Genetic relationship between skin and wool traits in Merino sheep

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Contents

1	Ack	nowledgement	2
2	Abs	stract	3
3	Intr	roduction	4
4	Mat	terials and methods	5
	4.1	Sheep population studied	5
	4.2	Traits measured	6
		4.2.1 Traits for which direct measurements were available	6
		4.2.2 Traits calculated from measured traits using a known func-	
		tional relationship	11
		4.2.3 Traits predicted from measured traits using an empirical	
		relationship obtained from a statistical fit of a model to	
		external data	11
		4.2.4 Traits predicted from a model describing skin development	18
		4.2.5 Traits introduced to accommodate nonlinearity	18
	4.3	Statistical techniques	18
		4.3.1 Mixed model fitting	19
		4.3.2 Genetic models	22
		4.3.3 Multivariate analysis	23
		4.3.4 Nonlinearities	24
		4.3.5 Genetic parameter shifts	24
	4.4	Quantitative genetic theory	24
5	Res	ults	24
	5.1	Fixed effects	24
	5.2	Direct responses to selection	32
	5.3	Indirect responses to selection	32
	5.4	Parameters	48
		5.4.1 Phenotypic variances	48
		5.4.2 Correlations	49
			269
	5.5		273
6	Disc	cussion 2	273
7	Con	nclusions	273

1 Acknowledgement

The data analysed here were collected while I worked at CSIRO Division of Animal Genetics and Division of Animal Production. I would like to acknowledge the contributions of Dr Ted Nay and Mr Ian Maddocks, and the encouragement given by Dr Helen Newton Turner, Dr J M Rendel, Dr A A Dunlop, and Dr T W Scott. I would also like to acknowledge the encouragement of Dr J M Watts in resurrecting this material for re-analysis with more advanced statistical technology, and in suggesting that the emphasis should be on fibre characteristics related to processing performance and product quality as well as production characteristics such as clean wool weight.

2 Abstract

3 Introduction

Some years ago an attempt was made to study the relationship between components of clean wool weight and skin characteristics obtained from histological examination of skin biopsy samples (Jackson, Nay, and Turner(1975) [3]. What came out of that study was that skin characteristics could explain a large proportion of the genetic variatrion in clean wool weight, and that the genetic covariance between skin characteristics and wool weight components could be partitioned into three independent functional relationships which were interpreted as three independent sets of genes.

The three independent factors were identified as

- large number of secondary follicles
- straight deep follicles
- primary follicle density

This analysis led to a selection experiment (AB32 in CSIRO jargon) which attempted to select for

- large follicles
- large total number of follicles
- both large follicles and large number of follicles simultaneously

in three selected lines. There was also an unselected control line.

During the course of that experiment some image analysis technology was developed for skin section images. This allowed measurement of the diameter of primary and secondary follicles, in addition to counting their density. These new measurements are available only on the last three years of the experiment but are an important extension which may change the scope and focus of the above multivriate analyses.

There has also been some important progress in our understanding of follicle development in sheep. The work of Moore et al(1989) [8] has shown that follicles develop from a population of pre-papilla cells and that if primary follicle development is suppressed (fewer or smaller primaries) then there are more pre-papilla cells left over to divide, and to develop into secondary follicles. The dynamics of the pre-papilla cell population can be modelled mathematically, so that the relationship between primary development and secondary development can be quantified. The consequences of this for a genetic analysis of primary and secondary follicle development are significant - there is nonlinearity and an element of functional relationships between traits neither of which are taken into account in traditional quantitative genetic analyses.

The objectives of this study are diverse and probably over ambitious. Briefly we would like to

• summarize the response to selection which was obtained in the above experiment

- estimate additive genetic parameters for a comprehensive range of skin and wool characteristics
- redo the multivariate analyses mentioned above with an emphasis on fibre quality as well as wool production
- work out how to include knowledge of the developmental relationships between characteristics in a quantitative genetic analysis and apply this to the Moore model mentioned above
- do a systematic check for nonlinearities and shifts in genetic parameters, and find a way of including these in a quantitative genetic analysis

One of the benefits of setting out such a broad objective is that the areas where we fail become indicators of future research directions.

4 Materials and methods

The sheep and the measurements thereon included in this study represent a substantial investment of CSIRO resources over 11 years of a breeding trial and several more years of laboratory measurement work. Unfortunately the experiment was terminated abruptly by a political decision and was never properly analysed or published. What we have, for the present study, is a set of measurements exhibiting various degrees of incompleteness. The present analysis is therefore somewhat complicated and the results may be affected by the severe imbalance with respect to some traits.

4.1 Sheep population studied

The selection experiment is known as AB32 in CSIRO jargon. It commenced in 1974. For two years (1974 and 1975) matings were made of a set of introduced Fine Merino rams across a set of CSIRO bred Medium Merino ewes to generate the base generation animals for a selection trial. Measurements were made on these base generation progeny.

Then, starting with the 1976 mating, the base generation animals were allocate at random to three selection lines and then selected as follows

- Line 1 selected for large follicle depth
- Line 2 selected for large number of follicles per head (estimated by multiplying follicle density by body surface area)
- Line 3 selected for both large follicle depth and large number of follicles per head

Selection continued until 1985, the animals born in 1985 being the last progeny of the selected lines with measurements available.

There was also an unselected control line (AB20 in CSIRO jargon) which was a group of Medium Merino sheep which served as an unselected control for all sheep selection experiments at 'Longford' Research Station. The control line structure is described in Watson, Jackson, and Whiteley(1977) [15].

Pedigree information was available on all sheep, in the case of AB32 extending back to 1974, and in the case of AB20 extending back to 1968.

4.2 Traits measured

There were several categories of traits considered for analysis.

4.2.1 Traits for which direct measurements were available

A brief description of the traits for which measurements were available is given in Table 1.

Table 1: Definition of traits measured

Trait name	Abbreviation	Units	Age measured	Description
Staple length	Stal	mm	14 months	Length of wool staple 10 months growth
Crimp frequency	Crimp	no per 2.5cm	14 months	Staple crimp frequency
Fibre diameter	Diam	microns	14 months	Mean fibre diameter by airflow technique
Greasy Fleece Weight	Gfw	Kg	14 months	Weight of fleece in shearing shed
Yield	Yld	percentage	14 months	Percent of clean wool in fleece at 16% re-
				gain
Clean wool weight	Cww	Kg	14 months	Weight of clean fibre at 16% regain
Bodyweight	Bwt	Kg	14 months	Live weight of animal
Neck wrinkle	WrN	score 0-6	14 months	Score for skin wrinkle on neck region
		(0=plain,6=wrinkled)		
Body wrinkle	WrB	score 0-5	14 months	Score for skin wrinkle on body region
		(0=plain,5=wrinkled)		
Total wrinkle	m WrT	sum of WrN and WrB	14 months	Sum of neck and body wrinkle scores
Face cover	Face	score $1-7$ (1=open,	14 months	Score for wool cover on the face
		7=muffled)		
Adjusted staple length	Staladj	mm per 365 days	14 months	Staple length adjusted to a growth period
				of 365 days
Adjusted clean wool Cww	Cwwadj	Kg per 365 days	14 months	Clean wool weight adjusted to a growth
weight.		71	11	period of 303 days
Adjusted greasy neece weight	Giwadj	kg per 305 days	14 months	Greasy fleece weight adjusted to a growth period of 365 days
Follish number new unit	<u>Д</u>	2000	11 months	No of mimour and good down follishe non
area	Ting	no per nenez	r4 monens	mm_s from skin biopsy
Follicle S/P ratio	Fr	no units	14 months	Ratio of no of primary to no of secondary
				follicles from skin biopsy
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rait name	Abbreviation	Onits	Age measured	Description
Total follicle number	Fnt	no per head x 10^6	14 months	No of follicles on the animal (estimated
				from Fnua and skin surface area)
Surface area	Sarea	m^2	14 months	Smooth skin surface area (estimated from
				Bwt with no allowance for wrinkle)
Follicle depth	Fd	mm	14 months	Average follicle depth from skin biopsy
				and vertical section
Follicle curvature	Fc	score $1-7$ (1=straight,	14 months	Follicle curvature score from skin biopsy
		7=curved)		and vertical section
Follicle unevenness	Fu	score 1-5 (1=even, 5 =un-	14 months	Score for unevenness of follicle depth from
		even)		skin biopsy and vertical section
Birth weight	Birwt	Kg	day of birth	Weight of lamb on day of birth
Birthcoat score side	Bcts	score 1-6 (1=no halo	day of birth	Score for pattern of halo hairs on side of
		hairs on side, 6=fully		lamb at day of birth
		covered)		
Birthcoat score back	Bctb	score $1-6$ ($1=$ no halo	day of birth	Score for density of halo hairs on mid
		hairs on mid backline,		backline on day of birth
		6=dense halo hairs)		
Weaning weight	Weanwt	Kg	approx 4 months	Weight of lamb on day of weaning
Weaner greasy fleece	WeanGfw	Kg	approx 4 months	Weaner greasy fleece weight at post-
weight				weaning shearing
No of lambs born	NLB	no	day of birth	Number of lambs in litter at birth
No of lambs weaned	NLW	no	approx 4 months	Number of lambs in litter at weaning
Greasy wool colour	Colour	score $1-7$ $(1=\text{white},$	14 months	Score for greasy yolk colour ignoring any
		7=yellow)		stain present

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		Table 1 – Continued from previous page	om previous page	
Trait name	Abbreviation	Units	Age measured	Description
Flystrike	Fly	score $0-9$ ($0=absent, 1-$	14 months	Score for presence or absene of flystrike at
		9=present to various de-		any site
		grees)		
Fleece rot	Flcrot	score $0-9$ (0 =absent, $1-$	14 months	Score for presence or absence of fleece rot
		9=present to various de-		
		grees)		
Bacterial stain	Bactst	score $0-9$ (0 =absent, $1-$	14 months	Score for presence or absence of bacterial
		9=present to various de-		stain
		grees)		
Mycotic dermatitis	MycD	score 0-9 (0=absent, 1-	14 months	Score for presence or absence of mycotic
		9=present to various de-		dermatitis
		grees)		
Mean diameter of pri-	Dp	microns	14 months	Mean diameter of primary fibres from
maries				biopsy and horizontal section
Mean diameter of secon-	Ds	microns	14 months	Mean diameter of secondary fibres from
daries				biopsy and horizontal section
Mean diameter of pri-	Dps	microns	14 months	Mean diameter of primary and secondary
maries and secondaries				fibres from biopsy and horizontal section
Primary to secondary di-	DpovDs	no units	14 months	Ratio of mean diameter of primary fibres
ameter ratio				to mean diameter of secondary fibres
CV of primary diameter	CVDp	no units	14 months	Coefficient of variation of primary fibre di-
				ameter
CV of secondary diame-	CVDs	no units	14 months	Coefficient of variation of secondary fibre
ter				diameter
Maximum diameter of	MaxDp	microns	14 months	Diameter of the largest primary fibre
primaries				

		Table 1 – Continued from previous page	nn previous page	
Trait name	Abbreviation	\mathbf{U} nits	Age measured	Description
Minimum diameter of MinDp	MinDp	microns	14 months	Diameter of the smallest primary fibre
primaries				
Maximum diameter of MaxDs	MaxDs	microns	14 months	Diameter of the largest secondary fibre
secondaries				
Minimum diameter of	MinDs	microns	14 months	Diameter of the smallest secondary fibre
secondaries				
SD of primaries	SDDp	microns	14 months	Standard deviation of primary fibre diam-
				eter
SD of secondaries	SDDs	microns	14 months	Standard deviation of secondary fibre di-
				ameter
SD of all fibres	SDD	microns	14 months	Standard deviation of primary and sec-
				ondary fibre diameter
CV of all fibres	CVD	no units	14 months	Coefficient of variation of primary and
				secondary fibre diameter
Primaries greater than	Gt30Dp	frequency	14 months	Proportion of primary fibres exceeding 30
30 microns				microns in diameter
Secondaries greater than	Gt30Ds	frequency	14 months	Proportion of secondary fibres exceeding
30 microns				30 microns in diameter
Fibres greater than 30	Gt30D	frequency	14 months	Proportion of fibres exceeding 30 microns
microns				in diameter

All of these measured traits were not available on all of the sheep. In particular the traits obtained by image analysis measurement on skin sections were only obtained for the 1982 to 1985 drops of selected lines and only the 1983 and 1985 drops of the control line. Also Crimp Frequency was only measured for 1974 to 1977 and 1982 to 1985. Various other subsets of traits had various patterns of missing observations.

The actual numbers of sheep measured for each trait and each pair of traits is given in Tables 2 to 6. It can be seen that each pair of traits has a different number of observations, with the exception that there are some subsets of traits (such as the 17 image analysis traits from Dp to Gt30D) for which the replication almost identical. Two traits, Birwt and WeanGfw, had very few observations when paired with the image analysis traits (Dp, etc) and had to be omitted from most of the analyses.

This heterogeneity of numbers of observations across traits and pairs of traits required a special approach in statistical analysis which is discussed in section 4.3.

4.2.2 Traits calculated from measured traits using a known functional relationship

These traits are really just another way of looking at the same measurements. If the functional relationship(s) are nonlinear, then we are not introducing redundant information by adding these calculated traits to the multivariate set. Sometimes it helps with biological interpretation to view the trait space from another perspective.

The traits calculated in this way are defined in Table 7.

Some of the traits classed as measurements and included in the previous section should, if one wishes to be pedantic, be included here. Examples are Sarea, Fnt, and Cww. Also Staladj, Cwwadj, and Gfwadj are functions of Stal, Cww, and Gfw but the function coefficients varied from year to year depending on the interval between shearings. We are going to keep things simple and only use the present section for some of the more unusual calculated traits.

4.2.3 Traits predicted from measured traits using an empirical relationship obtained from a statistical fit of a model to external data

There are two predictions of interest here

- Standard deviation of follicle depth (SDFd) predicted from follicle unevenness score
- Intrinsic radius of fibre curvature (IRad) predicted from follicle curvature score

Table 2: Numbers of sheep measured for each pair of traits: Part 1/5

Table	2: Nur	nbers of	sheep n	neasure	$_{ m ed}$ for ϵ	each pa	ir of tr	aits: P	art 1/5	ó .
	Stal	Crimp	Diam	Gfw	Yld	Cww	Bwt	WrN	WrB	WrT
Stal	3651	2227	3632	3638	3632	3632	3622	3619	3616	3616
Crimp	2227	2227	2213	2218	2213	2213	2205	2202	2199	2199
Diam	3632	2213	3638	3637	3637	3637	3620	3617	3614	3614
Gfw	3638	2218	3637	3643	3637	3637	3624	3621	3618	3618
Yld	3632	2213	3637	3637	3637	3637	3619	3616	3613	3613
Cww	3632	2213	3637	3637	3637	3637	3619	3616	3613	3613
Bwt	3622	2205	3620	3624	3619	3619	3629	3625	3622	3622
WrN	3619	2202	3617	3621	3616	3616	3625	3626	3623	3623
WrB	3616	2199	3614	3618	3613	3613	3622	3623	3623	3623
WrT	3616	2199	3614	3618	3613	3613	3622	3623	3623	3623
Face	3644	2220	3630	3635	3629	3629	3620	3617	3614	3614
Staladj	3572	2157	3553	3559	3553	3553	3543	3540	3538	3538
Cwwadj	3553	2143	3558	3558	3558	3558	3540	3537	3535	3535
Gfwadj	3559	2148	3558	3564	3558	3558	3545	3542	3540	3540
Fnua	3092	1768	3084	3087	3083	3083	3078	3076	3073	3073
Fr	3093	1768	3085	3088	3084	3084	3079	3077	3074	3074
Fnt	3074	1751	3075	3077	3074	3074	3079	3076	3073	3073
Sarea	3074	1752	3074	3077	3073	3073	3078	3075	3072	3072
Fd	2587	1281	2580	2582	2579	2579	2575	2573	2570	2570
Fc	2587	1281	2580	2582	2579	2579	2575	2573	2570	2570
Fu	2587	1281	2580	2582	2579	2579	2575	2573	2570	2570
Birwt	925	645	924	925	923	923	919	918	918	918
Bcts	3641	2219	3628	3633	3627	3627	3619	3616	3613	3613
Bctb	3161	1739	3148	3151	3147	3147	3139	3137	3134	3134
Weanwt	3646	2223	3633	3638	3632	3632	3624	3621	3618	3618
WeanGfw	1679	1015	1679	1681	1679	1679	1674	1671	1668	1668
NLB	3645	2221	3632	3637	3631	3631	3623	3620	3618	3618
NLW	3645	2221	3632	3637	3631	3631	3623	3620	3618	3618
Dp	825	468	823	824	823	823	821	821	821	821
Ds	825	468	823	824	823	823	821	821	821	821
Dps	825	468	823	824	823	823	821	821	821	821
DpovDs	825	468	823	824	823	823	821	821	821	821
CVDp	825	468	823	824	823	823	821	821	821	821
CVDs	825	468	823	824	823	823	821	821	821	821
MaxDp	825	468	823	824	823	823	821	821	821	821
MinDp	825	468	823	824	823	823	821	821	821	821
MaxDs	825	468	823	824	823	823	821	821	821	821
MinDs	825	468	823	824	823	823	821	821	821	821
SDDp	825	468	823	824	823	823	821	821	821	821
SDDs	825	468	823	824	823	823	821	821	821	821
SDD	825	468	823	824	823	823	821	821	821	821
CVD	825	468	823	824	823	823	821	821	821	821
Gt30Dp	825	468	823	824	823	823	821	821	821	821
Gt30Ds	825	468	823	824	823	823	821	821	821	821
Gt30D	825	468	823	824	823	823	821	821	821	821
Colour	3393	1971	3388	3391	3387	3387	3377	3375	3375	3375
Fly	3396	1972	3391	3394	3390	3390	3380	3378	3378	3378
Flcrot	3396	1972	3391	3394	3390	3390	3380	3378	3378	3378
Bactst	2279	855	2270	2273	2269	2269	2271	2270	2270	2270
MycD	2279	855	2270	2273	2269	2269	2271	2270	2270	2270

Table 3: Numbers of sheep measured for each pair of traits: Part 2/5.

Face Staladi Cwwadj Gfwadj Fluta Fr Flt Sarea Fd Fc Crimp 2220 2157 2143 2148 1768 1768 1768 1751 1752 1281	Table	3: Nun	nbers of s	sheep mea	sured for	each r		traits:	Part 2/	5.	
Crimp 2220 2157 2143 2148 1768 1768 1751 1752 1281		Face	Staladj	Cwwadj	Gfwadj	Fnua	Fr	Fnt	Sarea	Fd	Fc
Diam 3630 3553 3558 3558 3084 3085 3075 3074 2580 2580 Gfw 3629 3553 3558 3558 3083 3084 3074 3073 2579 2579 Cww 3629 3553 3558 3558 3083 3084 3074 3073 2579 2579 Bwt 3620 3553 3558 3558 3083 3084 3074 3073 2579 2575 Bwt 3620 3543 3540 3545 3078 3079 3079 3078 2575 2575 WrN 3617 3540 3537 3542 3076 3077 3076 3075 2573 2573 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 WrT 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3565 3550 3556 3590 3039 3074 3073 3072 2570 2570 Face 3649 3565 3553 3558 3558 3034 3035 3025 3024 2587 2587 Cwadj 3556 3559 3558 3558 3034 3035 3025 3024 2559 2559 Gfwadj 3556 3559 3358 3564 3038 3039 3028 3028 2562 2567 Fnu 3092 3043 3034 3038 3097 3097 3078 3079 2591 Fht 3093 3044 3035 3028 3079 3079 3079 2591 2591 Fht 3074 3025 3024 3028 3079 3079 3078 2573 Fd 2587 2567 2559 2562 2590 2591 2574 2573 2592 Fu 2587 2567 2559 2562 2590 2591 2574 2573 2592 Birwt 925 899 897 899 897 899 897 899 Bets 3639 3562 3548 3554 3090 3092 3073 3073 2588 2588 Bets 3639 3562 3548 3554 3090 3091 3072 3072 2555 2585 Betb 3163 3088 3074 3078 2579 2579 2580 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Ds 825 798 796 797 824 825 821 821 338 338 GWDD 825 798 796 797 824 825 821 821 338 338 GWDD 825 798 796 797 824 825 821 821 338 338 GUND 825 798 796 797 824	Stal	3644	3572	3553	3559	3092	3093	3074	3074	2587	
Gfw 3635 3559 3558 3568 3687 3087 3077 2572 2579 Cww 3629 3553 3558 3558 3083 3084 3074 3073 2579 2579 Bwt 3620 3543 3540 3542 3076 3077 3078 2575 2573 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2573 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3565 3550 3556 3092 3093 3074 3074 3072 2570 2570 Cwwadj 3556 3552 3553 3558 3558 3043 3044 3025 3025 2567 2567 2567 2567 2567 2567 2567 2567 2567 2579 2562 2562 <t< td=""><td>Crimp</td><td>2220</td><td>2157</td><td>2143</td><td>2148</td><td>1768</td><td>1768</td><td>1751</td><td>1752</td><td>1281</td><td>1281</td></t<>	Crimp	2220	2157	2143	2148	1768	1768	1751	1752	1281	1281
Yld 3629 3553 3558 3558 3083 3084 3074 3073 2579 2579 Cww 3629 3553 3558 3558 3083 3084 3074 3073 2579 2579 Bwt 3620 3543 3540 3545 3076 3077 3076 3075 2573 2573 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3565 3550 3556 3092 3093 3074 3074 2577 2570 Face 3649 3565 3550 3558 3558 3558 3034 3034 3074 3074 2579 2570 Cwwadj 3556 3558 3558 3558 3034 3038 3097 3078 3072 2579 2559 2562 2562 2562 2562 2562 2562 2562 <	Diam	3630	3553	3558	3558	3084	3085	3075	3074	2580	2580
Cww 3629 3553 3558 3083 3084 3074 3073 2579 2575 WrN 3617 3540 3545 3076 3077 3076 3075 2575 2573 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 2570 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 2570 2570 2570 7570 2570	Gfw	3635	3559	3558	3564	3087	3088	3077	3077	2582	2582
Bwt 3620 3543 3540 3545 3078 3079 3079 3078 2575 2573 2573 WrN 3614 3538 3535 3540 3073 3074 3073 3072 2570 2573 WrT 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3565 3555 3556 3059 3038 3044 3023 3024 2567 2567 Cwwadj 3550 3553 3558 3568 3034 3043 3025 3024 2559 2569 Gfwadj 3556 3559 3558 3568 3038 3039 3028 3028 2562 2569 Fmua 3092 3043 3038 3097 3078 3079 3079 2590 2590 2591 251 2591 2567 2567 2569 2562 2590 2591	Yld	3629	3553	3558	3558	3083	3084	3074	3073	2579	2579
WrN 3617 3540 3537 3542 3076 3077 3076 3075 2573 2570 WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3565 3550 3556 3092 3093 3074 2074 2587 2567 Cwadi 3556 3550 3558 3558 3034 3035 3025 3024 2559 2567 Cwadi 3556 3559 3558 3564 3038 3039 3028 3022 2562 2562 Funa 3093 3044 3035 3038 3097 3098 3078 3079 2591 2591 2591 2591 2591 2591 2591 2591 2591 2591 2591 2591 2574 2573 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592	Cww	3629	3553	3558	3558	3083	3084	3074	3073	2579	2579
WrB 3614 3538 3535 3540 3073 3074 3073 3072 2570 2570 Face 3649 3566 3552 3550 3556 3092 3093 3074 2587 2587 Staladj 3566 3572 3553 3558 3558 3034 3025 3025 2567 2567 Cwwadj 3556 3559 3558 3558 3564 3038 3039 3028 2562 2562 Fmua 3092 3043 3034 3038 3097 3098 3079 3079 2590 2590 2590 2590 2590 2590 2590 2591 2574 2574 2574 2574 2574 2573 <td>Bwt</td> <td>3620</td> <td>3543</td> <td>3540</td> <td>3545</td> <td>3078</td> <td>3079</td> <td>3079</td> <td>3078</td> <td>2575</td> <td>2575</td>	Bwt	3620	3543	3540	3545	3078	3079	3079	3078	2575	2575
WrT 3614 3538 3535 3540 3073 3074 3073 3074 2570 2570 Face 3649 3565 3550 3556 3595 3043 3044 3025 2567 2567 Cwwadj 3550 3553 3558 3558 3034 3035 3025 3024 2559 2559 Gfwadj 3556 3559 3558 3564 3038 3039 3028 3022 2562 2562 Fmua 3092 3043 3034 3038 3097 3078 3079 2590 2590 Fr 3093 3044 3025 3028 3078 3079 3079 3079 2591 2591 2574 2573 2591 2571 2573 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592 2592	WrN	3617	3540	3537	3542	3076	3077	3076	3075	2573	2573
Face 3649 3565 3550 3556 3092 3093 3074 3074 2587 2587 Staladij 3556 3572 3553 3558 3538 3034 3025 3024 2559 2559 Gfwadj 3556 3559 3558 3564 3038 3039 3028 3024 2559 2562 Fma 3092 3043 3034 3038 3097 3097 3079 2590 2590 2591 2571 2574 2574 2574 2574 2574 2574 2574 2574 2573 2574 2573 2572 2592 2591 2574 2573 2572 2590 2591 257	WrB	3614	3538	3535	3540	3073	3074	3073	3072	2570	2570
Staladj 3565 3572 3553 3558 3558 3034 3044 3025 3025 2567 2567 Cwwadj 3550 3553 3558 3558 3034 3035 3025 3024 2562 2562 Fnua 3092 3043 3034 3038 3097 3077 3078 3079 2590 2590 Fr 3093 3044 3025 3028 3078 3079 3079 3079 3079 3079 2591 2571 2573 2573 2573 2573 2573 2573 2573 2573 2573 2573 2573 2573 2573 2572 2572 2562 2590 2591 2574 2573 2592<	WrT	3614	3538	3535	3540	3073	3074	3073	3072	2570	2570
Cwwadj 3550 3553 3558 3558 3034 3035 3025 3024 2559 2559 Gfwadj 3556 3559 3558 3564 3038 3039 3028 3028 3028 2562 2562 2562 Frua 3093 3044 3035 3039 3097 3078 3079 3079 2590 2591 2571 2571 2571 2571 2571 2571 2571 2573 2592 2	Face	3649	3565	3550	3556	3092	3093	3074	3074	2587	2587
Gfwadj 3556 3559 3558 3564 3038 3039 3028 3028 2562 2562 Fnua 3092 3043 3034 3038 3097 3098 3078 3079 2591 2590 Fr 3093 3044 3025 3024 3028 3079 3079 3078 3079 2574 2574 2574 Sarea 3074 3025 3024 3028 3079 3079 3078 3079 2573 2572 2572 Fd 2587 2567 2559 2562 2590 2591 2574 2573 2592	Staladj	3565	3572	3553	3559	3043	3044	3025	3025	2567	2567
Fnua 3092 3043 3034 3038 3097 3097 3078 3079 2590 2590 Fr 3093 3044 3035 3039 3097 3079 3079 2591 2591 Fnt 3074 3025 3024 3028 3079 3079 3078 3079 2573 2572 2572 2572 2570 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 <td>Cwwadj</td> <td>3550</td> <td>3553</td> <td>3558</td> <td>3558</td> <td>3034</td> <td>3035</td> <td>3025</td> <td>3024</td> <td>2559</td> <td>2559</td>	Cwwadj	3550	3553	3558	3558	3034	3035	3025	3024	2559	2559
Fr 3093 3044 3035 3039 3097 3098 3079 3079 2591 2574 Fnt 3074 3025 3028 3078 3079 3079 3079 2573 2573 Fd 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Fc 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Fu 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Birwt 925 899 897 899 580 580 579 579 484 484 Bcts 3639 3562 3548 3554 3090 3091 3072 3072 2585 2585 Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2164 2164 </td <td>Gfwadj</td> <td>3556</td> <td>3559</td> <td>3558</td> <td>3564</td> <td>3038</td> <td>3039</td> <td>3028</td> <td>3028</td> <td>2562</td> <td>2562</td>	Gfwadj	3556	3559	3558	3564	3038	3039	3028	3028	2562	2562
Fnt 3074 3025 3025 3028 3079 3079 3078 2574 2573 Sarea 3074 3025 3024 3028 3079 3079 3078 3079 2573 2573 2573 2573 2573 2573 2573 2572 2572 2572 2572 2572 2572 2592 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 2592 2592 2591 2574 2573 2592 2592 2592 Birst 3639 3562 3548 3554 3090 3091 3072 3072 2585 2585 Bets 3639 3562 3548 3554 3090 3091 3072 3072 2585 2585 Bets 3664 3091 3092 3073 3073 2	Fnua	3092	3043	3034	3038	3097	3097	3078	3079	2590	2590
Sarea 3074 3025 3024 3028 3079 3079 3078 3079 2573 2573 2592 2592 2591 2574 2573 2592 <t< td=""><td>Fr</td><td>3093</td><td>3044</td><td>3035</td><td>3039</td><td>3097</td><td>3098</td><td>3079</td><td>3079</td><td>2591</td><td>2591</td></t<>	Fr	3093	3044	3035	3039	3097	3098	3079	3079	2591	2591
Fd 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Fc 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Birwt 925 899 897 899 580 580 579 579 484 484 Bcts 3639 3562 3548 3554 3090 3091 3072 2565 2585 2585 Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2164 2164 Weandfw 1676 1656 1656 1658 1476 1476 1473 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073	Fnt	3074	3025	3025	3028	3078	3079	3079	3078	2574	2574
Fc 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 2592 Birwt 925 899 8897 8899 580 580 579 579 484 484 Bets 3639 3562 3548 3554 3090 3091 3072 2575 2585 2585 Betb 3163 3088 3074 3078 2670 2671 2655 2655 2164 2164 Weanwt 3644 3567 3553 3559 3096 3077 3077 2590 2590 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588	Sarea	3074	3025	3024	3028	3079	3079	3078	3079	2573	
Fu 2587 2567 2559 2562 2590 2591 2574 2573 2592 2592 Birwt 925 899 897 899 580 580 579 579 484 484 Bcts 3639 3562 3548 3554 3090 3091 3072 2585 2585 Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2614 2164 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338	Fd	2587	2567	2559	2562	2590	2591	2574	2573	2592	2592
Birwt 925 899 897 899 580 580 579 579 484 484 Bcts 3639 3562 3548 3554 3090 3091 3072 2585 2585 Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2655 2655 2655 2656 2656 2656 2656 2655 2655 2656 2656 2656 2656 2655 2655 2656 2656 2656 2656 2656 2656 2656 2656 2656 2656 2656 2656 2656 2616 2616 4816 4816 4816 4814 4826 3617 3077 2590 2598 2588 2588	Fc	2587	2567	2559	2562	2590	2591	2574	2573	2592	2592
Bcts 3639 3562 3548 3554 3090 3091 3072 2585 2585 Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2164 2164 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Dp 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338	Fu	2587	2567	2559	2562	2590	2591	2574	2573	2592	2592
Bctb 3163 3088 3074 3078 2670 2671 2655 2655 2164 2164 WeanWt 3644 3567 3553 3559 3095 3096 3077 3077 2590 2590 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Dps 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 </td <td>Birwt</td> <td>925</td> <td>899</td> <td>897</td> <td>899</td> <td>580</td> <td>580</td> <td>579</td> <td>579</td> <td>484</td> <td>484</td>	Birwt	925	899	897	899	580	580	579	579	484	484
Weanwt 3644 3567 3553 3559 3095 3096 3077 2590 2590 WeanGfw 1676 1656 1656 1658 1476 1476 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Dps 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 GVDp	Bcts	3639	3562	3548	3554	3090	3091	3072	3072	2585	2585
WeanGfw 1676 1656 1656 1658 1476 1476 1473 1473 1428 1428 NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Ds 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 <tr< td=""><td>Bctb</td><td>3163</td><td>3088</td><td>3074</td><td>3078</td><td>2670</td><td>2671</td><td>2655</td><td>2655</td><td>2164</td><td>2164</td></tr<>	Bctb	3163	3088	3074	3078	2670	2671	2655	2655	2164	2164
NLB 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Ds 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 <td< td=""><td>Weanwt</td><td>3644</td><td>3567</td><td>3553</td><td>3559</td><td>3095</td><td>3096</td><td>3077</td><td>3077</td><td>2590</td><td>2590</td></td<>	Weanwt	3644	3567	3553	3559	3095	3096	3077	3077	2590	2590
NLW 3643 3572 3558 3564 3091 3092 3073 3073 2588 2588 Dp 825 798 796 797 824 825 821 821 338 338 Ds 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MaxDs </td <td>WeanGfw</td> <td>1676</td> <td>1656</td> <td>1656</td> <td>1658</td> <td>1476</td> <td>1476</td> <td>1473</td> <td>1473</td> <td>1428</td> <td>1428</td>	WeanGfw	1676	1656	1656	1658	1476	1476	1473	1473	1428	1428
Dp 825 798 796 797 824 825 821 338 338 Ds 825 798 796 797 824 825 821 821 338 338 Dps 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MinDp 825	NLB	3643	3572	3558	3564	3091	3092	3073	3073	2588	2588
Ds 825 798 796 797 824 825 821 821 338 338 Dps 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 SDDp		3643	3572	3558	3564	3091	3092	3073	3073	2588	2588
Ds 825 798 796 797 824 825 821 821 338 338 Dps 825 798 796 797 824 825 821 821 338 338 DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 SDDp	Dp	825	798	796	797	824	825	821	821	338	338
DpovDs 825 798 796 797 824 825 821 821 338 338 CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs			798	796	797	824	825	821	821	338	338
CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 CVD		825	798	796	797	824	825	821	821	338	338
CVDp 825 798 796 797 824 825 821 821 338 338 CVDs 825 798 796 797 824 825 821 821 338 338 MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 CVD	DpovDs	825	798	796	797	824	825	821	821	338	338
MaxDp 825 798 796 797 824 825 821 821 338 338 MinDp 825 798 796 797 824 825 821 821 338 338 MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp		825	798	796	797	824	825	821	821	338	338
MinDp 825 798 796 797 824 825 821 821 338 338 MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds	CVDs	825	798	796	797	824	825	821	821	338	338
MaxDs 825 798 796 797 824 825 821 821 338 338 MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30D	MaxDp	825	798	796	797	824	825	821	821	338	338
MinDs 825 798 796 797 824 825 821 821 338 338 SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30Ds <td>MinDp</td> <td>825</td> <td>798</td> <td>796</td> <td>797</td> <td>824</td> <td>825</td> <td>821</td> <td>821</td> <td>338</td> <td>338</td>	MinDp	825	798	796	797	824	825	821	821	338	338
SDDp 825 798 796 797 824 825 821 821 338 338 SDDs 825 798 796 797 824 825 821 821 338 338 SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour <td>MaxDs</td> <td></td> <td>798</td> <td>796</td> <td>797</td> <td>824</td> <td>825</td> <td>821</td> <td></td> <td>338</td> <td></td>	MaxDs		798	796	797	824	825	821		338	
SDDs 825 798 796 797 824 825 821 821 338 338 SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 <td< td=""><td>MinDs</td><td>825</td><td>798</td><td>796</td><td>797</td><td>824</td><td>825</td><td>821</td><td>821</td><td>338</td><td>338</td></td<>	MinDs	825	798	796	797	824	825	821	821	338	338
SDD 825 798 796 797 824 825 821 821 338 338 CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340	SDDp	825	798	796	797	824	825	821	821	338	338
CVD 825 798 796 797 824 825 821 821 338 338 Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2844 2340 2340 Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307 <td>SDDs</td> <td>825</td> <td>798</td> <td>796</td> <td>797</td> <td>824</td> <td>825</td> <td>821</td> <td>821</td> <td>338</td> <td>338</td>	SDDs	825	798	796	797	824	825	821	821	338	338
Gt30Dp 825 798 796 797 824 825 821 821 338 338 Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	SDD	825	798	796	797	824	825	821	821	338	338
Gt30Ds 825 798 796 797 824 825 821 821 338 338 Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	CVD	825	798	796	797	824	825	821	821	338	338
Gt30D 825 798 796 797 824 825 821 821 338 338 Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Gt30Dp	825	798	796	797	824	825	821	821	338	
Colour 3390 3320 3314 3318 2844 2845 2833 2833 2339 2339 Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Gt30Ds	825	798	796	797	824	825	821	821	338	338
Fly 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Gt30D	825	798	796	797	824	825	821	821	338	338
Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Colour	3390	3320	3314	3318	2844	2845	2833	2833	2339	2339
Flcrot 3393 3320 3314 3318 2845 2846 2834 2834 2340 2340 Bactst 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Fly	3393	3320	3314	3318	2845	2846	2834	2834	2340	2340
						2845	2846			2340	
MycD 2280 2214 2204 2208 1812 1813 1809 1809 1307 1307	Bactst	2280	2214	2204	2208	1812	1813	1809	1809	1307	1307
	MycD	2280	2214	2204	2208	1812	1813	1809	1809	1307	1307

Table 4: Numbers of sheep measured for each pair of traits: Part 3/5.

Table -	4: Nun	nbers of	sheep	measur	red for eac	ch pair of t	raits: I	Part 3/5	5.	
	Fu	Birwt	Bcts	Bctb	Weanwt	WeanGfw	NLB	NLW	Dp	$_{\mathrm{Ds}}$
Stal	2587	925	3641	3161	3646	1679	3645	3645	825	825
Crimp	1281	645	2219	1739	2223	1015	2221	2221	468	468
Diam	2580	924	3628	3148	3633	1679	3632	3632	823	823
Gfw	2582	925	3633	3151	3638	1681	3637	3637	824	824
Yld	2579	923	3627	3147	3632	1679	3631	3631	823	823
Cww	2579	923	3627	3147	3632	1679	3631	3631	823	823
Bwt	2575	919	3619	3139	3624	1674	3623	3623	821	821
WrN	2573	918	3616	3137	3621	1671	3620	3620	821	821
WrB	2570	918	3613	3134	3618	1668	3618	3618	821	821
WrT	2570	918	3613	3134	3618	1668	3618	3618	821	821
Face	2587	925	3639	3163	3644	1676	3643	3643	825	825
Staladj	2567	899	3562	3088	3567	1656	3572	3572	798	798
Cwwadj	2559	897	3548	3074	3553	1656	3558	3558	796	796
Gfwadj	2562	899	3554	3078	3559	1658	3564	3564	797	797
Fnua	2590	580	3090	2670	3095	1476	3091	3091	824	824
Fr	2591	580	3091	2671	3096	1476	3092	3092	825	825
Fnt	2574	579	3072	2655	3077	1473	3073	3073	821	821
Sarea	2573	579	3072	2655	3077	1473	3073	3073	821	821
Fd	2592	484	2585	2164	2590	1428	2588	2588	338	338
Fc	2592	484	2585	2164	2590	1428	2588	2588	338	338
Fu	2592	484	2585	2164	2590	1428	2588	2588	338	338
Birwt	484	927	923	862	926	549	927	927	95	95
Bcts	2585	923	3648	3164	3643	1678	3642	3642	825	825
Bctb	2164	862	3164	3164	3159	1196	3160	3160	825	825
Weanwt	2590	926	3643	3159	3653	1684	3647	3647	825	825
WeanGfw	1428	549	1678	1196	1684	1685	1681	1681	48	48
NLB	2588	927	3642	3160	3647	1681	3652	3652	823	823
NLW	2588	927	3642	3160	3647	1681	3652	3652	823	823
Dp	338	95	825	825	825	48	823	823	825	825
$_{\mathrm{Ds}}$	338	95	825	825	825	48	823	823	825	825
Dps	338	95	825	825	825	48	823	823	825	825
DpovDs	338	95	825	825	825	48	823	823	825	825
CVDp	338	95	825	825	825	48	823	823	825	825
CVDs	338	95	825	825	825	48	823	823	825	825
MaxDp	338	95	825	825	825	48	823	823	825	825
MinDp	338	95	825	825	825	48	823	823	825	825
MaxDs	338	95	825	825	825	48	823	823	825	825
MinDs	338	95	825	825	825	48	823	823	825	825
SDDp	338	95	825	825	825	48	823	823	825	825
SDDs	338	95	825	825	825	48	823	823	825	825
SDD	338	95	825	825	825	48	823	823	825	825
CVD	338	95	825	825	825	48	823	823	825	825
Gt30Dp	338	95	825	825	825	48	823	823	825	825
Gt30Ds	338	95	825	825	825	48	823	823	825	825
Gt30D	338	95	825	825	825	48	823	823	825	825
Colour	2339	926	3390	2911	3394	1434	3394	3394	825	825
Fly	2340	927	3393	2914	3397	1435	3397	3397	825	825
Flcrot	2340	927	3393	2914	3397	1435	3397	3397	825	825
Bactst	1307	630	2277	2277	2278	835	2278	2278	825	825
MycD	1307	630	2277	2277	2278	835	2278	2278	825	825

Table 5: Numbers of sheep measured for each pair of traits: Part 4/5

Dps DpovDs CVDp CVDs MaxDp MinDp MaxDs MinDs SDDp SDDs State S	Table 5	5: Nur	nbers of sl	heep me	asured f	or each p	air of tra	its: Part	4/5 .		
Crimp 468 468 468 468 468 468 468 468 468 468		Dps	DpovDs	CVDp	CVDs	MaxDp	MinDp	MaxDs	MinDs	SDDp	SDDs
Diam 823 824	Stal	825	825	825	825	825	825	825	825	825	825
Diam 823 824	Crimp	468	468	468	468	468	468	468	468	468	468
Yld 823 821 <td>Diam</td> <td>823</td>	Diam	823	823	823	823	823	823	823	823	823	823
Cww 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 821 <td></td> <td>824</td>		824	824	824	824	824	824	824	824	824	824
Bwt 821 <td>Yld</td> <td></td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td>	Yld		823	823	823	823	823	823	823	823	823
Bwt 821 <td>Cww</td> <td>823</td>	Cww	823	823	823	823	823	823	823	823	823	823
WrN 821 821 821 821 821 821 821 821 821 821	Bwt	821	821	821	821					821	821
WrT 821 821 821 821 821 821 821 821 821 821 821 821 825 826 827 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 <td>WrN</td> <td>821</td> <td>821</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>821</td>	WrN	821	821								821
WrT 821 821 821 821 821 821 821 821 821 821 821 821 825 826 827 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 824 <td>WrB</td> <td>821</td>	WrB	821	821	821	821	821	821	821	821	821	821
Staladj 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 796 797	WrT	821	821	821	821	821	821		821	821	821
Staladj 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 798 796 797	Face	825	825	825	825	825	825	825	825	825	825
Cwwadj 796 796 796 796 796 796 796 796 796 796 796 796 796 796 796 796 796 796 797<	Staladj	798	798	798	798	798	798	798	798	798	798
Gfwadj 797<	Cwwadj	796	796	796	796		796		796	796	796
Fnua 824 824 824 824 824 824 824 824 824 824	Gfwadj	797	797	797	797					797	797
Fr 825	Fnua	824	824	824	824	824	824		824	824	824
Fnt 821 825 825 825 825 825 825 8338 338 <td>Fr</td> <td>825</td> <td>825</td> <td>825</td> <td></td> <td>825</td> <td></td> <td></td> <td>825</td> <td>825</td> <td></td>	Fr	825	825	825		825			825	825	
Sarea 821 825 825 825 823 338 </td <td>Fnt</td> <td></td>	Fnt										
Fd 338 <td>Sarea</td> <td></td> <td></td> <td>821</td> <td></td> <td>821</td> <td></td> <td>821</td> <td>821</td> <td>821</td> <td>821</td>	Sarea			821		821		821	821	821	821
Fc 338 <td>Fd</td> <td>338</td> <td></td> <td>338</td> <td>338</td> <td>338</td> <td>338</td> <td></td> <td>338</td> <td></td> <td>338</td>	Fd	338		338	338	338	338		338		338
Fu 338 <td>Fc</td> <td>338</td> <td>338</td> <td></td> <td>338</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Fc	338	338		338						
Birwt 95 825 823 825 825		338	338	338	338	338	338	338	338	338	338
Bcts 825 <td>Birwt</td> <td>95</td> <td>95</td> <td>95</td> <td>95</td> <td></td> <td>95</td> <td></td> <td>95</td> <td>95</td> <td>95</td>	Birwt	95	95	95	95		95		95	95	95
Bctb 825 823 825 825 825 825 825 825 825 825 <td>Bcts</td> <td>825</td> <td>825</td> <td></td> <td></td> <td></td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td></td>	Bcts	825	825				825	825	825	825	
Weanwt 825 823 825 825 825 825 825 825 825 825 825 825 825 825 825<		825		825	825					825	825
WeanGfw 48 <t< td=""><td></td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td><td>825</td></t<>		825	825	825	825	825	825	825	825	825	825
NLB 823 823 823 823 823 823 823 823 823 823	WeanGfw	48	48		48	48	48			48	48
NLW 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 823 825 <td></td> <td>823</td> <td></td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td> <td>823</td>		823		823	823	823	823	823	823	823	823
Dp 825	NLW	823	823	823	823	823	823		823	823	823
Ds 825	Dp										
Dps 825 <td>$_{ m Ds}$</td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td></td> <td>825</td> <td>825</td> <td>825</td>	$_{ m Ds}$	825	825	825	825	825	825		825	825	825
CVDp 825 <td></td> <td>825</td> <td></td> <td></td> <td></td> <td>825</td> <td></td> <td>825</td> <td>825</td> <td></td> <td></td>		825				825		825	825		
CVDp 825 <td>DpovDs</td> <td>825</td>	DpovDs	825	825	825	825	825	825	825	825	825	825
CVDs 825 <td></td>											
MinDp 825 </td <td>CVDs</td> <td></td> <td>825</td> <td></td> <td></td> <td></td> <td></td> <td>825</td> <td></td> <td></td> <td></td>	CVDs		825					825			
MaxDs 825 </td <td>MaxDp</td> <td>825</td>	MaxDp	825	825	825	825	825	825	825	825	825	825
MinDs 825 </td <td>MinDp</td> <td>825</td>	MinDp	825	825	825	825	825	825	825	825	825	825
SDDp 825 <td></td> <td>825</td> <td></td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td>825</td> <td></td> <td></td>		825		825	825	825	825	825	825		
SDDp 825 <td>MinDs</td> <td>825</td>	MinDs	825	825	825	825	825	825	825	825	825	825
SDDs 825 <td>SDDp</td> <td>825</td>	SDDp	825	825	825	825	825	825	825	825	825	825
SDD 825 <td>SDDs</td> <td>825</td>	SDDs	825	825	825	825	825	825	825	825	825	825
CVD 825 <td>SDD</td> <td>825</td>	SDD	825	825	825	825	825	825	825	825	825	825
Gt30Dp 825<	CVD	825	825		825			825		825	
Gt30Ds 825<	Gt30Dp	825	825	825	825		825			825	825
Gt30D 825 </td <td></td> <td>825</td> <td></td> <td>825</td> <td></td> <td>825</td> <td></td> <td>825</td> <td></td> <td>825</td> <td>825</td>		825		825		825		825		825	825
Colour 825<	Gt30D										
Fly 825 <td></td>											
Flcrot 825 825 825 825 825 825 825 825 825 825											
Bactst 825 825 825 825 825 825 825 825 825 825							825	825			
	MycD				825						

Table 6: Numbers of sheep measured for each pair of traits: Part 5/5

Table	6: Nun	nbers of	$^{\circ}$ sheep me	easured fo	or each p	air of tra	aits: Pa	art 5/5.		
	SDD	CVD	Gt30Dp	Gt30Ds	Gt30D	Colour	Fly	Flcrot	Bactst	MycD
Stal	825	825	825	825	825	3393	3396	3396	2279	2279
Crimp	468	468	468	468	468	1971	1972	1972	855	855
Diam	823	823	823	823	823	3388	3391	3391	2270	2270
Gfw	824	824	824	824	824	3391	3394	3394	2273	2273
Yld	823	823	823	823	823	3387	3390	3390	2269	2269
Cww	823	823	823	823	823	3387	3390	3390	2269	2269
Bwt	821	821	821	821	821	3377	3380	3380	2271	2271
WrN	821	821	821	821	821	3375	3378	3378	2270	2270
WrB	821	821	821	821	821	3375	3378	3378	2270	2270
WrT	821	821	821	821	821	3375	3378	3378	2270	2270
Face	825	825	825	825	825	3390	3393	3393	2280	2280
Staladj	798	798	798	798	798	3320	3320	3320	2214	2214
Cwwadj	796	796	796	796	796	3314	3314	3314	2204	2204
Gfwadj	797	797	797	797	797	3318	3318	3318	2208	2208
Fnua	824	824	824	824	824	2844	2845	2845	1812	1812
Fr	825	825	825	825	825	2845	2846	2846	1813	1813
Fnt	821	821	821	821	821	2833	2834	2834	1809	1809
Sarea	821	821	821	821	821	2833	2834	2834	1809	1809
Fd	338	338	338	338	338	2339	2340	2340	1307	1307
Fc	338	338	338	338	338	2339	2340	2340	1307	1307
Fu	338	338	338	338	338	2339	2340	2340	1307	1307
Birwt	95	95	95	95	95	926	927	927	630	630
Bcts	825	825	825	825	825	3390	3393	3393	2277	2277
Bctb	825	825	825	825	825	2911	2914	2914	2277	2277
Weanwt	825	825	825	825	825	3394	3397	3397	2278	2278
WeanGfw	48	48	48	48	48	1434	1435	1435	835	835
NLB	823	823	823	823	823	3394	3397	3397	2278	2278
NLW	823	823	823	823	823	3394	3397	3397	2278	2278
Dp	825	825	825	825	825	825	825	825	825	825
$\overline{\mathrm{Ds}}$	825	825	825	825	825	825	825	825	825	825
Dps	825	825	825	825	825	825	825	825	825	825
DpovDs	825	825	825	825	825	825	825	825	825	825
$\overline{\mathrm{CVDp}}$	825	825	825	825	825	825	825	825	825	825
CVDs	825	825	825	825	825	825	825	825	825	825
MaxDp	825	825	825	825	825	825	825	825	825	825
MinDp	825	825	825	825	825	825	825	825	825	825
MaxDs	825	825	825	825	825	825	825	825	825	825
MinDs	825	825	825	825	825	825	825	825	825	825
SDDp	825	825	825	825	825	825	825	825	825	825
SDDs	825	825	825	825	825	825	825	825	825	825
SDD	825	825	825	825	825	825	825	825	825	825
CVD	825	825	825	825	825	825	825	825	825	825
Gt30Dp	825	825	825	825	825	825	825	825	825	825
Gt30Ds	825	825	825	825	825	825	825	825	825	825
Gt30D	825	825	825	825	825	825	825	825	825	825
Colour	825	825	825	825	825	3398	3398	3398	2277	2277
Fly	825	825	825	825	825	3398	3401	3401	2280	2280
Flcrot	825	825	825	825	825	3398	3401	3401	2280	2280
Bactst	825	825	825	825	825	2277	2280	2280	2280	2280
MycD	825	825	825	825	825	2277	2280	2280	2280	2280
	520	320	020	020	020	2211		2200	2200	

Table 7: Definition of traits calculated from measured traits using a known functional relationship

Trait name	Abbreviation	Units	Functional relationship
Primary follicle density	Fnpua	no per mm^2	$Fnpua = \frac{Fnua}{(Fr+1)}$
Secondary follicle density	Fnsua	no per mm^2	$Fnsua = \frac{(Fr)(Fnua)}{(Fr+1)}$
Total primary follicle number	Fnpt	No per head x 10^6	Fnpt = (Fnpua)(Sarea)
Total secondary follicle number	Fnst	No per head x 10^6	Fnst = (Fnsua)(Sarea)
Crimp wavelength	Crwvl	mm	$Crwvl = \frac{25.4}{Crimp}$
Crimps per staple	Crst	number	Crst = Crimp * Stal/25.4
Crimps per 365 days (crimp frequency in time)	Crstadj	number per 365 days	Crstadj = Crimp*Staladj/25.4
Crimp wavelength in time	Crwvt	days	$Crwvt = \frac{365}{Crstadj}$

The empicical prediction equations for SDFd and IRad are

$$SDFd = -0.4874 + 1.8282(Fu) \tag{1}$$

$$ICurv = 0.22447 + 0.25223(Fc)$$
 (2)

$$IRad = \frac{1}{(ICurv)} \tag{3}$$

Notice that predicting IRad is a 2 step procedure, we first predict ICurv, then calculate a reciprocal transformation to get IRad.

In the case of SDFd \dots

In the case of IRad there are a number of traits which we can calculate from IRad and crimp wavelength (Crwvl) based on the model for crimp formation in staples developed by Jackson and Watts(2015) [4]. The relevant equations, assuming a stretched helix model for staple crimp formation, are

$$Crampl = \sqrt{(Irad)^2 - \left(\frac{Crwvl}{2\pi}\right)^2}$$
 (4)

$$\frac{L_f}{L_s} = \frac{2\pi I rad}{C rampl} \tag{5}$$

$$L_f = L_s \left(\frac{L_f}{L_s}\right) \tag{6}$$

These equations and the development of the method of predicting Irad from Fc are described in Jackson and Watts(2016) [5].

A complete list of predicted traits and traits derived from predicted traits is given in Table 8.

4.2.4 Traits predicted from a model describing skin development

4.2.5 Traits introduced to accommodate nonlinearity

4.3 Statistical techniques

The initial step in analysing these data was to fit a mixed model which adjusted for appropriate fixed effects and estimated additive genetic, environmental, and phenotypic variance/covariance components. This was followed by multivariate analysis of the additive genetic variance/covariance matrix with the goal of understanding what dimensions of genetic variation were operating in the wool and skin trait spaces.

An attempt was made to incorporate knowledge from a model of skin development in to these quantitative genetic analyses.

A search was made for nonlinear behaviour in the relationships between traits. An attempt was made to estimate genetic parametes separately for various subgroups of the data to see if parameters were heterogeneous.

Table 8: Definition of traits predicted from measured traits using an empirical relationship and of traits calculated from predicted traits

Trait name	Abbreviation	Units	Obtained by
Standard deviation of follicle depth	SDFd	mm	SDFd = -0.4874 + 1.8282(Fu)
Intrinsic fibre curvature	Icurv	radians/mm	ICurv = 0.22447 + 0.25223(Fc)
Intrinsic fibre radius of curvature	Irad	mm	$IRad = \frac{1}{(ICurv)}$
Crimp amplitude	Crampl	mm	$Crampl = \sqrt{(Irad)^2 - \left(\frac{Crwvl}{2\pi}\right)^2}$
Fibre length to staple length ratio	LfovLs	no units	$rac{L_f}{L_s} = rac{2\pi I rad}{C rampl}$
Fibre length	Lf	mm	$L_f = L_s \left(\frac{L_f}{L_s}\right)$

4.3.1 Mixed model fitting

The software used for mixed model fitting and estimation of variance components and genetic parameters is known as dmm. dmm is free software available under the GPL licence from the CRAN repository. dmm runs as a package under the R statistical language [12]. dmm has a comprehensive user's guide (Jackson(2015) [6]) which covers the statistical theory used for estimation and a set of worked examples.

Variance component estimation is one of the most difficult areas of statistics. It is comprehensively documented by Searle et al (1992) [13]. The procedure which current wisdom seems to consider most appropriate is called REML. The procedures used by dmm are MINQUE and bias-corrected-ML. In most cases where data are not extremely unbalanced, there is very little difference between procedures. For the current task, dmm is most suited, because it handles multiple traits with unequal replication, because it estimates both variance/covariance components and genetic parameters arising therefrom, because it allows estimation of maternal as well as individual genetic and environmental vriance components and the covariances between them, and because it makes extensive use of procedures developed by Wolak(2014) [16] for computing additive and non-additive relationship matrices for both autosomal and sexlinked genetic variation, thus allowing estimation of dominance and epistatic variance components where the data allows.

The procedure followed by dmm is heir archical. We first fit a model for fixed effects modelling observations on individual sheep as follows

$$Y_{ijk} = \mu + Sex_i + YearbixLine_j + r_{ijk} \tag{7}$$

where

 Y_{ijk} is an observation on the kth individual of the ith Sex and the jth Year of birth x Line combination

 μ is an overall mean of the observations

 Sex_i is an effect due to the ith Sex

YearbixLine; is an effect due to the jth combination of Year of birth and Line

 r_{ijk} is a residual deviation for the kth individual of the ith Sex and the jth Year of birth x Line combination

Equation 7 is stated as a univariate model for simplicity. It can, of course be fitted to each of a set of traits. The residual deviations from model 7 represent the observations *adjusted for* the fixed effect.

The next step is to fit a dyadic model to the residuals from model 7. A dyad is a pair of individuals. A dyadic model is a model for the covariances between the residuals for pairs of individuals. The dyadic model attempts to fit various genetic and environmental variance/covariance components to the covariances between the residuals for each dyad. In the present case we first attempt an elementary partitioning of the dyadic covariances into additive genetic and environmental variance/covariance components. The dyadic model for this simple case can be written

$$Cov(r_k, r_{k'}) = A_{kk'} VarG(Ia) + E_{kk'} VarE(I) + \Delta_{kk'}$$
(8)

where

 $Cov(r_k, r_{k'})$ is the covariance of the kth and k'th residuals from the fitting of model 7

 $A_{kk'}$ is the kk'th element of the additive genetic relationship matrix, that is the relationship coefficient between the kth and k'th individuals

VarG(Ia) is the individual additive genetic variance

 E_{kk} is the kk th element of the environmental relationship matrix which is usually assumed to be an identity matrix

VarE(I) is the individual environmental variance

 $\Delta_{kk'}$ is the k'th residual for the dyadic model 8

Again, equation 8 is stated as a univariate model for simplicity, and only the most elementary partitioning into VarG(Ia) and VarE(I) is presented. There is a full exposition in Jackson(2015) [6].

The dyadic model 8 represents a set of equations which can be solved by ordinary least squares regression techniques to yield estimates of VarG(Ia) and VarE(I). This yields MINQUE estimates for the two variance components. Given these estimates we can then go back to the monadic model 7 and obtain GLS estimates of the fixed effects and residuals. If we then use the GLS residuals in the dyadic model 8 we obtain bias-corrected-ML estimates for the two variance components. There is a full presentation of variance component estimation in Jackson(2015) [6].

Given variance component estimates we can readily transform each component to a heritability (if it is univariate) or to a genetic (or environmental) correlation (if it is a between trait covariance component). These transforms, and the accompanying standard error estimates, are fully covered in Jackson (2015) [6]

Because of the complication of different numbers of replicates for each trait and each pair of traits it was necessary to perform the model fitting part of the analysis separately for each pair of traits, except that some economy was obtained by blocking together sets of traits for which the replication was almost identical. The blockings used for the measured traits of Tables 2 to 6 were as follows

```
Block1 "Stal" "Diam" "Bwt"

Block2 "WrN" "WrB" "WrT" "Face"

Block3 "Gfw" "Yld" "Cww"

Block4 "Staladj" "Gfwadj" "Cwwadj"

Block5 "Crimp"

Block6 "Dp" "Ds" "Dps" "DpovDs" "CVDp" "CVDs" "MaxDp" "MinDp" "MaxDs" "MinDs" "SDDp" "SDDs" "SDD" "CVD" "Gt30Dp" "Gt30Ds" "Gt30D"

Block7 "Fnua" "Fr" "Fnt" "Sarea"

Block8 "Fd" "Fc" "Fu"

Block9 "Colour" "Fly" "Flcrot"

Block10 "Bactst" "MycD"

Block11 "Bcts" "Bctb" "Weanwt"

Block12 "NLB" "NLW"
```

Note that two traits, Birwt and WeanGfw, have been omitted because of small subclass numbers in pairings with the Block6 traits. The blocking is based on similarity of subclass numbers and in some cases where the replication was high

it was necessary to reduce the number of traits per block to conserve computer memory. The blocking is merely a computational device. The fixed effect model had to contain the same effects for every pair of blocks, but the number of levels of each effect could vary between block pairs.

After obtaining the variance component estimates and genetic parameters for each pair of blocks, it was necessary to condense these 144 sets of estimates back into a single genetic covariance matrix estimate (and a single genetic correlation matrix estimate). There is no guarantee that the 48 x 48 matrices thus obtained are positive definite, even though the 12 x 12 blocks which make then up are individually positive definite. This was therefore checked and if required an iterative amendment made using the R routine nearPD() which is available in the Matrix package.

When the 'calculated' and 'predicted' traits were added the number of blocks was extended as required. For the 'calculated' traits, those related to crimp (Crwvl, Crst, Crstadj, Crwvt) were added to Block 5, and the primary and secondary density traits (Fnpua, Fnsua, Fnpt, Fnst) were made Block 13.

4.3.2 Genetic models

The simple partitioning of phenotypic (co)variances into additive genetic and environmental (co)variances given in equation 8 is almost always the starting point for quantitative genetic analysis. It should be noted that just beacuse a considerable proportion of the phenotypic (co)variancees come out as additive genetic does not mean that most of the gene effects have to be additive. Dominance and epistatic gene effects also generate some additive genetic variance.

Dominance and epistatic (co)variances can be estimated where the data are adequate. In the present case the data probably do not have sufficient closely related animals in the pedigree to permit estimation of nonadditive genetic (co)variances. We shall check, but I am not optimistic.

It is possible to consider a model where the individual's phenotype is made up of individual additive genetic and individual environmental components from its own genes plus maternal additive genetic and maternal environmental components from its mother's genes and its mother's environment. This leads to four components of variance, and to maternal additive genetic correlations as well as individual additive genetic correlations. Such maternal effects tend to occur where the trait is obviously influenced by the mother (eg Birth weight of a lamb is influenced by its own genes and by its mother's genes). This could easily be the case for skin development so maternal inheritance has to be investigated. The dmm software can analyse maternal inheritance and its Users Guide (Jackson(2015) [6] contains a full presentation of the genetic theory and some worked examples. Again, the data must have adequate pedigree relationships to permit maternal genetic analysis.

It is possible that some of the genes affecting skin and wool traits are on the X chromasome. The dmm software can partition genetic (co)variances into autosomal and sex-linked. There is evidence in one of the example analyses in Jackson(2015) [6] that some wool traits have sex-linked inheritance. This

has consequences for selection procedures since selected rams to not pass their sexlinked genes to male offspring, so the male-to-male pathway of improvement does not operate. Again there are pedigree requirements for the data to be adequate for estimation of sexlinked components.

Genetic parameters are not necessarily the same in all populations. There is some evidence that parameters for wool traits are sex-specific (Jackson et al(1986) [7], and they are almost certainly age-specific. They may also differ between single-born and twin-born animals and this is behind the decision to include NLB and NLW as traits rather than as fixed effects. Fitting a fixed effect which is partly genetic may remove or distort genetic variation for other traits. The present data may not be adequate to examine any of these heterogeneities.

4.3.3 Multivariate analysis

The initial approach was to simply look at the dimensionality of the genetic trait space using principal component analysis. The size and shape of the additive genetic trait space is given by the additive genetic covariance matrix. A large covariance matrix is not an easy object to comprehend. To help with this one can reduce the marix to *cononical form* which simply means finding the directions in which genetic variation is greatest, and the directions in which genetic variation is small. The technique for doing this on a single covariance matrix is known as principal components analysis.

One of the difficulties of principal components analysis is that its results are seriously biased if all traits are not measured in the same units. The traditional way of dealing with this is to do everything in standard deviation units, that is to use a correlation matrix instead of a covariance matrix. In our case this would amount to scaling to genetic standard deviation units. However we are not going to do that, we are going to scale to phenotypic standard deviation units which is the traditional approach of quantitative genetics to scaling. To do this we need to do a principal component analysis on the matrix shown below for the two trait case

$$m{H_{G(Ia)}} = \left[egin{array}{cc} h_1^2 & h_1 h_2 r_{G(Ia)} \\ h_1 h_2 r_{G(Ia)} & h_2^2 \end{array}
ight]$$

where

 h_1^2 is heritability of trait 1

 h_2^2 is heritability of trait 2

 $r_{G(Ia)}$ is the genetic correlation between traits 1 and 2

One reason for this approach is to avoid giving excess weight to traits for which the proportion of variance ie heritability) is small. By putting heritabilities (or proportion of variance) on the diagonal we are weighting each trait by its heritability. That is what is required if we wish to compare genetic variation of various traits.

The H matrices are not the same as the matrix GP^{-1} from the multivariate breeders equation ??. That matrix is in trait units and is not symmetric and is for prediction of genetic change. Here we are attempting to study genetic variation itself, not prediction.

Following this, traits were grouped into fleece observations, skin observations, and fibre traits of textile significance, and the genetic covariances between these groupings analysed using canonical regression techniques.

The traits included in each group were as follows

Fleece observations Cww, Yls, Gfw, Stalen, Diam, Crimp, Crwvl

Skin observations Fnua, Fr, Fnt, Fd, Fc, Fu, Dp, Ds

Fibre traits Lf, Diam, SDLf, SDD

- 4.3.4 Nonlinearities
- 4.3.5 Genetic parameter shifts
- 4.4 Quantitative genetic theory

5 Results

5.1 Fixed effects

Model 7 was fitted to all 56 measured traits. The resulting estimates of fixed effects are reported as fitted constants in Tables 9 to 15. The constants are fitted as contrasts defined to sum to zero over all the levels of each effect. Hence the notation C(Sex, sum)1 refers to the level coded as 1 for a contrast named Sex, ie rams. The level coded as 2 (ie ewes) is not reported as its effect is equal to minus the ram effect (because they sum to zero).

The mean is reported as (Intercept). If one wants the mean for rams one simply adds the C(Sex, sum)1 effect to the (Intercept), ie to the mean.

The effect reported as C(YbxLi, sum)yyl refers to combinations of $Year\ born\ in\ (yy)$ and $Line\ (l)$. Year born in (yy) ranges from 74 to 85 (meaning 1974 to 1985). Line (l) is as follows

- **0** unselected base animals (years 74 and 75 only)
- 1 selection line 1, selected for high follicle depth
- 2 selection line 2, selected for large number of follicles per head
- **3** selection line 3, selected for both large follicle depth and high number of follicles per head
- 4 unselected control line

Table 9: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 1/7.

model 7 for all 56 me								
	Stal	Diam	Bwt	WrN	WrB	WrT	Face	Gfw
C(Sex, sum)1	-1.38	-0.53	2.42	-0.12	-0.13	-0.25	0.30	-0.06
C(YbxLi, sum)749	-0.41	0.12	-0.25	0.12	0.08	0.21	0.44	-0.13
C(YbxLi, sum)750	-0.85	1.38	-0.37	0.01	-0.09	-0.07	0.05	-0.09
C(YbxLi, sum)759	13.71	-1.63	-1.92	0.31	-0.37	-0.05	0.80	-0.47
C(YbxLi, sum)761	17.26	-0.43	-1.31	0.17	-0.62	-0.44	0.29	-0.51
C(YbxLi, sum)762	27.11	0.43	1.06	0.00	0.06	0.07	-0.14	1.09
C(YbxLi, sum)763	25.15	0.36	0.10	0.03	-0.03	0.01	0.22	0.94
C(YbxLi, sum)769	21.83	0.82	1.05	0.21	0.09	0.32	-0.42	1.07
C(YbxLi, sum)771	28.84	1.16	-1.13	0.09	-0.11	-0.02	0.01	1.04
C(YbxLi, sum)772	-4.41	-0.82	-4.14	0.50	0.56	0.79	0.87	-0.69
C(YbxLi, sum)773	-9.39	-1.51	-2.01	0.08	-0.02	0.07	1.39	-0.77
C(YbxLi, sum)779	-4.48	-0.66	-3.94	0.16	0.20	0.37	0.60	-0.60
C(YbxLi, sum)781	5.30	0.12	2.83	-0.20	-0.17	-0.36	-0.46	0.34
C(YbxLi, sum)782	4.86	1.77	3.39	0.12	0.14	0.27	-0.23	0.55
C(YbxLi, sum)783	4.01	-0.48	4.85	0.17	0.50	0.67	-0.08	0.39
C(YbxLi, sum)789	-2.30	-0.82	7.16	-0.15	0.12	-0.02	0.17	0.27
C(YbxLi, sum)791	3.24	-0.67	6.07	0.09	0.32	0.41	-0.13	0.43
C(YbxLi, sum)792	3.61	0.99	6.39	0.04	0.20	0.26	-0.26	0.51
C(YbxLi, sum)793	-0.81	0.63	0.05	-0.02	0.06	0.05	-0.34	-0.14
C(YbxLi, sum)799	-6.61	-1.05	2.20	-0.28	-0.23	-0.51	-0.06	-0.20
C(YbxLi, sum)801	-3.65	-0.33	0.16	-0.38	-0.37	-0.74	-0.53	-0.10
C(YbxLi, sum)802	-1.73	1.43	3.03	-0.13	-0.17	-0.30	-0.39	-0.00
C(YbxLi, sum)803	-12.34	-1.61	-5.84	0.25	0.58	0.84	0.29	-0.87
C(YbxLi, sum)809	-15.02	-2.55	-4.58	-0.23	-0.00	-0.23	0.18	-1.01
C(YbxLi, sum)821	-12.39	-2.10	-4.98	-0.02	0.28	0.26	0.06	-0.84
C(YbxLi, sum)822	-7.40	-0.30	-0.70	-0.26	-0.26	-0.51	-0.19	-0.17
C(YbxLi, sum)823	-3.92	-0.17	-1.33	-0.17	-0.07	-0.23	-0.57	-0.04
C(YbxLi, sum)829	1.29	0.36	-3.27	-0.05	-0.07	-0.11	0.52	-0.63
C(YbxLi, sum)831	-1.84	1.49	-0.39	-0.16	-0.30	-0.45	-0.29	-0.08
C(YbxLi, sum)832	5.06	0.59	1.00	0.03	0.08	0.12	-0.10	0.28
C(YbxLi, sum)833	1.42	-0.35	2.77	-0.21	-0.14	-0.34	-0.25	0.25
C(YbxLi, sum)839	-6.34	0.65	2.98	0.30	0.31	0.62	-0.05	0.34
C(YbxLi, sum)841	-6.24	0.08	3.57	-0.16	-0.25	-0.40	-0.18	0.14
C(YbxLi, sum)842	-7.81	1.70	3.25	0.51	0.33	0.85	-0.37	0.44
C(YbxLi, sum)843	-4.86	2.09	2.99	0.35	0.05	0.41	-0.48	0.39
C(YbxLi, sum)849	-6.09	0.06	-4.21	-0.20	-0.13	-0.33	-0.14	0.01
C(YbxLi, sum)851	-12.48	-1.20	-2.69	-0.42	-0.31	-0.72	0.62	-0.18
C(YbxLi, sum)852	-7.78	-0.24	-3.80	-0.37	-0.31	-0.68	-0.27	-0.06
C(YbxLi, sum)853	-7.60	0.71	-2.98	-0.39	-0.42	-0.80	-0.23	-0.05
C(YbxLi, sum)859	-5.25	0.54	-1.05	0.11	0.23	0.34	-0.10	-0.11
(Intercept)	81.40	19.29	35.15	2.49	1.64	4.12	3.66	3.20

Table 10: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 2/7.

model 7 for all 50 measured traits: Part 2/7.									
	Yld	Cww	Staladj	Gfwadj	Cwwadj	Crimp	Crwvl	Crst	
C(Sex, sum)1	-1.03	-0.08	-2.18	-0.10	-0.11	-0.22	0.04	-0.99	
C(YbxLi, sum)749	-0.31	-0.10	-0.62	-0.09	-0.07	-2.14	0.39	-6.74	
C(YbxLi, sum)750	-1.73	-0.11	-1.04	-0.04	-0.09	0.02	-0.03	7.13	
C(YbxLi, sum)759	2.11	-0.26	-10.97	-1.40	-0.90	-1.49	0.25	3.28	
C(YbxLi, sum)761	1.77	-0.30	-8.89	-1.47	-0.96	-1.39	0.25	7.39	
C(YbxLi, sum)762	-1.02	0.71	-1.63	-0.09	-0.10	-0.10	-0.00	12.24	
C(YbxLi, sum)763	-1.10	0.60	-2.15	-0.19	-0.16	-0.67	0.14	8.05	
C(YbxLi, sum)769	-1.77	0.66	-4.32	-0.06	-0.10	-2.09	0.41	5.50	
C(YbxLi, sum)771	-0.59	0.69	1.62	-0.10	-0.08	0.65	-0.08	0.07	
C(YbxLi, sum)772	1.06	-0.44	6.02	-0.48	-0.29	0.66	-0.12	-2.33	
C(YbxLi, sum)773	1.15	-0.49	-1.26	-0.60	-0.36	-0.46	0.10	-3.33	
C(YbxLi, sum)779	2.17	-0.35	5.95	-0.37	-0.17	-2.08	0.46	-5.89	
C(YbxLi, sum)781	0.68	0.27	11.94	0.55	0.42				
C(YbxLi, sum)782	-3.07	0.26	11.64	0.82	0.43				
C(YbxLi, sum)783	0.71	0.30	6.61	0.51	0.39				
C(YbxLi, sum)789	3.12	0.29	-1.51	0.34	0.36				
C(YbxLi, sum)791	2.68	0.39	6.14	0.54	0.49				
C(YbxLi, sum)792	0.08	0.35	6.29	0.62	0.42				
C(YbxLi, sum)793	1.07	-0.06	6.58	0.15	0.14				
C(YbxLi, sum)799	3.65	-0.02	0.73	0.08	0.19				
C(YbxLi, sum)801	3.60	0.04	2.83	0.20	0.28				
C(YbxLi, sum)802	-0.37	-0.01	5.40	0.33	0.21				
C(YbxLi, sum)803	0.18	-0.58	-8.96	-0.87	-0.58				
C(YbxLi, sum)809	3.28	-0.61	-12.36	-1.04	-0.61				
C(YbxLi, sum)821	2.45	-0.51	-9.00	-0.83	-0.49				
C(YbxLi, sum)822	-0.85	-0.15	-2.77	0.15	0.06				
C(YbxLi, sum)823	0.02	-0.03	1.24	0.30	0.19				
C(YbxLi, sum)829	2.64	-0.36	13.09	-0.44	-0.20	-1.70	0.31	-3.04	
C(YbxLi, sum)831	-2.00	-0.12	3.63	0.21	0.06				
C(YbxLi, sum)832	-1.02	0.16	11.86	0.49	0.30				
C(YbxLi, sum)833	1.27	0.22	7.34	0.45	0.37				
C(YbxLi, sum)839	-0.02	0.23	-2.04	0.65	0.44	-0.01	-0.01	2.32	
C(YbxLi, sum)841	1.40	0.14	-2.19	0.40	0.33	-0.91	0.24	-2.88	
C(YbxLi, sum)842	0.92	0.33	-4.20	0.78	0.57	0.18	-0.05	-1.62	
C(YbxLi, sum)843	-1.47	0.22	-0.38	0.72	0.43	-1.47	0.28	-6.13	
C(YbxLi, sum)849	-5.52	-0.17	-3.99	0.14	-0.11	-2.03	0.39	-6.78	
C(YbxLi, sum)851	-4.05	-0.23	-11.75	-0.07	-0.18	0.37	-0.09	-4.83	
C(YbxLi, sum)852	-4.49	-0.17	-5.95	0.07	-0.12	0.28	-0.09	-6.22	
C(YbxLi, sum)853	-4.35	-0.16	-5.42	0.10	-0.09	-0.52	0.05	-7.08	
C(YbxLi, sum)859	-2.71	-0.16	-0.67	0.21	0.03	-0.87	0.12	-7.33	
(Intercept)	68.33	2.18	98.82	3.74	2.55	12.57	2.10	39.80	

Table 11: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 3/7.

Crstad Crwvt	model 7 for all 56 measured traits: Part 3/7.										
C(YbxLi, sum)749		Crstadj	Crwvt	Dp	$_{\mathrm{Ds}}$	Dps	DpovDs	CVDp	CVDs		
C(YbxLi, sum)750	C(Sex, sum)1	-1.36	0.02	-0.91	-0.20	-0.25	-0.03	1.11	0.76		
C(YbxLi, sum)759	C(YbxLi, sum)749	-8.20	0.14								
C(YbxLi, sum)761	C(YbxLi, sum)750	-4.91	0.08								
C(YbxLi, sum)762	C(YbxLi, sum)759	-8.98	0.18								
C(YbxLi, sum)763	C(YbxLi, sum)761	-5.99	0.10								
C(YbxLi, sum)769	C(YbxLi, sum)762	-1.06	0.02								
C(YbxLi, sum)771	C(YbxLi, sum)763	-4.42	0.08								
C(YbxLi, sum)772	C(YbxLi, sum)769	-6.97	0.13								
C(YbxLi, sum)773	C(YbxLi, sum)771	5.92	-0.08								
C(YbxLi, sum)779 C(YbxLi, sum)781 C(YbxLi, sum)782 C(YbxLi, sum)783 C(YbxLi, sum)789 C(YbxLi, sum)791 C(YbxLi, sum)792 C(YbxLi, sum)793 C(YbxLi, sum)793 C(YbxLi, sum)801 C(YbxLi, sum)802 C(YbxLi, sum)802 C(YbxLi, sum)808 C(YbxLi, sum)822 C(YbxLi, sum)822 C(YbxLi, sum)822 C(YbxLi, sum)823 C(YbxLi, sum)823 C(YbxLi, sum)824 C(YbxLi, sum)831 C(YbxLi, sum)832 C(YbxLi, sum)834 C(YbxLi, sum)834 C(YbxLi, sum)835 C(YbxLi, sum)836 C(YbxLi, sum)837 C(YbxLi, sum)838 C(YbxLi, sum)838 C(YbxLi, sum)839 C(YbxLi, sum)839 C(YbxLi, sum)839 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)843 C(YbxLi, sum)845 C(YbxLi, sum)851 C(YbxLi, sum)852 C(YbxLi, sum)853 C(YbxLi, sum)855 C(YbxLi, sum)855 C(YbxLi, sum)855 C(YbxLi, sum)859 C(YbxL	C(YbxLi, sum)772	2.57	-0.03								
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C(YbxLi, sum)832 -2.94 -0.80 -0.91 -0.09 -3.70 -3.49 C(YbxLi, sum)833 -1.60 -1.17 -1.23 -0.01 -2.56 -1.76 C(YbxLi, sum)839 3.55 -0.06 0.63 0.55 0.53 0.00 -3.40 -0.51 C(YbxLi, sum)841 0.03 0.03 2.16 2.44 2.41 -0.03 -2.09 -2.14 C(YbxLi, sum)842 1.69 -0.03 -1.25 0.52 0.42 -0.09 -4.52 -3.12 C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 0.10 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 <td< td=""><td>C(YbxLi, sum)829</td><td>-1.18</td><td>0.02</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	C(YbxLi, sum)829	-1.18	0.02								
C(YbxLi, sum)833 -1.60 -1.17 -1.23 -0.01 -2.56 -1.76 C(YbxLi, sum)839 3.55 -0.06 0.63 0.55 0.53 0.00 -3.40 -0.51 C(YbxLi, sum)841 0.03 0.03 2.16 2.44 2.41 -0.03 -2.09 -2.14 C(YbxLi, sum)842 1.69 -0.03 -1.25 0.52 0.42 -0.09 -4.52 -3.12 C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 0.10 0.02 -4.17 -2.41 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04	C(YbxLi, sum)831			-1.75	-0.76	-0.83	-0.05	-3.39	-1.55		
C(YbxLi, sum)839 3.55 -0.06 0.63 0.55 0.53 0.00 -3.40 -0.51 C(YbxLi, sum)841 0.03 0.03 2.16 2.44 2.41 -0.03 -2.09 -2.14 C(YbxLi, sum)842 1.69 -0.03 -1.25 0.52 0.42 -0.09 -4.52 -3.12 C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)832			-2.94	-0.80	-0.91	-0.09	-3.70	-3.49		
C(YbxLi, sum)841 0.03 0.03 2.16 2.44 2.41 -0.03 -2.09 -2.14 C(YbxLi, sum)842 1.69 -0.03 -1.25 0.52 0.42 -0.09 -4.52 -3.12 C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 0.10 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)833			-1.60	-1.17	-1.23	-0.01	-2.56	-1.76		
C(YbxLi, sum)842 1.69 -0.03 -1.25 0.52 0.42 -0.09 -4.52 -3.12 C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)839	3.55	-0.06	0.63	0.55	0.53	0.00	-3.40	-0.51		
C(YbxLi, sum)843 -4.24 0.08 0.22 -0.11 -0.13 0.02 -4.17 -2.41 C(YbxLi, sum)849 -5.06 0.10 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)841	0.03	0.03	2.16	2.44	2.41	-0.03	-2.09	-2.14		
C(YbxLi, sum)849 -5.06 0.10 C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)842	1.69	-0.03	-1.25	0.52	0.42	-0.09	-4.52	-3.12		
C(YbxLi, sum)851 -2.78 0.04 1.32 -0.64 -0.57 0.10 -3.55 -0.96 C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)843	-4.24	0.08	0.22	-0.11	-0.13	0.02	-4.17	-2.41		
C(YbxLi, sum)852 -4.54 0.07 -2.48 -1.36 -1.44 -0.04 -6.05 -2.25 C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)849	-5.06	0.10								
C(YbxLi, sum)853 -5.66 0.10 0.72 -1.16 -1.10 0.10 -3.43 -1.48 C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)851	-2.78	0.04	1.32	-0.64	-0.57	0.10	-3.55	-0.96		
C(YbxLi, sum)859 -5.95 0.10 0.10 0.83 0.80 -0.04 -3.07 -1.16	C(YbxLi, sum)852	-4.54	0.07	-2.48	-1.36	-1.44	-0.04		-2.25		
	C(YbxLi, sum)853	-5.66	0.10	0.72	-1.16	-1.10	0.10	-3.43	-1.48		
(Intercept) 48.25 0.79 24.49 21.11 21.28 1.16 20.18 17.66	C(YbxLi, sum)859	-5.95	0.10	0.10	0.83	0.80	-0.04	-3.07	-1.16		
	(Intercept)	48.25	0.79	24.49	21.11	21.28	1.16	20.18	17.66		

Table 12: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 4/7.

model / for all 50 me	MaxDp	MinDp	MaxDs	MinDs	SDDp	SDDs	SDD	CVD
C(Sex, sum)1	-1.03	-1.24	0.02	-0.59	0.07	0.12	0.11	0.75
C(YbxLi, sum)749								
C(YbxLi, sum)750								
C(YbxLi, sum)759								
C(YbxLi, sum)761								
C(YbxLi, sum)762								
C(YbxLi, sum)763								
C(YbxLi, sum)769								
C(YbxLi, sum)771								
C(YbxLi, sum)772								
C(YbxLi, sum)773								
C(YbxLi, sum)779								
C(YbxLi, sum)781								
C(YbxLi, sum)782								
C(YbxLi, sum)783								
C(YbxLi, sum)789								
C(YbxLi, sum)791								
C(YbxLi, sum)792								
C(YbxLi, sum)793								
C(YbxLi, sum)799								
C(YbxLi, sum)801								
C(YbxLi, sum)802								
C(YbxLi, sum)803								
C(YbxLi, sum)809								
C(YbxLi, sum)821								
C(YbxLi, sum)822	-3.86	-0.57	-3.26	-0.78	-0.75	-0.37	-0.40	-0.93
C(YbxLi, sum)823	1.98	0.17	-0.46	-0.41	0.26	-0.05	-0.03	0.42
C(YbxLi, sum)829								
C(YbxLi, sum)831	-3.69	2.05	-1.76	0.84	-1.08	-0.46	-0.51	-1.70
C(YbxLi, sum)832	-5.59	1.62	-4.37	0.48	-1.34	-0.84	-0.88	-3.57
C(YbxLi, sum)833	-3.35	1.92	-3.34	0.31	-0.87	-0.54	-0.57	-1.87
C(YbxLi, sum)839	-0.50	3.89	-0.48	2.33	-0.76	-0.02	-0.07	-0.77
C(YbxLi, sum)841	3.76	5.17	1.45	-0.40	0.01	-0.01	-0.01	-2.15
C(YbxLi, sum)842	-3.43	2.80	-2.35	-0.72	-1.26	-0.56	-0.61	-3.29
C(YbxLi, sum)843	-0.92	3.67	-2.82	0.39	-0.92	-0.51	-0.55	-2.56
C(YbxLi, sum)849			ے <u>ر</u>		0	0.00	0.22	4 00
C(YbxLi, sum)851	1.20	4.56	-1.45	-0.03	-0.57	-0.32	-0.33	-1.08
C(YbxLi, sum)852	-5.26	2.81	-4.86	-0.53	-1.80	-0.67	-0.75	-2.53
C(YbxLi, sum)853	0.62	3.53	-3.49	-0.75	-0.62	-0.49	-0.50	-1.53
C(YbxLi, sum)859	-0.39	2.82	-0.78	0.58	-0.71	-0.11	-0.14	-1.30
(Intercept)	35.11	12.85	37.92	8.54	4.93	3.71	3.80	17.92

Table 13: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 5/7.

Gt30Dp Gt30Ds Gt30D Fnua Fr Fnt Sarea C(Sex, sum)1 -2.54 0.06 -0.09 2.27 0.94 4.78 0.04	Fd
C(Sov.sum)1 2.54 0.06 0.00 2.27 0.04 4.78 0.04	0.00
	-0.03
C(YbxLi, sum)749	
C(YbxLi, sum)750 1.83 -1.64 -0.24 -0.03	-0.05
C(YbxLi, sum)759 -3.81 -4.48 -5.41 -0.03	-0.01
C(YbxLi, sum)761 -3.46 0.36 -1.89 0.03	0.04
C(YbxLi, sum)762 -2.07 -0.94 -1.48 0.01	-0.03
C(YbxLi, sum)763 -4.10 -0.09 -2.43 0.02	-0.04
C(YbxLi, sum)769 -3.23 -0.84 -4.12 -0.02	0.03
C(YbxLi, sum)771 -1.03 0.02 -5.67 -0.08	0.16
C(YbxLi, sum)772 3.52 1.49 1.28 -0.03	0.15
C(YbxLi, sum)773 1.19 0.24 -3.18 -0.07	0.13
C(YbxLi, sum)779 -4.70 -3.38 -7.85 -0.06	0.25
C(YbxLi, sum)781 -2.56 1.98 1.23 0.06	0.24
C(YbxLi, sum)782 1.34 1.75 5.67 0.07	0.11
C(YbxLi, sum)783 -1.22 1.14 2.79 0.07	0.22
C(YbxLi, sum)789 -4.92 -0.21 -1.46 0.06	0.32
C(YbxLi, sum)791 3.04 1.22 -1.81 -0.07	0.07
C(YbxLi, sum)792 9.47 4.91 6.09 -0.04	-0.08
C(YbxLi, sum)793 7.30 2.32 2.51 -0.07	0.07
C(YbxLi, sum)799 0.16 -0.59 -2.98 -0.05	-0.02
C(YbxLi, sum)801 -2.19 1.61 -2.77 -0.01	0.19
C(YbxLi, sum)802 3.23 1.99 2.91 -0.01	0.05
C(YbxLi, sum)803 7.04 3.09 5.71 -0.02	0.14
C(YbxLi, sum)809 -3.72 -0.16 -3.81 -0.00	0.11
C(YbxLi, sum)821 0.42 1.14 2.01 0.02	0.12
C(YbxLi, sum)822 -8.41 -1.76 -2.14 12.74 3.84 17.22 0.06	-0.05
C(YbxLi, sum)823 2.83 -0.86 -0.72 8.61 2.36 12.45 0.06	0.02
C(YbxLi, sum)829	
C(YbxLi, sum)831 -7.24 -1.49 -1.86 4.19 4.18 11.47 0.11	0.05
C(YbxLi, sum)832 -9.18 -2.14 -2.55 14.21 6.39 27.14 0.16	-0.10
C(YbxLi, sum)833 -8.90 -1.65 -2.10 16.04 6.76 25.68 0.13	0.04
C(YbxLi, sum)839 -0.64 0.94 0.79 6.93 1.58 12.22 0.08	
C(YbxLi, sum)841 3.85 3.26 3.24 -4.30 2.64 -2.87 0.02	
C(YbxLi, sum)842 -7.79 -0.98 -1.38 16.53 8.95 21.86 0.06	
C(YbxLi, sum)843 -3.51 -1.28 -1.50 14.35 5.52 14.65 0.01	
C(YbxLi, sum)849	
C(YbxLi, sum)851 2.83 -1.02 -0.91 13.53 2.32 5.42 -0.11	
C(YbxLi, sum)852 -12.45 -2.01 -2.60 26.19 3.46 17.92 -0.09	
C(YbxLi, sum)853 0.94 -1.69 -1.66 24.78 4.11 16.37 -0.09	
C(YbxLi, sum)859 -2.32 0.89 0.78 10.28 -0.34 5.27 -0.07	
(Intercept) 15.80 2.81 3.49 61.43 18.86 60.60 0.99	1.57

Table 14: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 6/7.

model 7 for all 56 measured traits: Part 6/7.											
	Fc	Fu	Colour	Fly	Flcrot	Bactst	MycD	Bcts			
C(Sex, sum)1	-0.11	-0.05	-0.04	-0.04	0.02	-0.04	-0.03	-0.13			
C(YbxLi, sum)749			-0.01	-0.90	0.26						
C(YbxLi, sum)750	-0.56	-0.50	-0.36	-1.10	-0.06						
C(YbxLi, sum)759	-0.68	-0.49	-0.19	-0.90	0.01			0.18			
C(YbxLi, sum)761	-0.81	-0.87	0.01	-1.52	0.03			-0.55			
C(YbxLi, sum)762	-0.89	-0.88	-0.06	-1.02	0.29			-1.09			
C(YbxLi, sum)763	-0.30	-0.69	-0.15	0.44	0.07			0.07			
C(YbxLi, sum)769	-0.83	-0.30	-0.09	-0.91	-0.39			-0.55			
C(YbxLi, sum)771	-0.02	-0.84						0.40			
C(YbxLi, sum)772	-0.33	-0.87						-0.23			
C(YbxLi, sum)773	-0.27	-0.89						-0.09			
C(YbxLi, sum)779	-0.34	-0.89	0.99	0.50	-0.25			0.16			
C(YbxLi, sum)781	-0.19	-0.78	-2.82	-4.57	-4.33			-1.27			
C(YbxLi, sum)782	-1.10	-1.28	-3.25	-4.57	-4.31	-0.01	-0.01	-1.35			
C(YbxLi, sum)783	-0.03	-0.53	-2.91	-4.58	-4.23	-0.01	-0.01	-0.61			
C(YbxLi, sum)789	-0.63	-0.78	-2.70	-4.58	-4.37	0.03	-0.01	-0.33			
C(YbxLi, sum)791	-0.28	-0.66	-2.68	-4.61	-4.48	-0.02	-0.00	0.22			
C(YbxLi, sum)792	-0.79	-1.11	-2.99	-4.61	-4.46	-0.01	0.00	-1.90			
C(YbxLi, sum)793	-0.65	-0.87	-2.72	-4.62	-4.47	-0.02	-0.01	-0.92			
C(YbxLi, sum)799	-0.52	-0.86	-2.30	-4.61	-4.48	-0.01	0.04	-0.65			
C(YbxLi, sum)801	0.67	0.00	-2.41	-4.60	-4.48	-0.02	-0.00	-1.13			
C(YbxLi, sum)802	-0.30	-0.75	-2.52	-4.62	-4.45	-0.02	0.14	-1.34			
C(YbxLi, sum)803	-0.18	-0.58	-2.44	-4.61	-4.47	-0.02	0.09	-0.33			
C(YbxLi, sum)809	0.31	-0.12	-2.00	-4.61	-4.48	-0.01	0.15	-0.72			
C(YbxLi, sum)821	0.14	-0.42	-1.88	-4.48	-3.73	0.27	0.36	-1.08			
C(YbxLi, sum)822	-0.83	-1.22	-1.94	-4.57	-3.78	0.29	0.25	-1.38			
C(YbxLi, sum)823	-0.35	-0.97	-1.88	-4.55	-3.85	0.40	0.58	-0.29			
C(YbxLi, sum)829			-1.45	-4.51	-3.94	0.32	0.64	-0.52			
C(YbxLi, sum)831	0.03	-0.78	-2.60	-4.61	-4.07	-0.00	0.01	-0.81			
C(YbxLi, sum)832	-0.64	-1.43	-2.53	-4.60	-4.18	-0.02	-0.00	-1.58			
C(YbxLi, sum)833	-0.47	-1.21	-2.76	-4.62	-3.78	0.01	-0.01	-0.27			
C(YbxLi, sum)839			-2.25	-4.58	-4.06	0.01	0.05	-0.56			
C(YbxLi, sum)841			-2.91	-4.62	-3.99	0.03	0.15	-1.18			
C(YbxLi, sum)842			-2.56	-4.55	-3.24	0.06	0.58	-1.60			
C(YbxLi, sum)843			-2.60	-4.55	-3.52	0.18	0.58	-0.67			
C(YbxLi, sum)849			-2.34	-4.54	-3.80	0.10	0.58	-0.99			
C(YbxLi, sum)851			-2.37	-4.61	-4.40	-0.02	0.02	-0.19			
C(YbxLi, sum)852			-2.17	-4.59	-4.43	-0.03	-0.01	-1.75			
C(YbxLi, sum)853			-2.49	-4.56	-4.36	-0.02	0.13	-0.68			
C(YbxLi, sum)859			-2.53	-4.62	-4.44	-0.02	0.09	-1.06			
(Intercept)	3.87	3.62	5.99	4.61	4.47	0.02	0.00	4.61			

Table 15: Fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 7/7.

C(Sex, sum)ray	model 7 for all 56 measured traits: Part 7/7.										
C(YbxLi, sum)749 0.12 0.06 0.38 1.45 0.26 -0.50 C(YbxLi, sum)759 0.51 -0.36 -0.05 -0.13 0.72 -4.53 0.56 -5.97 C(YbxLi, sum)761 -0.34 7.18 0.11 -0.08 -0.21 -3.25 -0.13 -1.75 C(YbxLi, sum)762 -0.78 6.15 -0.32 -0.24 0.06 -2.13 0.10 -1.57 C(YbxLi, sum)763 0.54 7.34 -0.13 -0.07 -0.21 -3.89 -0.12 -2.30 C(YbxLi, sum)7769 -0.18 6.04 -0.23 -0.18 -0.04 -3.20 -0.08 -4.03 C(YbxLi, sum)7771 0.64 0.55 -0.00 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)7773 0.05 -0.46 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 <th< td=""><td></td><td>Bctb</td><td>Weanwt</td><td>NLB</td><td>NLW</td><td>Fnpua</td><td>Fnsua</td><td>Fnpt</td><td>Fnst</td></th<>		Bctb	Weanwt	NLB	NLW	Fnpua	Fnsua	Fnpt	Fnst		
C(YbxLi, sum)750 0.13 0.06 0.38 1.45 0.26 -0.50 C(YbxLi, sum)751 0.51 -0.36 -0.05 -0.13 0.72 -4.53 0.56 -5.90 C(YbxLi, sum)762 0.78 6.15 -0.32 -0.24 0.06 -2.13 0.10 -1.57 C(YbxLi, sum)763 0.54 7.34 -0.13 -0.07 -0.21 -3.89 -0.12 -2.30 C(YbxLi, sum)769 -0.18 6.04 -0.23 -0.18 -0.04 -0.03 -0.97 -0.28 -5.40 C(YbxLi, sum)7769 -0.18 6.04 -0.23 -0.18 -0.04 -0.23 -0.97 -0.28 -5.40 C(YbxLi, sum)7779 -0.55 -0.00 -0.04 -0.05 -3.58 -0.14 1.42 C(YbxLi, sum)7779 -0.35 -0.13 -0.01 -0.05 -3.58 -0.14 1.42 C(YbxLi, sum)782 -0.38 7.56 0.09 -0.05 -0.19 1.53 0.01 <	C(Sex, sum)1	-0.14	0.73	0.00	0.00	-0.03	2.30	0.09	4.69		
C(YbxLi, sum)759 0.51 -0.36 -0.05 -0.13 0.72 -4.53 0.56 -5.97 C(YbxLi, sum)761 -0.34 7.18 0.11 -0.08 -0.21 -3.25 -0.13 -1.75 C(YbxLi, sum)762 -0.78 6.15 -0.32 -0.24 0.06 -2.13 0.10 -1.57 C(YbxLi, sum)763 0.54 7.34 -0.13 -0.07 -0.21 -3.89 -0.12 -2.30 C(YbxLi, sum)779 0.18 6.04 -0.23 -0.18 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)777 0.64 0.55 -0.00 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)783 0.34 7.01 0.03 0.05 -0.19											
C(YbxLi, sum)761 -0.34 7.18 0.11 -0.08 -0.21 -3.25 -0.13 -1.75 C(YbxLi, sum)762 -0.78 6.15 -0.32 -0.24 0.06 -2.13 0.10 -1.57 C(YbxLi, sum)769 -0.18 6.04 -0.23 -0.18 -0.04 -3.29 -0.02 -0.08 -4.03 C(YbxLi, sum)779 0.64 0.55 -0.00 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)773 0.05 -0.46 0.06 0.05 3.58 -0.14 1.42 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.12 1.46 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 <td>C(YbxLi, sum)750</td> <td></td> <td></td> <td>0.13</td> <td>0.06</td> <td>0.38</td> <td>1.45</td> <td>0.26</td> <td>-0.50</td>	C(YbxLi, sum)750			0.13	0.06	0.38	1.45	0.26	-0.50		
C(YbxLi, sum)762 -0.78 6.15 -0.32 -0.24 0.06 -2.13 0.10 -1.57 C(YbxLi, sum)763 0.54 7.34 -0.13 -0.07 -0.21 -3.89 -0.12 -2.30 C(YbxLi, sum)769 -0.18 6.04 -0.23 -0.18 -0.04 -3.20 -0.08 -4.03 C(YbxLi, sum)771 0.64 -0.55 -0.00 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)773 0.05 -0.46 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 0.35 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.51 -0.02 1.41 C(YbxLi, sum)799 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 </td <td>C(YbxLi, sum)759</td> <td></td> <td>-0.36</td> <td></td> <td>-0.13</td> <td></td> <td></td> <td></td> <td>-5.97</td>	C(YbxLi, sum)759		-0.36		-0.13				-5.97		
C(YbxLi, sum)763 0.54 7.34 -0.13 -0.07 -0.21 -3.89 -0.12 -2.30 C(YbxLi, sum)769 -0.18 6.04 -0.23 -0.18 -0.04 -3.20 -0.08 -4.03 C(YbxLi, sum)771 0.64 0.55 -0.00 -0.04 -0.05 3.58 -0.14 1.42 C(YbxLi, sum)773 0.05 -0.46 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)783 0.34 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08	C(YbxLi, sum)761	-0.34	7.18	0.11	-0.08	-0.21	-3.25	-0.13	-1.75		
C(YbxLi, sum)769 -0.18 6.04 -0.23 -0.18 -0.04 -3.20 -0.08 -4.03 C(YbxLi, sum)771 0.64 0.55 -0.00 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)772 -0.27 0.47 -0.08 -0.10 -0.05 3.58 -0.14 1.42 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68	C(YbxLi, sum)762	-0.78	6.15	-0.32	-0.24	0.06	-2.13	0.10	-1.57		
C(YbxLi, sum)771 0.64 0.55 -0.00 -0.04 -0.06 -0.97 -0.28 -5.40 C(YbxLi, sum)773 -0.05 -0.46 -0.06 -0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31	C(YbxLi, sum)763	0.54	7.34	-0.13	-0.07	-0.21	-3.89	-0.12	-2.30		
C(YbxLi, sum)772 -0.27 0.47 -0.08 -0.10 -0.05 3.58 -0.14 1.42 C(YbxLi, sum)773 0.05 -0.46 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)799 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)799 -0.19 6.91 0.03 0.06 -0.01 7.31	C(YbxLi, sum)769	-0.18	6.04	-0.23	-0.18	-0.04	-3.20	-0.08	-4.03		
C(YbxLi, sum)773 0.05 -0.46 0.06 0.05 0.04 1.15 -0.18 -3.00 C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)799 -0.19 6.91 0.03 0.04 0.10 0.05 -0.33 6.42 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 1.84 <th< td=""><td>C(YbxLi, sum)771</td><td>0.64</td><td>0.55</td><td>-0.00</td><td>-0.04</td><td>-0.06</td><td>-0.97</td><td>-0.28</td><td>-5.40</td></th<>	C(YbxLi, sum)771	0.64	0.55	-0.00	-0.04	-0.06	-0.97	-0.28	-5.40		
C(YbxLi, sum)779 0.35 0.13 0.01 0.06 0.37 -5.07 0.17 -8.02 C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -1.01 -0.02 -1.47 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)803 0.10 -0.43 0.11 0.08 -0.16 3.38	C(YbxLi, sum)772	-0.27	0.47	-0.08	-0.10	-0.05	3.58	-0.14	1.42		
C(YbxLi, sum)781 -0.27 7.18 -0.05 -0.04 -0.41 -2.15 -0.22 1.46 C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)803 0.10 -0.43 0.11 0.08 -0.16 3.38	C(YbxLi, sum)773	0.05	-0.46	0.06	0.05	0.04	1.15	-0.18	-3.00		
C(YbxLi, sum)782 -0.38 7.56 0.09 0.05 -0.19 1.53 0.01 5.66 C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)799 -0.19 6.91 0.03 0.04 0.10 0.05 -0.05 -2.93 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 <	C(YbxLi, sum)779	0.35	0.13	0.01	0.06	0.37	-5.07	0.17	-8.02		
C(YbxLi, sum)783 0.34 7.01 0.23 0.23 -0.21 -1.01 -0.01 2.81 C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57	C(YbxLi, sum)781	-0.27	7.18	-0.05	-0.04	-0.41	-2.15	-0.22	1.46		
C(YbxLi, sum)789 0.45 6.58 0.20 0.23 -0.21 -4.71 -0.02 -1.44 C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)803 0.10 -0.04 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)803 0.02 0.14 0.02 -0.16 0.58 -0.07	C(YbxLi, sum)782	-0.38	7.56	0.09	0.05	-0.19	1.53	0.01	5.66		
C(YbxLi, sum)791 0.88 7.45 0.03 0.06 -0.03 3.08 -0.25 -1.55 C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)799 -0.19 6.91 0.03 0.04 0.10 0.05 -0.05 -2.93 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58	C(YbxLi, sum)783	0.34	7.01	0.23	0.23	-0.21	-1.01	-0.01	2.81		
C(YbxLi, sum)792 -1.56 7.86 0.19 0.18 -0.21 9.68 -0.33 6.42 C(YbxLi, sum)793 -0.53 6.06 0.16 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)799 -0.19 6.91 0.03 0.04 0.10 0.05 -0.05 -2.93 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32	C(YbxLi, sum)789	0.45	6.58	0.20	0.23	-0.21	-4.71	-0.02	-1.44		
C(YbxLi, sum)793 -0.53 6.06 0.16 -0.01 7.31 -0.21 2.71 C(YbxLi, sum)799 -0.19 6.91 0.03 0.04 0.10 0.05 -0.05 -2.93 C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04	C(YbxLi, sum)791	0.88	7.45	0.03	0.06	-0.03	3.08	-0.25	-1.55		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	C(YbxLi, sum)792	-1.56	7.86	0.19	0.18	-0.21	9.68	-0.33	6.42		
C(YbxLi, sum)801 -0.80 0.32 0.08 0.14 -0.35 -1.84 -0.37 -2.40 C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 0.29 8.32 0.47 11.51 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54	C(YbxLi, sum)793	-0.53	6.06	0.16	0.16	-0.01	7.31	-0.21	2.71		
C(YbxLi, sum)802 -1.07 0.43 0.11 0.08 -0.16 3.38 -0.16 3.07 C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 <td>C(YbxLi, sum)799</td> <td>-0.19</td> <td>6.91</td> <td>0.03</td> <td>0.04</td> <td>0.10</td> <td>0.05</td> <td>-0.05</td> <td>-2.93</td>	C(YbxLi, sum)799	-0.19	6.91	0.03	0.04	0.10	0.05	-0.05	-2.93		
C(YbxLi, sum)803 0.10 -0.04 0.26 0.19 -0.07 7.11 -0.13 5.84 C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 -0.29 8.32 0.47 11.98 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 <td>C(YbxLi, sum)801</td> <td>-0.80</td> <td>0.32</td> <td>0.08</td> <td>0.14</td> <td>-0.35</td> <td>-1.84</td> <td>-0.37</td> <td>-2.40</td>	C(YbxLi, sum)801	-0.80	0.32	0.08	0.14	-0.35	-1.84	-0.37	-2.40		
C(YbxLi, sum)809 -0.30 -0.14 0.22 0.18 -0.15 -3.57 -0.15 -3.66 C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52<	C(YbxLi, sum)802	-1.07	0.43	0.11	0.08	-0.16	3.38	-0.16	3.07		
C(YbxLi, sum)821 -0.68 -1.02 0.14 0.02 -0.16 0.58 -0.07 2.09 C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)849 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88<	C(YbxLi, sum)803	0.10	-0.04	0.26	0.19	-0.07	7.11	-0.13	5.84		
C(YbxLi, sum)822 -0.99 -0.43 -0.07 -0.05 0.13 12.61 0.34 16.88 C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09	C(YbxLi, sum)809	-0.30	-0.14	0.22	0.18	-0.15	-3.57	-0.15	-3.66		
C(YbxLi, sum)823 0.15 -0.86 -0.18 -0.14 0.29 8.32 0.47 11.98 C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxL	C(YbxLi, sum)821	-0.68	-1.02	0.14	0.02	-0.16	0.58	-0.07	2.09		
C(YbxLi, sum)829 -0.19 -0.81 0.23 0.17 C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)853 </td <td>C(YbxLi, sum)822</td> <td>-0.99</td> <td>-0.43</td> <td>-0.07</td> <td>-0.05</td> <td>0.13</td> <td>12.61</td> <td>0.34</td> <td>16.88</td>	C(YbxLi, sum)822	-0.99	-0.43	-0.07	-0.05	0.13	12.61	0.34	16.88		
C(YbxLi, sum)831 -0.34 6.60 -0.13 -0.08 -0.35 4.54 -0.04 11.51 C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(Ybx	C(YbxLi, sum)823	0.15	-0.86	-0.18	-0.14	0.29	8.32	0.47	11.98		
C(YbxLi, sum)832 -0.94 7.49 0.02 -0.04 -0.23 14.44 0.24 26.88 C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 <t< td=""><td>C(YbxLi, sum)829</td><td>-0.19</td><td>-0.81</td><td>0.23</td><td>0.17</td><td></td><td></td><td></td><td></td></t<>	C(YbxLi, sum)829	-0.19	-0.81	0.23	0.17						
C(YbxLi, sum)833 0.22 7.27 0.08 0.04 -0.14 16.18 0.23 25.45 C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 <td< td=""><td>C(YbxLi, sum)831</td><td>-0.34</td><td>6.60</td><td>-0.13</td><td>-0.08</td><td>-0.35</td><td>4.54</td><td>-0.04</td><td>11.51</td></td<>	C(YbxLi, sum)831	-0.34	6.60	-0.13	-0.08	-0.35	4.54	-0.04	11.51		
C(YbxLi, sum)839 -0.16 6.47 -0.16 -0.15 0.08 6.84 0.36 11.87 C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)832	-0.94	7.49	0.02	-0.04	-0.23	14.44	0.24	26.88		
C(YbxLi, sum)841 -0.18 7.07 -0.17 -0.09 -0.52 -3.78 -0.45 -2.43 C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 -0.19 -0.19 -0.29 13.24 -0.07 5.49 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)833	0.22	7.27	0.08	0.04	-0.14	16.18	0.23	25.45		
C(YbxLi, sum)842 -0.56 8.74 -0.21 -0.14 -0.34 16.88 -0.17 22.02 C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)839	-0.16	6.47	-0.16	-0.15	0.08	6.84	0.36	11.87		
C(YbxLi, sum)843 0.26 6.52 -0.10 -0.10 -0.09 14.45 -0.08 14.73 C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)841	-0.18	7.07	-0.17	-0.09	-0.52	-3.78	-0.45	-2.43		
C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)842	-0.56	8.74	-0.21	-0.14	-0.34	16.88	-0.17	22.02		
C(YbxLi, sum)849 -0.14 8.75 -0.25 -0.19 C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)843	0.26	6.52	-0.10	-0.10	-0.09	14.45	-0.08	14.73		
C(YbxLi, sum)851 0.77 4.91 -0.22 -0.17 0.29 13.24 -0.07 5.49 C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92		-0.14	8.75	-0.25	-0.19						
C(YbxLi, sum)852 -0.54 5.63 -0.19 -0.14 0.68 25.51 0.33 17.59 C(YbxLi, sum)853 0.36 4.79 -0.05 0.02 0.52 24.26 0.17 16.20 C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92		0.77	4.91	-0.22	-0.17	0.29	13.24	-0.07	5.49		
C(YbxLi, sum)859 -0.09 5.41 -0.19 -0.12 0.63 9.65 0.36 4.92	C(YbxLi, sum)852	-0.54	5.63	-0.19	-0.14	0.68	25.51	0.33	17.59		
	C(YbxLi, sum)853	0.36	4.79	-0.05	0.02	0.52	24.26	0.17	16.20		
(Intercept) 3.93 14.38 1.32 1.24 3.13 58.29 3.08 57.52	C(YbxLi, sum)859	-0.09	5.41	-0.19	-0.12	0.63	9.65	0.36	4.92		
	(Intercept)	3.93	14.38	1.32	1.24	3.13	58.29	3.08	57.52		

These C(YbxLi, sum)yyl effects allow calculation of differences between selected and control lines within a particular year, simply by differencing the appropriate constants. For example we can get the difference between Line 3 and Control in 1985 as C(YbxLi, sum)853 - C(YbxLi, sum)859 for any any trait.

The standard errors of the above constant estimates are reported in Tables 16 to 22.

If one calculates some linear combination of the constants, the standard error of the combination can be approximated as the geometric mean of the standard errors of the constants involved. This is approximate as it does not allow for any covariances between the constants due to unequal subclass numbers. These covariances are available, but are not reported here.

5.2 Direct responses to selection

For each of the traits selected for (Fnt and Fd), we plotted fixed effects for each Year-of-birth for the selected line and the control line. The difference between selected and control lines represents the amount of genetic change. This is a very elementary way of analysing response to selection in sheep flocks with overlapping generations. It shows what has happened to successive drops of animals. Figure 1 shows the direct response plot for Line 1 and the control line.

Line 1 starts out with a smaller Fd than the Control Line, but changes from 1979 onward to having a larger Fd than the Control Line. There are a lot of data points missing. I am still waiting for CSIRO to complete the Fd measurements on Line 1 in 1984-85 and on the Control Line in 1981-85. Nevertheless we can conclude that there has been genetic change in Fd in Line 1 due to selection for Fd.

Figure 2 shows the direct response plot for Line 2 and the Control Line.

Line 2 starts out with a larger number of follicles than the Control Line, and this difference increases with time. We can conclude that there has been genetic change in Fnt in Line 2 due to selection for Fnt. There is also a considerable environmental shift between years 80 and 82, both Line 2 and the Control Line have increased follicle number and this jump is manintained thereafter. The cause of this jump is unknown. It may be significant that there was a change of techniwue from manual counting to semi-automatic image processing in 1982.

Figure 3 shows the direct response plot for follicle depth for Line 3 and the Control Line. Figure 4 shows the direct response plot for follicle number per head for Line 3 and the Control Line.

Line 3 has achieved genetic change in both follicle depth and follicle number per head. The shift in follicle number between years 80 and 82 is again present.

5.3 Indirect responses to selection

We will just look at indirect responses in clean wool weight, fibre diameter and staple length.

Figure 5 shows the indirect or correlated changes in clean wool weight (Cwwadj) in all three lines. There is no obvious change in clean wool weight in

Table 16: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 1/7.

tained from fitting m	odel 7	for all 56	5 meas	ıred tra	its: Par	t 1/7.		
	Stal	Diam	Bwt	WrN	WrB	WrT	Face	Gfw
C(Sex, sum)1	0.16	0.02	0.07	0.01	0.01	0.02	0.02	0.01
C(YbxLi, sum)749	0.48	0.07	0.22	0.04	0.04	0.07	0.05	0.03
C(YbxLi, sum)750	1.16	0.17	0.53	0.09	0.10	0.18	0.13	0.06
C(YbxLi, sum)759	0.56	0.08	0.25	0.05	0.05	0.08	0.06	0.03
C(YbxLi, sum)761	1.29	0.19	0.59	0.10	0.11	0.20	0.14	0.07
C(YbxLi, sum)762	1.66	0.25	0.76	0.13	0.14	0.25	0.19	0.09
C(YbxLi, sum)763	1.32	0.20	0.60	0.11	0.11	0.20	0.15	0.07
C(YbxLi, sum)769	1.58	0.24	0.72	0.13	0.13	0.24	0.18	0.08
C(YbxLi, sum)771	1.18	0.18	0.54	0.10	0.10	0.18	0.13	0.06
C(YbxLi, sum)772	1.05	0.16	0.48	0.09	0.09	0.16	0.12	0.06
C(YbxLi, sum)773	1.00	0.15	0.45	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)779	1.01	0.15	0.46	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)781	1.02	0.15	0.47	0.08	0.09	0.15	0.11	0.05
C(YbxLi, sum)782	1.03	0.16	0.47	0.08	0.09	0.16	0.12	0.05
C(YbxLi, sum)783	1.08	0.16	0.49	0.09	0.09	0.16	0.12	0.06
C(YbxLi, sum)789	1.11	0.17	0.51	0.09	0.09	0.17	0.12	0.06
C(YbxLi, sum)791	1.14	0.17	0.52	0.09	0.10	0.17	0.13	0.06
C(YbxLi, sum)792	0.95	0.14	0.43	0.08	0.08	0.14	0.11	0.05
C(YbxLi, sum)793	0.91	0.14	0.42	0.07	0.08	0.14	0.10	0.05
C(YbxLi, sum)799	1.06	0.16	0.48	0.09	0.09	0.16	0.12	0.06
C(YbxLi, sum)801	1.04	0.16	0.47	0.08	0.09	0.16	0.12	0.06
C(YbxLi, sum)802	1.02	0.15	0.47	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)803	0.96	0.15	0.44	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)809	1.11	0.17	0.51	0.09	0.09	0.17	0.12	0.06
C(YbxLi, sum)821	0.98	0.15	0.45	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)822	1.06	0.16	0.49	0.09	0.09	0.16	0.12	0.06
C(YbxLi, sum)823	1.04	0.16	0.48	0.08	0.09	0.16	0.12	0.06
C(YbxLi, sum)829	0.84	0.13	0.38	0.07	0.07	0.13	0.09	0.04
C(YbxLi, sum)831	0.99	0.15	0.45	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)832	1.13	0.17	0.52	0.09	0.09	0.17	0.13	0.06
C(YbxLi, sum)833	0.97	0.15	0.44	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)839	1.10	0.17	0.50	0.09	0.09	0.17	0.12	0.06
C(YbxLi, sum)841	1.02	0.15	0.47	0.08	0.09	0.16	0.11	0.05
C(YbxLi, sum)842	1.02	0.15	0.47	0.08	0.09	0.15	0.11	0.05
C(YbxLi, sum)843	0.91	0.14	0.42	0.07	0.08	0.14	0.10	0.05
C(YbxLi, sum)849	1.06	0.16	0.48	0.09	0.09	0.16	0.12	0.06
C(YbxLi, sum)851	1.01	0.15	0.46	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)852	1.03	0.16	0.47	0.08	0.09	0.16	0.12	0.05
C(YbxLi, sum)853	0.97	0.15	0.44	0.08	0.08	0.15	0.11	0.05
C(YbxLi, sum)859	1.03	0.16	0.47	0.08	0.09	0.16	0.12	0.05
(Intercept)	0.17	0.03	0.08	0.01	0.01	0.03	0.02	0.01

Table 17: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 2/7.

tained from fitting in						~ .	~ .	
	Yld	Cww	Staladj	Gfwadj	Cwwadj	Crimp	Crwvl	Crst
C(Sex, sum)1	0.08	0.01	0.19	0.01	0.01	0.05	0.01	0.16
C(YbxLi, sum)749	0.24	0.02	0.58	0.03	0.02	0.30	0.06	1.01
C(YbxLi, sum)750	0.58	0.04	1.39	0.07	0.05	0.17	0.03	0.56
C(YbxLi, sum)759	0.28	0.02	0.67	0.04	0.02	0.33	0.07	1.10
C(YbxLi, sum)761	0.64	0.05	1.54	0.08	0.06	0.42	0.08	1.41
C(YbxLi, sum)762	0.83	0.06	2.00	0.11	0.07	0.34	0.07	1.13
C(YbxLi, sum)763	0.66	0.05	1.58	0.08	0.06	0.40	0.08	1.33
C(YbxLi, sum)769	0.80	0.06	1.90	0.10	0.07	0.31	0.06	1.03
C(YbxLi, sum)771	0.59	0.04	1.42	0.08	0.05	0.28	0.06	0.93
C(YbxLi, sum)772	0.53	0.04	1.27	0.07	0.05	0.26	0.05	0.88
C(YbxLi, sum)773	0.50	0.04	1.19	0.06	0.04	0.27	0.05	0.90
C(YbxLi, sum)779	0.50	0.04	1.22	0.06	0.04	0.23	0.05	0.78
C(YbxLi, sum)781	0.51	0.04	1.23	0.07	0.04			
C(YbxLi, sum)782	0.52	0.04	1.27	0.07	0.05			
C(YbxLi, sum)783	0.54	0.04	1.33	0.07	0.05			
C(YbxLi, sum)789	0.56	0.04	1.33	0.07	0.05			
C(YbxLi, sum)791	0.57	0.04	1.39	0.07	0.05			
C(YbxLi, sum)792	0.48	0.04	1.19	0.06	0.04			
C(YbxLi, sum)793	0.46	0.03	1.10	0.06	0.04			
C(YbxLi, sum)799	0.53	0.04	1.73	0.09	0.06			
C(YbxLi, sum)801	0.52	0.04	1.25	0.07	0.05			
C(YbxLi, sum)802	0.51	0.04	1.23	0.07	0.04			
C(YbxLi, sum)803	0.48	0.04	1.17	0.06	0.04			
C(YbxLi, sum)809	0.55	0.04	1.33	0.07	0.05			
C(YbxLi, sum)821	0.49	0.04	1.18	0.06	0.04			
C(YbxLi, sum)822	0.54	0.04	1.28	0.07	0.05			
C(YbxLi, sum)823	0.52	0.04	1.26	0.07	0.05			
C(YbxLi, sum)829	0.42	0.03	1.02	0.05	0.04	0.28	0.06	0.93
C(YbxLi, sum)831	0.50	0.04	1.20	0.06	0.04			
C(YbxLi, sum)832	0.57	0.04	1.36	0.07	0.05			
C(YbxLi, sum)833	0.48	0.04	1.16	0.06	0.04			
C(YbxLi, sum)839	0.55	0.04	1.33	0.07	0.05	0.26	0.05	0.88
C(YbxLi, sum)841	0.52	0.04	1.23	0.07	0.04	0.25	0.05	0.82
C(YbxLi, sum)842	0.51	0.04	1.23	0.07	0.04	0.36	0.07	1.22
C(YbxLi, sum)843	0.45	0.03	1.09	0.06	0.04	0.27	0.05	0.91
C(YbxLi, sum)849	0.53	0.04	1.27	0.07	0.05	0.27	0.05	0.89
C(YbxLi, sum)851	0.51	0.04	1.22	0.06	0.04	0.26	0.05	0.87
C(YbxLi, sum)852	0.52	0.04	1.24	0.07	0.05	0.29	0.06	0.97
C(YbxLi, sum)853	0.49	0.04	1.17	0.06	0.04	0.26	0.05	0.87
C(YbxLi, sum)859	0.52	0.04	1.24	0.07	0.05	0.26	0.05	0.88
(Intercept)	0.09	0.01	0.21	0.01	0.01	0.11	0.02	0.37

Table 18: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 3/7.

C(Sex, sum)1 O.19 0.00 0.14 0.08 0.08 0.01 0.19 0.11 C(YbxLi, sum)749 1.20 0.02 0.02 0.03 0.01 0.19 0.11 C(YbxLi, sum)750 0.68 0.01 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03	tained from fitting model 7 for all 56 measured traits: Part 3/7.										
C(YbxLi, sum)749		Crstadj	Crwvt	Dp	Ds	Dps	DpovDs	CVDp	CVDs		
C(YbxLi, sum)750	C(Sex, sum)1	0.19	0.00	0.14	0.08	0.08	0.01	0.19	0.11		
C(YbxLi, sum)759	C(YbxLi, sum)749	1.20	0.02								
C(YbxLi, sum)761	C(YbxLi, sum)750	0.68	0.01								
C(YbxLi, sum)762	C(YbxLi, sum)759	1.32	0.03								
C(YbxLi, sum)763	C(YbxLi, sum)761	1.68	0.03								
C(YbxLi, sum)769	C(YbxLi, sum)762	1.36	0.03								
C(YbxLi, sum)771	C(YbxLi, sum)763	1.59	0.03								
C(YbxLi, sum)772	C(YbxLi, sum)769	1.23	0.02								
C(YbxLi, sum)773	C(YbxLi, sum)771	1.12	0.02								
C(YbxLi, sum)779 C(YbxLi, sum)781 C(YbxLi, sum)782 C(YbxLi, sum)783 C(YbxLi, sum)799 C(YbxLi, sum)791 C(YbxLi, sum)792 C(YbxLi, sum)793 C(YbxLi, sum)799 C(YbxLi, sum)801 C(YbxLi, sum)802 C(YbxLi, sum)809 C(YbxLi, sum)822 C(YbxLi, sum)822 C(YbxLi, sum)823 C(YbxLi, sum)823 C(YbxLi, sum)829 C(YbxLi, sum)831 C(YbxLi, sum)831 C(YbxLi, sum)832 C(YbxLi, sum)832 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)834 C(YbxLi, sum)834 C(YbxLi, sum)835 C(YbxLi, sum)836 C(YbxLi, sum)837 C(YbxLi, sum)838 C(YbxLi, sum)838 C(YbxLi, sum)839 C(YbxLi, sum)839 C(YbxLi, sum)831 C(YbxLi, sum)831 C(YbxLi, sum)832 C(YbxLi, sum)833 C(YbxLi, sum)834 C(YbxLi, sum)834 C(YbxLi, sum)835 C(YbxLi, sum)836 C(YbxLi, sum)837 C(YbxLi, sum)837 C(YbxLi, sum)838 C(YbxLi, sum)841 C(YbxLi, sum)841 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)842 C(YbxLi, sum)844 C(YbxL	C(YbxLi, sum)772	1.06	0.02								
C(YbxLi, sum)781 C(YbxLi, sum)782 C(YbxLi, sum)783 C(YbxLi, sum)789 C(YbxLi, sum)791 C(YbxLi, sum)792 C(YbxLi, sum)793 C(YbxLi, sum)799 C(YbxLi, sum)801 C(YbxLi, sum)803 C(YbxLi, sum)809 C(YbxLi, sum)822 C(YbxLi, sum)821 C(YbxLi, sum)822 C(YbxLi, sum)823 C(YbxLi, sum)831 C(YbxLi, sum)831 C(YbxLi, sum)831 C(YbxLi, sum)832 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)833 C(YbxLi, sum)834 C(YbxLi, sum)834 C(YbxLi, sum)835 C(YbxLi, sum)836 C(YbxLi, sum)837 C(YbxLi, sum)837 C(YbxLi, sum)841 C(YbxLi, sum)841 C(YbxLi, sum)842 C(YbxLi, sum)844 C(YbxL	C(YbxLi, sum)773	1.08	0.02								
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C(YbxLi, sum)821 0.55 0.32 0.32 0.03 0.73 0.44 C(YbxLi, sum)823 0.56 0.33 0.33 0.03 0.75 0.45 C(YbxLi, sum)829 1.12 0.02 C(YbxLi, sum)831 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)803										
C(YbxLi, sum)822 0.55 0.32 0.32 0.03 0.73 0.44 C(YbxLi, sum)823 0.56 0.33 0.33 0.03 0.75 0.45 C(YbxLi, sum)829 1.12 0.02 C(YbxLi, sum)831 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58											
C(YbxLi, sum)823 0.56 0.33 0.33 0.03 0.75 0.45 C(YbxLi, sum)829 1.12 0.02 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)831 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)821										
C(YbxLi, sum)829 1.12 0.02 C(YbxLi, sum)831 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)822			0.55	0.32	0.32	0.03	0.73	0.44		
C(YbxLi, sum)831 0.65 0.39 0.38 0.03 0.87 0.52 C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)823			0.56	0.33	0.33	0.03	0.75	0.45		
C(YbxLi, sum)832 0.72 0.42 0.42 0.03 0.96 0.57 C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)829	1.12	0.02								
C(YbxLi, sum)833 0.68 0.40 0.40 0.03 0.91 0.55 C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)831			0.65	0.39	0.38	0.03	0.87	0.52		
C(YbxLi, sum)839 1.05 0.02 0.66 0.39 0.38 0.03 0.88 0.52 C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)832			0.72	0.42	0.42	0.03	0.96	0.57		
C(YbxLi, sum)841 0.98 0.02 0.71 0.42 0.42 0.03 0.95 0.57 C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)833			0.68	0.40	0.40	0.03	0.91	0.55		
C(YbxLi, sum)842 1.46 0.03 0.73 0.43 0.42 0.03 0.97 0.58	C(YbxLi, sum)839	1.05	0.02	0.66	0.39	0.38	0.03	0.88	0.52		
	C(YbxLi, sum)841	0.98	0.02	0.71	0.42	0.42	0.03	0.95	0.57		
C(YbxLi, sum)843 1.09 0.02 0.61 0.36 0.36 0.03 0.82 0.49	C(YbxLi, sum)842	1.46	0.03	0.73	0.43	0.42	0.03	0.97	0.58		
, , , = = = = = = = = = = = = = = = = =	C(YbxLi, sum)843	1.09	0.02	0.61	0.36	0.36	0.03	0.82	0.49		
C(YbxLi, sum)849 1.07 0.02	C(YbxLi, sum)849	1.07	0.02								
C(YbxLi, sum)851 1.04 0.02 0.55 0.32 0.32 0.03 0.73 0.44	C(YbxLi, sum)851	1.04	0.02	0.55					0.44		
C(YbxLi, sum)852 1.16 0.02 0.58 0.34 0.34 0.03 0.78 0.47		1.16		0.58			0.03				
C(YbxLi, sum)853 1.04 0.02 0.55 0.32 0.32 0.03 0.73 0.44	. ,										
C(YbxLi, sum)859 1.05 0.02 0.65 0.38 0.38 0.03 0.87 0.52	C(YbxLi, sum)859		0.02		0.38			0.87	0.52		
	(Intercept)	0.44	0.01	0.42	0.25	0.24	0.02	0.56	0.33		

Table 19: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 4/7.

tained from fitting m								
	MaxDp	MinDp	MaxDs	MinDs	SDDp	SDDs	SDD	CVD
C(Sex, sum)1	0.27	0.15	0.21	0.10	0.06	0.02	0.02	0.11
C(YbxLi, sum)749								
C(YbxLi, sum)750								
C(YbxLi, sum)759								
C(YbxLi, sum)761								
C(YbxLi, sum)762								
C(YbxLi, sum)763								
C(YbxLi, sum)769								
C(YbxLi, sum)771								
C(YbxLi, sum)772								
C(YbxLi, sum)773								
C(YbxLi, sum)779								
C(YbxLi, sum)781								
C(YbxLi, sum)782								
C(YbxLi, sum)783								
C(YbxLi, sum)789								
C(YbxLi, sum)791								
C(YbxLi, sum)792								
C(YbxLi, sum)793								
C(YbxLi, sum)799								
C(YbxLi, sum)801								
C(YbxLi, sum)802								
C(YbxLi, sum)803								
C(YbxLi, sum)809								
C(YbxLi, sum)821								
C(YbxLi, sum)822	1.07	0.58	0.83	0.39	0.22	0.09	0.09	0.43
C(YbxLi, sum)823	1.09	0.59	0.85	0.40	0.23	0.09	0.10	0.44
C(YbxLi, sum)829								
C(YbxLi, sum)831	1.28	0.69	0.99	0.47	0.27	0.11	0.11	0.51
C(YbxLi, sum)832	1.41	0.76	1.09	0.51	0.29	0.12	0.12	0.56
C(YbxLi, sum)833	1.34	0.72	1.03	0.49	0.28	0.12	0.12	0.54
C(YbxLi, sum)839	1.28	0.69	0.99	0.47	0.27	0.11	0.11	0.52
C(YbxLi, sum)841	1.39	0.75	1.08	0.51	0.29	0.12	0.12	0.56
C(YbxLi, sum)842	1.42	0.77	1.10	0.52	0.29	0.12	0.12	0.57
C(YbxLi, sum)843	1.20	0.65	0.93	0.44	0.25	0.10	0.10	0.48
C(YbxLi, sum)849								
C(YbxLi, sum)851	1.07	0.58	0.83	0.39	0.22	0.09	0.09	0.43
C(YbxLi, sum)852	1.14	0.62	0.88	0.42	0.24	0.10	0.10	0.46
C(YbxLi, sum)853	1.07	0.58	0.83	0.39	0.22	0.09	0.09	0.43
C(YbxLi, sum)859	1.28	0.69	0.99	0.47	0.27	0.11	0.11	0.51
(Intercept)	0.81	0.44	0.63	0.30	0.17	0.07	0.07	0.33

Table 20: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 5/7.

Gt30Dp Gt30Ds Gt30Ds Fnua Fr Fnt Sarea Fd C(Sex, sum)1 0.68 0.11 0.13 0.23 0.07 0.23 0.00 0.00 C(YbxLi, sum)759 0.93 0.29 0.91 0.01 0.01 C(YbxLi, sum)761 2.20 0.70 2.16 0.01 0.03 C(YbxLi, sum)761 2.32 0.74 2.28 0.02 0.03 C(YbxLi, sum)762 1.85 0.59 1.81 0.01 0.02 C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.02 C(YbxLi, sum)779 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02
C(YbxLi, sum)749 C(YbxLi, sum)750 C(YbxLi, sum)759 C(YbxLi, sum)761 C(YbxLi, sum)762 C(YbxLi, sum)762 C(YbxLi, sum)763 C(YbxLi, sum)763 C(YbxLi, sum)769 C(YbxLi, sum)770 C(YbxLi, sum)770 C(YbxLi, sum)771 C(YbxLi, sum)771 C(YbxLi, sum)772 C(YbxLi, sum)773 C(YbxLi, sum)773 C(YbxLi, sum)773 C(YbxLi, sum)781 C(YbxLi, sum)781 C(YbxLi, sum)782 C(YbxLi, sum)782 C(YbxLi, sum)783 C(YbxLi, sum)783 C(YbxLi, sum)789 C(YbxLi, sum)789 C(YbxLi, sum)791 C(YbxLi, sum)791 C(YbxLi, sum)792 C(YbxLi, sum)792 C(YbxLi, sum)793 C(YbxLi, sum)801 C(YbxLi, sum)802 C(YbxLi, sum)803 C(YbxLi, sum)823 C(YbxLi, sum)823 C(YbxLi, sum)823 C(YbxLi, sum)823 C(YbxLi, sum)833 C(YbxL
C(YbxLi, sum)750 0.93 0.29 0.91 0.01 0.03 C(YbxLi, sum)759 2.20 0.70 2.16 0.01 0.03 C(YbxLi, sum)761 2.32 0.74 2.28 0.02 0.03 C(YbxLi, sum)762 1.85 0.59 1.81 0.01 0.02 C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.03 C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)792 1.47
C(YbxLi, sum)759 2.20 0.70 2.16 0.01 0.03 C(YbxLi, sum)761 2.32 0.74 2.28 0.02 0.03 C(YbxLi, sum)762 1.85 0.59 1.81 0.01 0.02 C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.03 C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47
C(YbxLi, sum)761 2.32 0.74 2.28 0.02 0.03 C(YbxLi, sum)762 1.85 0.59 1.81 0.01 0.02 C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.03 C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)799 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49
C(YbxLi, sum)762 1.85 0.59 1.81 0.01 0.02 C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.03 C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)801 1.49
C(YbxLi, sum)763 2.19 0.70 2.15 0.01 0.03 C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)793 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)803 1.49
C(YbxLi, sum)769 1.67 0.53 1.64 0.01 0.02 C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49
C(YbxLi, sum)771 1.51 0.48 1.48 0.01 0.02 C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49
C(YbxLi, sum)772 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)821 1.61
C(YbxLi, sum)773 1.46 0.46 1.43 0.01 0.02 C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.34 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)821 1.61 0.51 1.59 0.01 0.02 C(YbxLi, sum)823 2.72
C(YbxLi, sum)779 1.26 0.40 1.24 0.01 0.02 C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.41 0.45 1.38 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.43 0.45 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)821 1.61 0.51 1.59 0.01 0.02 C(YbxLi, sum)823 2.72 0.46 0.50 1.47 0.47 1.45 0.01
C(YbxLi, sum)781 1.58 0.50 1.55 0.01 0.02 C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.41 0.45 1.38 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)821 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)823 2.72 0.46 0.50 1.41 0.45 1.39 0.01 0.02 C(YbxLi, sum)831 3.19 0.54 0.59 1.89 0.60 1.85
C(YbxLi, sum)782 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)783 1.48 0.47 1.45 0.01 0.02 C(YbxLi, sum)789 1.36 0.43 1.34 0.01 0.02 C(YbxLi, sum)791 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)792 1.47 0.47 1.44 0.01 0.02 C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.43 0.45 1.40 0.01 0.02 C(YbxLi, sum)821 1.61 0.51 1.59 0.01 0.02 C(YbxLi, sum)823 2.72 0.46 0.50 1.47 0.47 1.45 0.01 0.02
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C(YbxLi, sum)793 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)799 1.41 0.45 1.38 0.01 0.02 C(YbxLi, sum)801 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)802 1.53 0.48 1.50 0.01 0.02 C(YbxLi, sum)803 1.49 0.47 1.46 0.01 0.02 C(YbxLi, sum)809 1.43 0.45 1.40 0.01 0.02 C(YbxLi, sum)821 1.61 0.51 1.59 0.01 0.02 C(YbxLi, sum)822 2.66 0.45 0.49 1.41 0.45 1.39 0.01 0.02 C(YbxLi, sum)823 2.72 0.46 0.50 1.47 0.47 1.45 0.01 0.02 C(YbxLi, sum)829 0.54 0.59 1.89 0.60 1.85 0.01 0.03 C(YbxLi, sum)831 3.19 0.54 0.59 1.89 0.60 1.85 0.01 0.03 C(YbxLi, sum)833 3.33 0.56 0.62 2.03 0.64 1.
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C(YbxLi, sum)829 C(YbxLi, sum)831 3.19 0.54 0.59 1.89 0.60 1.85 0.01 0.03 C(YbxLi, sum)832 3.50 0.59 0.65 2.14 0.68 2.10 0.01 0.03 C(YbxLi, sum)833 3.33 0.56 0.62 2.03 0.64 1.99 0.01 0.03
C(YbxLi, sum)831 3.19 0.54 0.59 1.89 0.60 1.85 0.01 0.03 C(YbxLi, sum)832 3.50 0.59 0.65 2.14 0.68 2.10 0.01 0.03 C(YbxLi, sum)833 3.33 0.56 0.62 2.03 0.64 1.99 0.01 0.03
C(YbxLi, sum)832 3.50 0.59 0.65 2.14 0.68 2.10 0.01 0.03 C(YbxLi, sum)833 3.33 0.56 0.62 2.03 0.64 1.99 0.01 0.03
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O(371, 1))000 0.00 0.74 0.70 1.00 0.00 1.04 0.01
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C(YbxLi, sum)841 3.47 0.59 0.64 1.88 0.60 1.84 0.01
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C(YbxLi, sum)843 2.99 0.51 0.55 1.70 0.54 1.67 0.01
C(YbxLi, sum)849
C(YbxLi, sum)851 2.66 0.45 0.49 1.40 0.44 1.38 0.01
C(YbxLi, sum)852 2.84 0.48 0.52 1.59 0.51 1.57 0.01
C(YbxLi, sum)853 2.68 0.45 0.49 1.43 0.45 1.40 0.01
C(YbxLi, sum)859 3.18 0.54 0.59 1.86 0.59 1.83 0.01
(Intercept) 2.03 0.34 0.38 0.59 0.19 0.58 0.00 0.01

Table 21: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 6/7.

C(Sex, sum)1 0.02 0.02 0.01 0.02 0.03 0.01 0.02 0.03 C(YbxLi, sum)749 0.10 0.18 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.21 0.15 0.20 0.26 0.21 0.21 0.15 0.15 0.26 0.23 0.27 0.22 0.74 0.15 0.25 0.26 0.21 0.27 0.22 0.27 0.22 0.27 0.22 0.27 0.22 0.27 0.22 0.27 0.22 0.27 0.22 0.26 0.74 0.15 0.11 0.11 0.11 0.12 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.27 0.22 0.26 0.22 0.26 0.24 0.22 0.26 0.21	tained from fitting m	odel 7	for all	56 measui	red trai	its: Part	6/7.		
C(YbxLi, sum)749 0.10 0.18 0.24 C(YbxLi, sum)750 0.08 0.06 0.10 0.13 C(YbxLi, sum)759 0.20 0.14 0.11 0.20 0.26 0.21 C(YbxLi, sum)761 0.21 0.15 0.26 0.33 0.27 C(YbxLi, sum)762 0.17 0.12 0.12 0.21 0.27 0.22 C(YbxLi, sum)769 0.15 0.11 0.14 0.25 0.32 0.26 C(YbxLi, sum)771 0.14 0.10 0.11 0.19 0.24 0.20 C(YbxLi, sum)773 0.13 0.10 0.18 0.23 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.23 C(YbxLi, sum)789 0.13 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)789 0.12 0.09 0.16 0.21 0.06 <t< td=""><td></td><td>Fc</td><td>Fu</td><td>Colour</td><td>Fly</td><td>Flcrot</td><td>Bactst</td><td>MycD</td><td>Bcts</td></t<>		Fc	Fu	Colour	Fly	Flcrot	Bactst	MycD	Bcts
C(YbxLi, sum)750 0.08 0.06 0.06 0.10 0.13 C(YbxLi, sum)759 0.20 0.14 0.11 0.20 0.26 0.21 C(YbxLi, sum)761 0.21 0.15 0.26 0.33 0.22 C(YbxLi, sum)762 0.17 0.12 0.12 0.21 0.27 0.22 C(YbxLi, sum)769 0.15 0.11 0.14 0.25 0.32 0.26 C(YbxLi, sum)771 0.14 0.10 0.18 0.24 0.20 C(YbxLi, sum)772 0.13 0.10 0.18 0.18 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 0.23 0.18 C(YbxLi, sum)781 0.14 0.10 0.18 0.23 0.15 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)792 <t< td=""><td>C(Sex, sum)1</td><td>0.02</td><td>0.02</td><td>0.01</td><td>0.02</td><td>0.03</td><td>0.01</td><td>0.02</td><td>0.03</td></t<>	C(Sex, sum)1	0.02	0.02	0.01	0.02	0.03	0.01	0.02	0.03
C(YbxLi, sum)759 0.20 0.14 0.11 0.20 0.26 0.33 0.27 C(YbxLi, sum)761 0.21 0.15 0.15 0.26 0.33 0.27 C(YbxLi, sum)762 0.17 0.12 0.12 0.21 0.27 0.22 0.26 C(YbxLi, sum)763 0.20 0.14 0.14 0.25 0.32 0.26 C(YbxLi, sum)769 0.15 0.11 0.11 0.19 0.24 0.20 0.20 C(YbxLi, sum)771 0.14 0.10 0.11 0.19 0.24 0.20 0.20 C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.18 0.15 C(YbxLi, sum)782 0.13 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)789 0.11 0.08 0.08 0.14 0.18 0.23 0.19 C(YbxLi, sum)789 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)842 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)842 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)842 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, s	C(YbxLi, sum)749			0.10	0.18	0.24			
C(YbxLi, sum)761 0.21 0.15 0.15 0.26 0.33 0.27 C(YbxLi, sum)762 0.17 0.12 0.12 0.21 0.27 0.22 C(YbxLi, sum)763 0.20 0.14 0.14 0.25 0.32 0.26 C(YbxLi, sum)769 0.15 0.11 0.11 0.19 0.24 0.20 C(YbxLi, sum)779 0.14 0.10 0.18 0.18 C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.23 0.19 C(YbxLi, sum)781 0.14 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)783 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)834 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)841 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)842 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)843 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)843 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)843 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)845 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0	C(YbxLi, sum)750	0.08	0.06	0.06	0.10	0.13			
C(YbxLi, sum)762 0.17 0.12 0.12 0.21 0.27 0.22 C(YbxLi, sum)763 0.20 0.14 0.14 0.25 0.32 0.26 C(YbxLi, sum)769 0.15 0.11 0.11 0.19 0.24 0.20 C(YbxLi, sum)771 0.14 0.10 0.18 C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)789 0.11 0.08 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)782 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)803 0.13 0.09 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.09 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)833 0.20 0.14 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)833 0.20 0.14 0.10 0.19 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)833 0.20 0.16 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)844 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)845 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)845 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.00 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.1			0.14			0.26			
C(YbxLi, sum)763 0.20 0.14 0.14 0.25 0.32 0.26 C(YbxLi, sum)769 0.15 0.11 0.11 0.19 0.24 0.20 C(YbxLi, sum)771 0.14 0.10 0.18 C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)781 0.14 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)799 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.20 0.16 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.20 0.16 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)842 0.09 0.15 0.19 0.05 0.11 0.16 0.18 C(YbxLi, sum)843 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)845 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.00 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)	C(YbxLi, sum)761	0.21	0.15	0.15	0.26	0.33			
C(YbxLi, sum)776 0.15 0.11 0.11 0.19 0.24 0.20 C(YbxLi, sum)771 0.14 0.10 0.18 0.18 C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)781 0.14 0.10 0.18 0.23 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 <td>C(YbxLi, sum)762</td> <td>0.17</td> <td>0.12</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	C(YbxLi, sum)762	0.17	0.12						
C(YbxLi, sum)771	C(YbxLi, sum)763	0.20	0.14	0.14	0.25	0.32			0.26
C(YbxLi, sum)772 0.13 0.10 0.18 C(YbxLi, sum)773 0.13 0.10 0.18 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)781 0.14 0.10 0.18 0.23 0.09 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.17 C(YbxLi, sum)801 0.13 <td></td> <td>0.15</td> <td></td> <td>0.11</td> <td>0.19</td> <td>0.24</td> <td></td> <td></td> <td>0.20</td>		0.15		0.11	0.19	0.24			0.20
C(YbxLi, sum)773 0.13 0.10 C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)781 0.14 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 </td <td>C(YbxLi, sum)771</td> <td>0.14</td> <td>0.10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.18</td>	C(YbxLi, sum)771	0.14	0.10						0.18
C(YbxLi, sum)779 0.11 0.08 0.08 0.14 0.18 0.15 C(YbxLi, sum)781 0.14 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10	C(YbxLi, sum)772	0.13	0.10						0.18
C(YbxLi, sum)781 0.14 0.10 0.10 0.18 0.23 0.19 C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803	C(YbxLi, sum)773	0.13	0.10						0.18
C(YbxLi, sum)782 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 <	C(YbxLi, sum)779	0.11	0.08	0.08	0.14				0.15
C(YbxLi, sum)783 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)801 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.09 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.12 0.1		0.14	0.10		0.18				
C(YbxLi, sum)789 0.12 0.09 0.08 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.13 0.09 0.09 0.16 0.21 0.06 0.12 0.1	C(YbxLi, sum)782		0.10		0.17		0.06	0.12	
C(YbxLi, sum)791 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.12 0.1	C(YbxLi, sum)783	0.13	0.10	0.09	0.16	0.21	0.06	0.12	0.18
C(YbxLi, sum)792 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.1	C(YbxLi, sum)789	0.12	0.09	0.08	0.15	0.19	0.05	0.11	0.16
C(YbxLi, sum)793 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.21 0.06 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.1		0.14	0.10					0.12	
C(YbxLi, sum)799 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.1	C(YbxLi, sum)792	0.13	0.10	0.09	0.16	0.21	0.06	0.12	0.18
C(YbxLi, sum)801 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.2	C(YbxLi, sum)793	0.13	0.10	0.09	0.17		0.06	0.12	
C(YbxLi, sum)802 0.14 0.10 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.29 C(YbxLi, sum)843 0.09 0.15 0.20 0.05 0.11 0.16 C(YbxL		0.13	0.09	0.09	0.16		0.05	0.12	
C(YbxLi, sum)803 0.13 0.10 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.29 C(YbxLi, sum)843 0.09 0.15 0.20 0.05 0.11 0.16 C(YbxLi, sum)843 0.09									
C(YbxLi, sum)809 0.13 0.09 0.09 0.16 0.21 0.05 0.12 0.17 C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.29 C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16	C(YbxLi, sum)802	0.14	0.10	0.10	0.17	0.22	0.06	0.12	0.18
C(YbxLi, sum)821 0.15 0.11 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)832 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)849 0.09 0.15 0.20 0.05 0.11 0.16 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.21 0.06 0.12 0.17 C(YbxLi, sum)853 0.09 0.16	C(YbxLi, sum)803	0.13	0.10	0.09	0.17		0.06	0.12	0.18
C(YbxLi, sum)822 0.13 0.09 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)832 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)849 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05									
C(YbxLi, sum)823 0.13 0.10 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)829 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)832 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)821	0.15	0.11	0.10	0.18		0.06	0.13	0.19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.13	0.09	0.09	0.16		0.05	0.12	
C(YbxLi, sum)831 0.19 0.14 0.10 0.17 0.22 0.06 0.12 0.19 C(YbxLi, sum)832 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)853 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17		0.13	0.10					0.12	
C(YbxLi, sum)832 0.19 0.14 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)829								
C(YbxLi, sum)833 0.22 0.16 0.10 0.18 0.23 0.06 0.13 0.20 C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17								0.12	
C(YbxLi, sum)839 0.09 0.15 0.20 0.05 0.12 0.17 C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	,								
C(YbxLi, sum)841 0.09 0.15 0.19 0.05 0.11 0.16 C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)833	0.22	0.16	0.10	0.18	0.23	0.06	0.13	0.20
C(YbxLi, sum)842 0.10 0.17 0.22 0.06 0.12 0.18 C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)839			0.09	0.15	0.20	0.05	0.12	
C(YbxLi, sum)843 0.09 0.17 0.21 0.06 0.12 0.18 C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17					0.15			0.11	
C(YbxLi, sum)849 0.09 0.16 0.21 0.06 0.12 0.18 C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)842			0.10	0.17		0.06	0.12	0.18
C(YbxLi, sum)851 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)843			0.09			0.06	0.12	
C(YbxLi, sum)852 0.10 0.18 0.23 0.06 0.13 0.19 C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17									
C(YbxLi, sum)853 0.09 0.16 0.20 0.05 0.12 0.17 C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)851			0.09	0.16	0.20	0.05	0.12	0.17
C(YbxLi, sum)859 0.09 0.16 0.20 0.05 0.12 0.17	C(YbxLi, sum)852			0.10	0.18	0.23	0.06	0.13	0.19
	,								
(Intercept) 0.05 0.04 0.04 0.07 0.09 0.04 0.09 0.08									
	(Intercept)	0.05	0.04	0.04	0.07	0.09	0.04	0.09	0.08

Table 22: Standard errors of fixed effects for Sex and Year-born-in-x-Line obtained from fitting model 7 for all 56 measured traits: Part 7/7.

tained from fitting m	odel 7 fe	or all 56 m	easured	traits:	Part $7/7$.			
	Bctb	Weanwt	NLB	NLW	Fnpua	Fnsua	Fnpt	Fnst
C(Sex, sum)1	0.03	0.05	0.01	0.01	0.01	0.23	0.01	0.22
C(YbxLi, sum)749			0.02	0.02				
C(YbxLi, sum)750			0.06	0.05	0.05	0.91	0.05	0.89
C(YbxLi, sum)759	0.22	0.44	0.03	0.02	0.11	2.15	0.11	2.11
C(YbxLi, sum)761	0.28	0.56	0.06	0.06	0.12	2.27	0.12	2.23
C(YbxLi, sum)762	0.23	0.46	0.08	0.07	0.10	1.80	0.09	1.77
C(YbxLi, sum)763	0.27	0.53	0.06	0.06	0.11	2.14	0.11	2.10
C(YbxLi, sum)769	0.21	0.42	0.08	0.07	0.09	1.63	0.09	1.60
C(YbxLi, sum)771	0.19	0.38	0.06	0.05	0.08	1.48	0.08	1.45
C(YbxLi, sum)772	0.18	0.36	0.05	0.05	0.08	1.42	0.07	1.40
C(YbxLi, sum)773	0.18	0.37	0.05	0.04	0.08	1.42	0.07	1.40
C(YbxLi, sum)779	0.16	0.32	0.05	0.04	0.06	1.23	0.06	1.21
C(YbxLi, sum)781	0.20	0.39	0.05	0.05	0.08	1.55	0.08	1.52
C(YbxLi, sum)782	0.19	0.37	0.05	0.05	0.08	1.44	0.08	1.42
C(YbxLi, sum)783	0.19	0.37	0.05	0.05	0.08	1.44	0.08	1.42
C(YbxLi, sum)789	0.17	0.33	0.05	0.05	0.07	1.33	0.07	1.31
C(YbxLi, sum)791	0.19	0.38	0.06	0.05	0.08	1.49	0.08	1.47
C(YbxLi, sum)792	0.18	0.37	0.05	0.04	0.08	1.44	0.07	1.41
C(YbxLi, sum)793	0.19	0.37	0.04	0.04	0.08	1.45	0.08	1.43
C(YbxLi, sum)799	0.18	0.36	0.05	0.05	0.07	1.38	0.07	1.35
C(YbxLi, sum)801	0.19	0.37	0.05	0.05	0.08	1.45	0.08	1.43
C(YbxLi, sum)802	0.19	0.38	0.05	0.04	0.08	1.49	0.08	1.47
C(YbxLi, sum)803	0.19	0.37	0.05	0.04	0.08	1.45	0.08	1.43
C(YbxLi, sum)809	0.18	0.36	0.05	0.05	0.07	1.40	0.07	1.37
C(YbxLi, sum)821	0.20	0.40	0.05	0.04	0.08	1.58	0.08	1.55
C(YbxLi, sum)822	0.18	0.35	0.05	0.05	0.07	1.38	0.07	1.36
C(YbxLi, sum)823	0.18	0.37	0.05	0.05	0.08	1.44	0.07	1.41
C(YbxLi, sum)829	0.19	0.37	0.04	0.04				
C(YbxLi, sum)831	0.19	0.39	0.05	0.04	0.10	1.84	0.10	1.81
C(YbxLi, sum)832	0.20	0.40	0.06	0.05	0.11	2.09	0.11	2.06
C(YbxLi, sum)833	0.20	0.41	0.05	0.04	0.10	1.98	0.10	1.95
C(YbxLi, sum)839	0.17	0.35	0.05	0.05	0.10	1.83	0.10	1.80
C(YbxLi, sum)841	0.17	0.34	0.05	0.05	0.10	1.83	0.10	1.80
C(YbxLi, sum)842	0.19	0.38	0.05	0.05	0.10	1.97	0.10	1.94
C(YbxLi, sum)843	0.19	0.37	0.04	0.04	0.09	1.66	0.09	1.63
C(YbxLi, sum)849	0.18	0.37	0.05	0.05				
C(YbxLi, sum)851	0.18	0.35	0.05	0.04	0.07	1.37	0.07	1.34
C(YbxLi, sum)852	0.20	0.39	0.05	0.05	0.08	1.56	0.08	1.53
C(YbxLi, sum)853	0.18	0.36	0.05	0.04	0.07	1.39	0.07	1.37
C(YbxLi, sum)859	0.18	0.35	0.05	0.05	0.10	1.82	0.09	1.78
(Intercept)	0.09	0.17	0.01	0.01	0.03	0.58	0.03	0.57

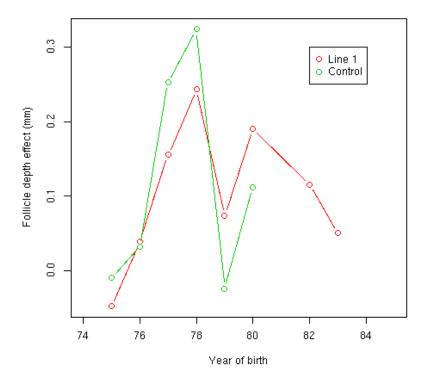


Figure 1: Direct response to selection for follicle depth in Line 1. Shifts in the difference between Line 1 and Control Line represent genetic change.

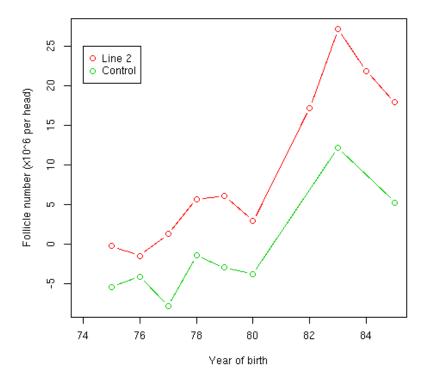


Figure 2: Direct response to selection for follicle number per head in Line 2. Shifts in the difference between Line 2 and Control Line represent genetic change.

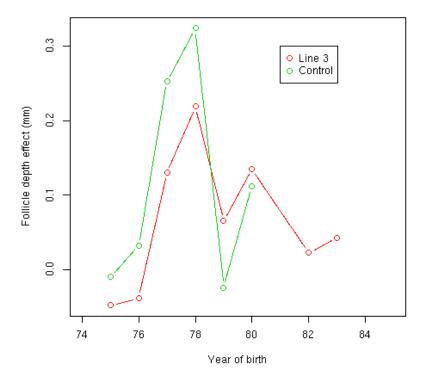


Figure 3: Direct response in follicle depth, to selection for follicle depth and follicle number per head in Line 3. Shifts in the difference between Line 3 and Control Line represent genetic change.

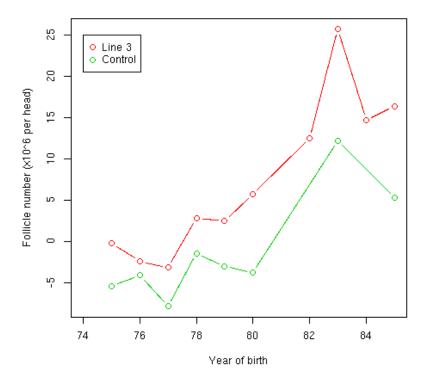


Figure 4: Direct response in follicle number per head, to selection for follicle depth and follicle number per head in Line 3. Shifts in the difference between Line 3 and Control Line represent genetic change.

any of the three lines. There is a slight suggestion that the selected line might average out above the control line in both Line 2 and Line 3. This is not what was expected. The original thinking behind this experiment was that if one wanted to engineer a change in wool weight one had to put selection pressure on all of its components. The components of wool weight in this scenario were considred to be follicle size (measured as follicle depth) and number of follicles (measured as follicle number per head). It was expected that there would be a change in wool weight in Line 3 only. This did not occur. Possible explanations are

- the experiment did not continue for long enough
- the two components (follicle size and number) are in some way not an adequate representation of the biology of wool growth
- the concept of components is somehow flawed

We can look into this a little more thoroughly by seeing if there were any correlated changes in fibre diameter or in fibre length growth rate (measured as staple length).

Figure 7 and Figure 6 show the correlated changes in average fibre diameter and staple length.

There are no obvious correlated changes in staple length or fibre diameter in any of the 3 lines. There is a slight suggestion that staple length might average out higher than the Control line in Lines 2 and 3, as was observeed for clean wool weight. It is becoming clear that the experiment simply did not continue for enough years for correlated responses to be studied. Correlated genetic change is almost always smaller than direct responses to selection, and will therefore take more generations to detect.

In view of the above, the experiment was simply not carried on for long enough to fulfil its original aim. The hypothesis that one can 'engineer' a genetic improvement in wool weight by changing its components in a coordinated way, is still open. A more detailed analysis of responses against amount of selection applied, is not warranted, and would be difficult to carry out because of the missing observations.

The experiment does however provide an important pedigreed data set with some interesting measurements not available elsewhere. We now proceed to an analysis of the pedigree data.

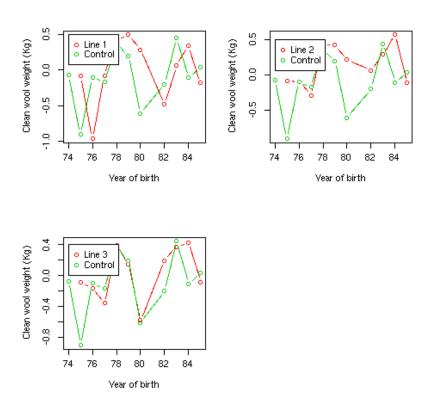


Figure 5: Indirect response in clean wool weight, to selection for follicle depth in Line 1, follicle number per head in Line 2, and follicle depth and follicle number per head in Line 3. Shifts in the difference between each Line and the Control Line represent genetic change.

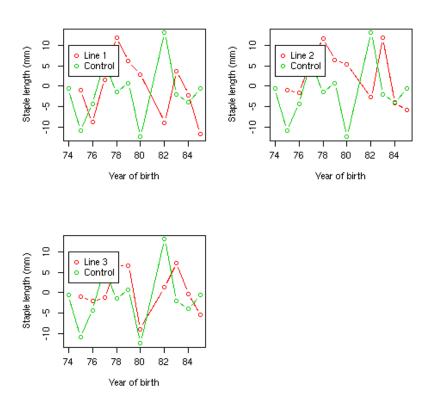


Figure 6: Indirect response in staple length, to selection for follicle depth in Line 1, follicle number per head in Line 2, and follicle depth and follicle number per head in Line 3. Shifts in the difference between each Line and the Control Line represent genetic change.

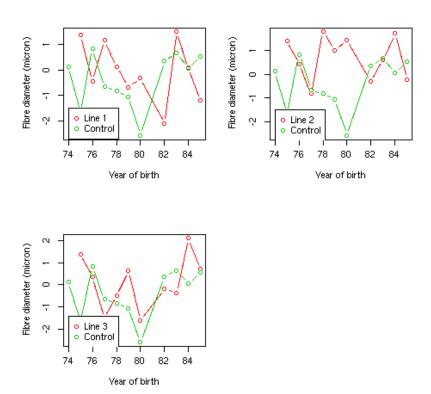


Figure 7: Indirect response in fibre diameter, to selection for follicle depth in Line 1, follicle number per head in Line 2, and follicle depth and follicle number per head in Line 3. Shifts in the difference between each Line and the Control Line represent genetic change.

5.4 Parameters

It is important to present phenotypic as well as genetic parameters. They are required in calculating responses to selection. Heritabilities and genetic correlations alone are not sufficient.

5.4.1 Phenotypic variances

Phenotypic variances and their standard errors are presented in Table 23

Table 23: Estimates of phenotypic variance with standard errors and confidence limits for 56 skin and wool traits

Traitpair	Estimate	StdErr	CI95lo	CI95hi
Stal:Stal	87.501	1.423	84.711	90.290
Diam:Diam	1.998	0.032	1.934	2.061
Bwt:Bwt	18.238	0.297	17.657	18.820
WrN:WrN	0.575	0.009	0.557	0.594
WrB:WrB	0.614	0.010	0.595	0.634
WrT:WrT	2.017	0.033	1.953	2.081
Face:Face	1.113	0.018	1.078	1.147
Gfw:Gfw	0.249	0.004	0.241	0.257
Yld:Yld	22.216	0.358	21.514	22.919
Cww:Cww	0.120	0.002	0.116	0.124
Staladj:Staladj	126.588	2.075	122.520	130.656
Gfwadj:Gfwadj	0.357	0.006	0.346	0.369
Cwwadj:Cwwadj	0.168	0.003	0.163	0.174
Crimp:Crimp	5.361	0.106	5.154	5.569
Crwvl:Crwvl	0.225	0.004	0.216	0.233
Crst:Crst	56.780	1.183	54.461	59.099
Crstadj:Crstadj	81.204	1.696	77.880	84.528
Crwvt:Crwvt	0.031	0.001	0.029	0.032
Dp:Dp	11.806	0.389	11.042	12.569
Ds:Ds	4.059	0.135	3.794	4.324
Dps:Dps	3.987	0.133	3.727	4.248
DpovDs:DpovDs	0.028	0.001	0.026	0.029
CVDp:CVDp	20.746	0.697	19.381	22.111
CVDs:CVDs	7.378	0.249	6.891	7.866
MaxDp:MaxDp	44.886	1.489	41.966	47.805
MinDp:MinDp	12.649	0.434	11.799	13.500
MaxDs:MaxDs	26.440	0.893	24.689	28.191
MinDs:MinDs	5.890	0.200	5.499	6.281
SDDp:SDDp	1.954	0.064	1.828	2.080
SDDs:SDDs	0.335	0.011	0.313	0.357
SDD:SDD	0.340	0.011	0.318	0.362

Table 23 – Continued from previous page

Traitpair	Estimate	StdErr	CI95lo	CI95hi
CVD:CVD	7.128	0.240	6.658	7.598
Gt30Dp:Gt30Dp	278.347	9.248	260.221	296.473
Gt30Ds:Gt30Ds	7.879	0.265	7.359	8.399
Gt30D:Gt30D	9.396	0.316	8.776	10.015
Fnua:Fnua	148.641	2.625	143.495	153.786
Fr:Fr	15.004	0.265	14.485	15.523
Fnt:Fnt	143.441	2.532	138.478	148.403
Sarea:Sarea	0.007	0.000	0.006	0.007
Fd:Fd	0.023	0.000	0.022	0.024
Fc:Fc	1.240	0.024	1.194	1.287
Fu:Fu	0.645	0.012	0.620	0.669
Colour:Colour	0.599	0.010	0.580	0.619
Fly:Fly	1.849	0.031	1.788	1.911
Flcrot:Flcrot	3.066	0.052	2.964	3.168
Bactst:Bactst	0.117	0.002	0.112	0.122
MycD:MycD	0.544	0.011	0.522	0.567
Bcts:Bcts	2.096	0.036	2.026	2.165
Bctb:Bctb	2.274	0.039	2.199	2.350
Weanwt:Weanwt	8.804	0.154	8.502	9.105
NLB:NLB	0.209	0.003	0.202	0.216
NLW:NLW	0.173	0.003	0.168	0.179
Fnpua:Fnpua	0.395	0.007	0.381	0.408
Fnsua:Fnsua	142.081	2.509	137.163	146.999
Fnpt:Fnpt	0.385	0.007	0.372	0.398
Fnst:Fnst	137.073	2.420	132.331	141.816

The columns CI95lo and CI95hi represent the lower and upper limits of a 95 per cent confidence interval for the variance estimate.

5.4.2 Correlations

Phenotypic, genetic and environmental correlations for each pair of traits are presented in Table 24

Table 24: Estimates of individual environmental(E(I)), individual additive genetic(G(Ia)), and phenotypic(P(I)) correlations with standard errors and confidence limits for 56 skin and wool traits

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Stal:Stal	E(I)	1.00	0.00	1.00	1.00
Stal:Stal	G(Ia)	1.00	0.00	1.00	1.00

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Stal:Stal	P(I)	1.00	0.00	1.00	1.00		
Stal:Diam	E(I)	0.12	0.03	0.06	0.19		
Stal:Diam	G(Ia)	0.14	0.03	0.09	0.20		
Stal:Diam	P(I)	0.13	0.02	0.10	0.16		
Stal:Bwt	E(I)	0.26	0.03	0.20	0.31		
Stal:Bwt	G(Ia)	0.08	0.03	0.02	0.14		
Stal:Bwt	P(I)	0.19	0.02	0.16	0.23		
Stal:WrN	E(I)	-0.12	0.03	-0.18	-0.06		
Stal:WrN	G(Ia)	-0.21	0.03	-0.27	-0.15		
Stal:WrN	P(I)	-0.15	0.02	-0.18	-0.12		
Stal:WrB	$\mid E(I) \mid$	-0.09	0.03	-0.15	-0.03		
Stal:WrB	G(Ia)	-0.24	0.03	-0.30	-0.19		
Stal:WrB	P(I)	-0.15	0.02	-0.18	-0.11		
Stal:WrT	E(I)	-0.11	0.03	-0.17	-0.05		
Stal:WrT	G(Ia)	-0.22	0.03	-0.28	-0.17		
Stal:WrT	P(I)	-0.16	0.02	-0.19	-0.12		
Stal:Face	E(I)	-0.02	0.04	-0.10	0.07		
Stal:Face	G(Ia)	-0.31	0.02	-0.35	-0.27		
Stal:Face	P(I)	-0.16	0.02	-0.19	-0.13		
Stal:Gfw	E(I)	0.17	0.03	0.11	0.23		
Stal:Gfw	G(Ia)	0.53	0.03	0.47	0.58		
Stal:Gfw	P(I)	0.30	0.02	0.27	0.33		
Stal:Yld	E(I)	0.36	0.03	0.30	0.42		
Stal:Yld	G(Ia)	0.11	0.03	0.06	0.17		
Stal:Yld	P(I)	0.26	0.02	0.23	0.29		
Stal:Cww	$\mid E(I) \mid$	0.31	0.03	0.25	0.36		
Stal:Cww	G(Ia)	0.59	0.03	0.54	0.64		
Stal:Cww	P(I)	0.41	0.01	0.38	0.43		
Stal:Staladj	$\mid E(I) \mid$	0.97	0.00	0.96	0.98		
Stal:Staladj	G(Ia)	0.99	0.00	0.99	1.00		
Stal:Staladj	P(I)	0.98	0.00	0.97	0.98		
Stal:Gfwadj	E(I)	0.14	0.03	0.09	0.20		
Stal:Gfwadj	G(Ia)	0.51	0.03	0.45	0.56		
Stal:Gfwadj	P(I)	0.27	0.02	0.24	0.30		
Stal:Cwwadj	E(I)	0.28	0.03	0.23	0.33		
Stal:Cwwadj	G(Ia)	0.58	0.03	0.52	0.63		
Stal:Cwwadj	P(I)	0.38	0.01	0.35	0.41		
Stal:Crimp	E(I)	0.41	0.21	-0.00	0.82		
Stal:Crimp	G(Ia)	-0.58	0.03	-0.63	-0.53		
Stal:Crimp	P(I)	-0.28	0.02	-0.32	-0.24		
Stal:Crwvl	E(I)	-0.06	0.04	-0.14	0.03		
Stal:Crwvl	G(Ia)	0.55	0.03	0.48	0.61		
Stal:Crwvl	P(I)	0.21	0.02	0.17	0.24		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Stal:Crst	E(I)	0.95	0.06	0.84	1.07		
Stal:Crst	G(Ia)	-0.22	0.04	-0.29	-0.15		
Stal:Crst	P(I)	0.31	0.02	0.28	0.35		
Stal:Crstadj	E(I)	0.89	0.05	0.78	0.99		
Stal:Crstadj	G(Ia)	-0.21	0.04	-0.28	-0.14		
Stal:Crstadj	P(I)	0.31	0.02	0.27	0.35		
Stal:Crwvt	E(I)	-0.66	0.04	-0.74	-0.58		
Stal:Crwvt	G(Ia)	0.16	0.04	0.08	0.24		
Stal:Crwvt	P(I)	-0.30	0.02	-0.34	-0.27		
Stal:Dp	E(I)	0.09	0.09	-0.08	0.26		
Stal:Dp	G(Ia)	-0.19	0.05	-0.30	-0.08		
Stal:Dp	P(I)	-0.05	0.03	-0.12	0.01		
Stal:Ds	E(I)	-0.06	0.08	-0.21	0.09		
Stal:Ds	G(Ia)	0.36	0.06	0.24	0.49		
Stal:Ds	P(I)	0.13	0.03	0.06	0.19		
Stal:Dps	E(I)	-0.05	0.08	-0.20	0.09		
Stal:Dps	G(Ia)	0.35	0.06	0.23	0.48		
Stal:Dps	P(I)	0.12	0.03	0.06	0.19		
Stal:DpovDs	E(I)	0.19	0.14	-0.08	0.46		
Stal:DpovDs	G(Ia)	-0.34	0.04	-0.42	-0.25		
Stal:DpovDs	P(I)	-0.15	0.03	-0.21	-0.09		
Stal:CVDp	E(I)	-0.15	0.07	-0.29	-0.01		
Stal:CVDp	G(Ia)	0.05	0.07	-0.09	0.19		
Stal:CVDp	P(I)	-0.07	0.03	-0.13	-0.00		
Stal:CVDs	E(I)	-0.17	0.07	-0.31	-0.04		
Stal:CVDs	G(Ia)	-0.09	0.08	-0.23	0.06		
Stal:CVDs	P(I)	-0.14	0.03	-0.20	-0.07		
Stal:MaxDp	E(I)	0.07	0.08	-0.09	0.24		
Stal:MaxDp	G(Ia)	-0.17	0.06	-0.28	-0.06		
Stal:MaxDp	P(I)	-0.05	0.03	-0.11	0.02		
Stal:MinDp	E(I)	0.22	0.06	0.09	0.34		
Stal:MinDp	G(Ia)	-0.74	0.18	-1.09	-0.39		
Stal:MinDp	P(I)	-0.01	0.03	-0.07	0.06		
Stal:MaxDs	E(I)	-0.21	0.07	-0.34	-0.09		
Stal:MaxDs	G(Ia)	0.20	0.09	0.01	0.39		
Stal:MaxDs	P(I)	-0.08	0.03	-0.14	-0.01		
Stal:MinDs	E(I)	-0.02	0.06	-0.14	0.10		
Stal:MinDs	G(Ia)	0.20	0.16	-0.12	0.52		
Stal:MinDs	P(I)	0.02	0.03	-0.04	0.09		
Stal:SDDp	E(I)	-0.04	0.08	-0.20	0.12		
Stal:SDDp	G(Ia)	-0.12	0.06	-0.23	-0.01		
Stal:SDDp	P(I)	-0.08	0.03	-0.14	-0.02		
Stal:SDDs	E(I)	-0.19	0.08	-0.34	-0.04		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Stal:SDDs	G(Ia)	0.10	0.06	-0.02	0.23		
Stal:SDDs	P(I)	-0.06	0.03	-0.12	0.01		
Stal:SDD	E(I)	-0.18	0.08	-0.33	-0.03		
Stal:SDD	G(Ia)	0.08	0.06	-0.05	0.20		
Stal:SDD	P(I)	-0.06	0.03	-0.13	0.00		
Stal:CVD	$\mid E(I) \mid$	-0.17	0.07	-0.30	-0.03		
Stal:CVD	G(Ia)	-0.11	0.07	-0.25	0.04		
Stal:CVD	P(I)	-0.14	0.03	-0.21	-0.08		
Stal:Gt30Dp	$\mid E(I) \mid$	0.07	0.08	-0.09	0.23		
Stal:Gt30Dp	G(Ia)	-0.21	0.06	-0.33	-0.10		
Stal:Gt30Dp	P(I)	-0.07	0.03	-0.13	-0.00		
Stal:Gt30Ds	E(I)	-0.06	0.07	-0.19	0.08		
Stal:Gt30Ds	G(Ia)	0.10	0.08	-0.05	0.25		
Stal:Gt30Ds	P(I)	0.00	0.03	-0.06	0.07		
Stal:Gt30D	E(I)	-0.04	0.07	-0.18	0.10		
Stal:Gt30D	G(Ia)	0.05	0.07	-0.10	0.19		
Stal:Gt30D	P(I)	-0.01	0.03	-0.07	0.06		
Stal:Fnua	E(I)	-0.19	0.03	-0.25	-0.13		
Stal:Fnua	G(Ia)	-0.13	0.04	-0.20	-0.06		
Stal:Fnua	P(I)	-0.17	0.02	-0.20	-0.14		
Stal:Fr	E(I)	-0.07	0.03	-0.13	-0.01		
Stal:Fr	G(Ia)	-0.25	0.04	-0.32	-0.18		
Stal:Fr	P(I)	-0.13	0.02	-0.17	-0.10		
Stal:Fnt	E(I)	-0.07	0.03	-0.13	-0.01		
Stal:Fnt	G(Ia)	-0.06	0.04	-0.14	0.01		
Stal:Fnt	P(I)	-0.07	0.02	-0.11	-0.04		
Stal:Sarea	E(I)	0.26	0.03	0.20	0.32		
Stal:Sarea	G(Ia)	0.10	0.03	0.04	0.17		
Stal:Sarea	P(I)	0.20	0.02	0.17	0.24		
Stal:Fd	E(I)	0.16	0.03	0.10	0.22		
Stal:Fd	G(Ia)	0.42	0.05	0.32	0.53		
Stal:Fd	P(I)	0.22	0.02	0.18	0.26		
Stal:Fc	E(I)	0.03	0.05	-0.06	0.13		
Stal:Fc	G(Ia)	-0.44	0.03	-0.50	-0.38		
Stal:Fc	P(I)	-0.19	0.02	-0.22	-0.15		
Stal:Fu	E(I)	-0.06	0.04	-0.13	0.01		
Stal:Fu	G(Ia)	-0.36	0.04	-0.44	-0.29		
Stal:Fu	P(I)	-0.17	0.02	-0.20	-0.13		
Stal:Colour	E(I)	-0.10	0.03	-0.16	-0.05		
Stal:Colour	G(Ia)	0.02	0.05	-0.07	0.11		
Stal:Colour	P(I)	-0.07	0.02	-0.10	-0.04		
Stal:Fly	E(I)	0.13	0.03	0.08	0.18		
Stal:Fly	G(Ia)	-0.52	0.07	-0.66	-0.38		

Table 24 – Continued from previous page

	$\frac{1}{2}$ le 24 – Contin				
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Stal:Fly	P(I)	-0.00	0.02	-0.03	0.03
Stal:Flcrot	E(I)	-0.01	0.03	-0.06	0.04
Stal:Flcrot	G(Ia)	-0.10	0.11	-0.32	0.11
Stal:Flcrot	P(I)	-0.02	0.02	-0.05	0.01
Stal:Bactst	E(I)	-0.05	0.03	-0.11	0.02
Stal:Bactst	G(Ia)	-0.55	0.14	-0.82	-0.29
Stal:Bactst	P(I)	-0.11	0.02	-0.15	-0.07
Stal:MycD	E(I)	0.01	0.03	-0.05	0.08
Stal:MycD	G(Ia)	-0.27	0.12	-0.51	-0.03
Stal:MycD	P(I)	-0.03	0.02	-0.07	0.01
Stal:Bcts	$\mid E(I) \mid$	0.33	0.06	0.21	0.45
Stal:Bcts	G(Ia)	-0.16	0.02	-0.20	-0.11
Stal:Bcts	P(I)	0.03	0.02	-0.00	0.07
Stal:Bctb	$\mid E(I) \mid$	0.32	0.06	0.21	0.43
Stal:Bctb	G(Ia)	-0.19	0.02	-0.24	-0.14
Stal:Bctb	P(I)	0.02	0.02	-0.01	0.06
Stal:Weanwt	E(I)	0.11	0.03	0.05	0.17
Stal:Weanwt	G(Ia)	-0.02	0.04	-0.11	0.06
Stal:Weanwt	P(I)	0.07	0.02	0.04	0.10
Stal:NLB	E(I)	-0.04	0.03	-0.10	0.01
Stal:NLB	G(Ia)	0.27	0.04	0.19	0.36
Stal:NLB	P(I)	0.04	0.02	0.01	0.07
Stal:NLW	E(I)	0.03	0.03	-0.03	0.08
Stal:NLW	G(Ia)	0.14	0.04	0.06	0.22
Stal:NLW	P(I)	0.06	0.02	0.03	0.09
Stal:Fnpua	E(I)	-0.11	0.03	-0.16	-0.05
Stal:Fnpua	G(Ia)	0.12	0.04	0.03	0.20
Stal:Fnpua	P(I)	-0.04	0.02	-0.08	-0.01
Stal:Fnsua	E(I)	-0.19	0.03	-0.25	-0.13
Stal:Fnsua	G(Ia)	-0.14	0.04	-0.21	-0.06
Stal:Fnsua	P(I)	-0.17	0.02	-0.21	-0.14
Stal:Fnpt	E(I)	0.00	0.03	-0.06	0.06
Stal:Fnpt	G(Ia)	0.16	0.04	0.08	0.24
Stal:Fnpt	P(I)	0.05	0.02	0.01	0.08
Stal:Fnst	E(I)	-0.08	0.03	-0.14	-0.01
Stal:Fnst	G(Ia)	-0.07	0.04	-0.15	-0.00
Stal:Fnst	P(I)	-0.08	0.02	-0.11	-0.04
Diam:Stal	E(I)	0.12	0.03	0.06	0.19
Diam:Stal	G(Ia)	0.14	0.03	0.09	0.20
Diam:Stal	P(I)	0.13	0.02	0.10	0.16
Diam:Diam	E(I)	1.00	0.00	1.00	1.00
Diam:Diam	G(Ia)	1.00	0.00	1.00	1.00
Diam:Diam	P(I)	1.00	0.00	1.00	1.00

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Diam:Bwt	E(I)	0.20	0.03	0.14	0.26	
Diam:Bwt	G(Ia)	0.15	0.03	0.10	0.20	
Diam:Bwt	P(I)	0.18	0.02	0.15	0.21	
Diam:WrN	E(I)	0.17	0.03	0.11	0.24	
Diam:WrN	G(Ia)	0.22	0.03	0.17	0.27	
Diam:WrN	P(I)	0.19	0.02	0.16	0.23	
Diam:WrB	E(I)	0.20	0.03	0.13	0.26	
Diam:WrB	G(Ia)	0.15	0.03	0.10	0.20	
Diam:WrB	P(I)	0.18	0.02	0.15	0.21	
Diam:WrT	E(I)	0.21	0.03	0.15	0.28	
Diam:WrT	G(Ia)	0.19	0.02	0.15	0.24	
Diam:WrT	P(I)	0.20	0.02	0.17	0.23	
Diam:Face	E(I)	-0.03	0.05	-0.12	0.07	
Diam:Face	G(Ia)	-0.12	0.02	-0.16	-0.08	
Diam:Face	P(I)	-0.08	0.02	-0.11	-0.05	
Diam:Gfw	E(I)	0.29	0.03	0.23	0.35	
Diam:Gfw	G(Ia)	0.56	0.02	0.51	0.60	
Diam:Gfw	P(I)	0.39	0.01	0.37	0.42	
Diam:Yld	E(I)	-0.05	0.04	-0.12	0.02	
Diam:Yld	G(Ia)	-0.17	0.02	-0.22	-0.12	
Diam:Yld	P(I)	-0.10	0.02	-0.13	-0.07	
Diam:Cww	E(I)	0.25	0.03	0.19	0.31	
Diam:Cww	G(Ia)	0.48	0.03	0.43	0.53	
Diam:Cww	P(I)	0.34	0.01	0.31	0.37	
Diam:Staladj	E(I)	0.13	0.03	0.07	0.19	
Diam:Staladj	G(Ia)	0.13	0.03	0.08	0.18	
Diam:Staladj	P(I)	0.13	0.02	0.10	0.16	
Diam:Gfwadj	E(I)	0.29	0.03	0.23	0.35	
Diam:Gfwadj	G(Ia)	0.55	0.02	0.50	0.60	
Diam:Gfwadj	P(I)	0.39	0.01	0.36	0.42	
Diam:Cwwadj	E(I)	0.26	0.03	0.20	0.31	
Diam:Cwwadj	G(Ia)	0.48	0.03	0.43	0.53	
Diam:Cwwadj	P(I)	0.34	0.01	0.31	0.37	
Diam:Crimp	E(I)	0.33	0.18	-0.03	0.68	
Diam:Crimp	G(Ia)	-0.44	0.03	-0.49	-0.38	
Diam:Crimp	P(I)	-0.20	0.02	-0.23	-0.16	
Diam:Crwvl	E(I)	-0.17	0.04	-0.25	-0.09	
Diam:Crwvl	G(Ia)	0.48	0.03	0.41	0.55	
Diam:Crwvl	P(I)	0.10	0.02	0.07	0.14	
Diam:Crst	E(I)	0.18	0.06	0.06	0.29	
Diam:Crst	G(Ia)	-0.33	0.04	-0.39	-0.26	
Diam:Crst	P(I)	-0.08	0.02	-0.12	-0.04	
Diam:Crstadj	E(I)	0.20	0.06	0.09	0.31	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Diam:Crstadj	G(Ia)	-0.34	0.04	-0.41	-0.27		
Diam:Crstadj	P(I)	-0.07	0.02	-0.11	-0.02		
Diam:Crwvt	E(I)	-0.16	0.05	-0.25	-0.07		
Diam:Crwvt	G(Ia)	0.35	0.04	0.27	0.43		
Diam:Crwvt	P(I)	0.05	0.02	0.01	0.09		
Diam:Dp	E(I)	0.63	0.08	0.48	0.78		
Diam:Dp	G(Ia)	0.14	0.05	0.05	0.24		
Diam:Dp	P(I)	0.37	0.03	0.31	0.42		
Diam:Ds	E(I)	0.35	0.06	0.22	0.48		
Diam:Ds	G(Ia)	0.91	0.04	0.83	0.99		
Diam:Ds	P(I)	0.61	0.02	0.57	0.66		
Diam:Dps	E(I)	0.38	0.06	0.26	0.50		
Diam:Dps	G(Ia)	0.93	0.04	0.85	1.01		
Diam:Dps	P(I)	0.63	0.02	0.58	0.67		
Diam:DpovDs	E(I)	0.58	0.15	0.28	0.88		
Diam:DpovDs	G(Ia)	-0.33	0.04	-0.41	-0.24		
Diam:DpovDs	P(I)	-0.05	0.03	-0.11	0.02		
Diam:CVDp	E(I)	-0.07	0.08	-0.22	0.09		
Diam:CVDp	G(Ia)	0.30	0.06	0.18	0.43		
Diam:CVDp	P(I)	0.09	0.03	0.03	0.16		
Diam:CVDs	E(I)	-0.06	0.07	-0.21	0.08		
Diam:CVDs	G(Ia)	0.14	0.07	0.00	0.28		
Diam:CVDs	P(I)	0.02	0.03	-0.04	0.09		
Diam:MaxDp	E(I)	0.44	0.08	0.29	0.60		
Diam:MaxDp	G(Ia)	0.16	0.05	0.07	0.26		
Diam:MaxDp	P(I)	0.29	0.03	0.23	0.35		
Diam:MinDp	E(I)	0.26	0.06	0.14	0.39		
Diam:MinDp	G(Ia)	0.03	0.11	-0.19	0.24		
Diam:MinDp	P(I)	0.17	0.03	0.11	0.24		
Diam:MaxDs	E(I)	0.20	0.06	0.08	0.33		
Diam:MaxDs	G(Ia)	0.80	0.08	0.65	0.96		
Diam:MaxDs	P(I)	0.39	0.03	0.33	0.44		
Diam:MinDs	E(I)	0.16	0.06	0.04	0.29		
Diam:MinDs	G(Ia)	0.02	0.12	-0.22	0.26		
Diam:MinDs	P(I)	0.11	0.03	0.04	0.17		
Diam:SDDp	E(I)	0.25	0.08	0.09	0.41		
Diam:SDDp	G(Ia)	0.22	0.05	0.12	0.32		
Diam:SDDp	P(I)	0.23	0.03	0.17	0.29		
Diam:SDDs	E(I)	0.14	0.08	-0.01	0.29		
Diam:SDDs	G(Ia)	0.61	0.05	0.51	0.71		
Diam:SDDs	P(I)	0.36	0.03	0.30	0.42		
Diam:SDD	E(I)	0.17	0.08	0.03	0.32		
Diam:SDD	G(Ia)	0.61	0.05	0.51	0.71		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Diam:SDD	P(I)	0.38	0.03	0.33	0.44		
Diam:CVD	E(I)	-0.05	0.08	-0.20	0.10		
Diam:CVD	G(Ia)	0.15	0.07	0.02	0.29		
Diam:CVD	P(I)	0.04	0.03	-0.03	0.10		
Diam:Gt30Dp	E(I)	0.46	0.08	0.30	0.61		
Diam:Gt30Dp	G(Ia)	0.19	0.05	0.09	0.29		
Diam:Gt30Dp	P(I)	0.32	0.03	0.26	0.38		
Diam:Gt30Ds	E(I)	0.34	0.06	0.22	0.46		
Diam:Gt30Ds	G(Ia)	0.74	0.06	0.63	0.85		
Diam:Gt30Ds	P(I)	0.49	0.03	0.43	0.54		
Diam:Gt30D	$\mid E(I) \mid$	0.42	0.06	0.30	0.54		
Diam:Gt30D	G(Ia)	0.71	0.05	0.61	0.82		
Diam:Gt30D	P(I)	0.53	0.03	0.48	0.58		
Diam:Fnua	E(I)	-0.47	0.03	-0.53	-0.42		
Diam:Fnua	G(Ia)	-0.58	0.03	-0.63	-0.52		
Diam:Fnua	P(I)	-0.51	0.01	-0.53	-0.48		
Diam:Fr	E(I)	-0.42	0.03	-0.48	-0.36		
Diam:Fr	G(Ia)	-0.20	0.03	-0.26	-0.14		
Diam:Fr	P(I)	-0.33	0.02	-0.36	-0.30		
Diam:Fnt	E(I)	-0.38	0.03	-0.44	-0.32		
Diam:Fnt	G(Ia)	-0.51	0.03	-0.56	-0.45		
Diam:Fnt	P(I)	-0.42	0.02	-0.45	-0.39		
Diam:Sarea	E(I)	0.21	0.03	0.14	0.28		
Diam:Sarea	G(Ia)	0.15	0.03	0.09	0.21		
Diam:Sarea	P(I)	0.18	0.02	0.15	0.22		
Diam:Fd	E(I)	0.06	0.03	-0.01	0.13		
Diam:Fd	G(Ia)	0.27	0.05	0.17	0.36		
Diam:Fd	P(I)	0.12	0.02	0.08	0.15		
Diam:Fc	E(I)	0.62	0.05	0.54	0.71		
Diam:Fc	G(Ia)	0.13	0.02	0.08	0.18		
Diam:Fc	P(I)	0.35	0.02	0.32	0.38		
Diam:Fu	E(I)	0.38	0.04	0.31	0.45		
Diam:Fu	G(Ia)	0.25	0.03	0.19	0.31		
Diam:Fu	P(I)	0.33	0.02	0.30	0.36		
Diam:Colour	E(I)	0.03	0.03	-0.03	0.09		
Diam:Colour	G(Ia)	0.00	0.04	-0.08	0.08		
Diam:Colour	P(I)	0.02	0.02	-0.01	0.05		
Diam:Fly	E(I)	0.05	0.03	-0.00	0.11		
Diam:Fly	G(Ia)	-0.31	0.06	-0.43	-0.19		
Diam:Fly	P(I)	-0.03	0.02	-0.06	0.01		
Diam:Flcrot	E(I)	0.02	0.03	-0.03	0.08		
Diam:Flcrot	G(Ia)	-0.20	0.10	-0.41	0.00		
Diam:Flcrot	P(I)	-0.01	0.02	-0.04	0.03		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Diam:Bactst	E(I)	0.02	0.04	-0.06	0.10
Diam:Bactst	G(Ia)	0.01	0.09	-0.17	0.19
Diam:Bactst	P(I)	0.01	0.02	-0.03	0.05
Diam:MycD	E(I)	-0.03	0.04	-0.11	0.04
Diam:MycD	G(Ia)	0.03	0.10	-0.17	0.22
Diam:MycD	P(I)	-0.02	0.02	-0.06	0.02
Diam:Bcts	E(I)	0.17	0.07	0.04	0.30
Diam:Bcts	G(Ia)	0.09	0.02	0.06	0.13
Diam:Bcts	P(I)	0.11	0.02	0.08	0.15
Diam:Bctb	E(I)	0.17	0.06	0.05	0.28
Diam:Bctb	G(Ia)	0.08	0.02	0.04	0.12
Diam:Bctb	P(I)	0.11	0.02	0.07	0.14
Diam:Weanwt	E(I)	-0.10	0.04	-0.17	-0.03
Diam:Weanwt	G(Ia)	0.30	0.04	0.22	0.37
Diam:Weanwt	P(I)	0.04	0.02	0.01	0.08
Diam:NLB	E(I)	0.15	0.03	0.09	0.21
Diam:NLB	G(Ia)	-0.03	0.04	-0.10	0.05
Diam:NLB	P(I)	0.09	0.02	0.06	0.12
Diam:NLW	E(I)	0.15	0.03	0.09	0.20
Diam:NLW	G(Ia)	-0.05	0.04	-0.12	0.02
Diam:NLW	P(I)	0.08	0.02	0.05	0.11
Diam:Fnpua	E(I)	-0.09	0.03	-0.15	-0.03
Diam:Fnpua	G(Ia)	-0.35	0.04	-0.43	-0.28
Diam:Fnpua	P(I)	-0.17	0.02	-0.20	-0.14
Diam:Fnsua	E(I)	-0.48	0.03	-0.53	-0.43
Diam:Fnsua	G(Ia)	-0.57	0.03	-0.62	-0.52
Diam:Fnsua	P(I)	-0.51	0.01	-0.54	-0.48
Diam:Fnpt	E(I)	-0.01	0.03	-0.07	0.05
Diam:Fnpt	G(Ia)	-0.25	0.04	-0.32	-0.18
Diam:Fnpt	P(I)	-0.09	0.02	-0.12	-0.06
Diam:Fnst	E(I)	-0.39	0.03	-0.44	-0.33
Diam:Fnst	G(Ia)	-0.51	0.03	-0.56	-0.45
Diam:Fnst	P(I)	-0.43	0.02	-0.46	-0.40
Bwt:Stal	E(I)	0.26	0.03	0.20	0.31
Bwt:Stal	G(Ia)	0.08	0.03	0.02	0.14
Bwt:Stal	P(I)	0.19	0.02	0.16	0.23
Bwt:Diam	E(I)	0.20	0.03	0.14	0.26
Bwt:Diam	G(Ia)	0.15	0.03	0.10	0.20
Bwt:Diam	P(I)	0.18	0.02	0.15	0.21
Bwt:Bwt	E(I)	1.00	0.00	1.00	1.00
Bwt:Bwt	G(Ia)	1.00	0.00	1.00	1.00
Bwt:Bwt	P(I)	1.00	0.00	1.00	1.00
Bwt:WrN	E(I)	0.24	0.03	0.18	0.30

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bwt:WrN	G(Ia)	-0.34	0.03	-0.40	-0.28		
Bwt:WrN	P(I)	0.02	0.02	-0.01	0.05		
Bwt:WrB	E(I)	0.27	0.03	0.21	0.33		
Bwt:WrB	G(Ia)	-0.35	0.03	-0.41	-0.29		
Bwt:WrB	P(I)	0.04	0.02	0.01	0.07		
Bwt:WrT	E(I)	0.29	0.03	0.23	0.35		
Bwt:WrT	G(Ia)	-0.35	0.03	-0.41	-0.29		
Bwt:WrT	P(I)	0.03	0.02	0.00	0.07		
Bwt:Face	E(I)	-0.06	0.04	-0.14	0.03		
Bwt:Face	G(Ia)	-0.31	0.02	-0.36	-0.27		
Bwt:Face	P(I)	-0.18	0.02	-0.21	-0.15		
Bwt:Gfw	E(I)	0.57	0.02	0.52	0.62		
Bwt:Gfw	G(Ia)	0.24	0.03	0.18	0.29		
Bwt:Gfw	P(I)	0.45	0.01	0.42	0.48		
Bwt:Yld	E(I)	0.02	0.03	-0.04	0.09		
Bwt:Yld	G(Ia)	0.05	0.03	-0.00	0.11		
Bwt:Yld	P(I)	0.03	0.02	0.00	0.07		
Bwt:Cww	E(I)	0.55	0.02	0.50	0.60		
Bwt:Cww	G(Ia)	0.26	0.03	0.21	0.32		
Bwt:Cww	P(I)	0.45	0.01	0.42	0.48		
Bwt:Staladj	E(I)	0.24	0.03	0.18	0.30		
Bwt:Staladj	G(Ia)	0.09	0.03	0.03	0.15		
Bwt:Staladj	P(I)	0.18	0.02	0.15	0.22		
Bwt:Gfwadj	E(I)	0.53	0.03	0.48	0.58		
Bwt:Gfwadj	G(Ia)	0.24	0.03	0.18	0.29		
Bwt:Gfwadj	P(I)	0.43	0.01	0.40	0.45		
Bwt:Cwwadj	E(I)	0.52	0.02	0.47	0.57		
Bwt:Cwwadj	G(Ia)	0.26	0.03	0.20	0.32		
Bwt:Cwwadj	P(I)	0.43	0.01	0.40	0.46		
Bwt:Crimp	E(I)	0.66	0.21	0.24	1.07		
Bwt:Crimp	G(Ia)	-0.21	0.03	-0.26	-0.15		
Bwt:Crimp	P(I)	-0.00	0.02	-0.04	0.04		
Bwt:Crwvl	E(I)	-0.24	0.04	-0.32	-0.16		
Bwt:Crwvl	G(Ia)	0.23	0.04	0.16	0.31		
Bwt:Crwvl	P(I)	-0.04	0.02	-0.08	-0.00		
Bwt:Crst	E(I)	0.50	0.06	0.38	0.61		
Bwt:Crst	G(Ia)	-0.22	0.04	-0.29	-0.15		
Bwt:Crst	P(I)	0.12	0.02	0.08	0.16		
Bwt:Crstadj	E(I)	0.44	0.06	0.33	0.55		
Bwt:Crstadj	G(Ia)	-0.19	0.04	-0.27	-0.12		
Bwt:Crstadj	P(I)	0.12	0.02	0.08	0.16		
Bwt:Crwvt	E(I)	-0.37	0.04	-0.46	-0.29		
Bwt:Crwvt	G(Ia)	0.23	0.04	0.15	0.31		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bwt:Crwvt	P(I)	-0.12	0.02	-0.16	-0.08		
Bwt:Dp	E(I)	0.13	0.07	-0.02	0.27		
Bwt:Dp	G(Ia)	-0.26	0.07	-0.40	-0.12		
Bwt:Dp	P(I)	-0.03	0.03	-0.09	0.04		
Bwt:Ds	E(I)	0.11	0.06	-0.02	0.23		
Bwt:Ds	G(Ia)	0.35	0.08	0.20	0.51		
Bwt:Ds	P(I)	0.19	0.03	0.13	0.25		
Bwt:Dps	E(I)	0.11	0.06	-0.01	0.23		
Bwt:Dps	G(Ia)	0.33	0.08	0.17	0.49		
Bwt:Dps	P(I)	0.18	0.03	0.12	0.25		
Bwt:DpovDs	E(I)	0.06	0.12	-0.17	0.29		
Bwt:DpovDs	G(Ia)	-0.39	0.06	-0.50	-0.28		
Bwt:DpovDs	P(I)	-0.17	0.03	-0.23	-0.10		
Bwt:CVDp	E(I)	-0.04	0.06	-0.16	0.08		
Bwt:CVDp	G(Ia)	0.04	0.09	-0.14	0.23		
Bwt:CVDp	P(I)	-0.02	0.03	-0.08	0.05		
Bwt:CVDs	E(I)	-0.18	0.06	-0.29	-0.06		
Bwt:CVDs	G(Ia)	-0.00	0.08	-0.16	0.15		
Bwt:CVDs	P(I)	-0.13	0.03	-0.19	-0.06		
Bwt:MaxDp	E(I)	0.04	0.07	-0.10	0.18		
Bwt:MaxDp	G(Ia)	-0.15	0.07	-0.30	-0.00		
Bwt:MaxDp	P(I)	-0.03	0.03	-0.10	0.03		
Bwt:MinDp	E(I)	0.08	0.05	-0.02	0.19		
Bwt:MinDp	G(Ia)	-0.49	0.19	-0.87	-0.11		
Bwt:MinDp	P(I)	-0.01	0.03	-0.08	0.05		
Bwt:MaxDs	E(I)	-0.01	0.06	-0.12	0.10		
Bwt:MaxDs	G(Ia)	0.20	0.12	-0.04	0.43		
Bwt:MaxDs	P(I)	0.04	0.03	-0.03	0.11		
Bwt:MinDs	E(I)	0.12	0.05	0.02	0.22		
Bwt:MinDs	G(Ia)	-0.34	0.23	-0.78	0.11		
Bwt:MinDs	P(I)	0.05	0.03	-0.01	0.12		
Bwt:SDDp	E(I)	0.04	0.07	-0.10	0.18		
Bwt:SDDp	G(Ia)	-0.14	0.07	-0.29	0.01		
Bwt:SDDp	P(I)	-0.03	0.03	-0.09	0.04		
Bwt:SDDs	E(I)	-0.11	0.07	-0.24	0.02		
Bwt:SDDs	G(Ia)	0.19	0.08	0.03	0.36		
Bwt:SDDs	P(I)	-0.01	0.03	-0.07	0.06		
Bwt:SDD	E(I)	-0.10	0.07	-0.23	0.03		
Bwt:SDD	G(Ia)	0.16	0.08	-0.00	0.32		
Bwt:SDD	P(I)	-0.01	0.03	-0.07	0.06		
Bwt:CVD	E(I)	-0.17	0.06	-0.29	-0.05		
Bwt:CVD	G(Ia)	-0.03	0.09	-0.21	0.15		
Bwt:CVD	P(I)	-0.13	0.03	-0.19	-0.06		

Table 24 – Continued from previous page

Traitpair	$\frac{1e 24 - Contin}{Component}$	Estimate	StdErr	CI95lo	CI95hi
Bwt:Gt30Dp	E(I)	0.06	0.07	-0.07	0.20
Bwt:Gt30Dp	G(Ia)	-0.32	0.07	-0.46	-0.17
Bwt:Gt30Dp	P(I)	-0.08	0.03	-0.14	-0.01
Bwt:Gt30Ds	E(I)	-0.06	0.06	-0.14	0.06
Bwt:Gt30Ds Bwt:Gt30Ds	G(Ia)	0.19	0.00	-0.10	0.00
Bwt:Gt30Ds	P(I)	0.01	0.10	-0.05	0.08
Bwt:Gt30D	E(I)	-0.04	0.06	-0.16	0.08
Bwt:Gt30D	G(Ia)	0.07	0.10	-0.12	0.26
Bwt:Gt30D	P(I)	-0.01	0.03	-0.07	0.06
Bwt:Fnua	E(I)	-0.23	0.03	-0.29	-0.17
Bwt:Fnua	G(Ia)	-0.21	0.04	-0.28	-0.15
Bwt:Fnua	P(I)	-0.23	0.02	-0.26	-0.19
Bwt:Fr	E(I)	0.06	0.03	-0.00	0.13
Bwt:Fr	G(Ia)	-0.11	0.04	-0.18	-0.04
Bwt:Fr	P(I)	0.00	0.02	-0.03	0.04
Bwt:Fnt	E(I)	0.21	0.03	0.15	0.27
Bwt:Fnt	G(Ia)	0.26	0.03	0.20	0.33
Bwt:Fnt	P(I)	0.22	0.02	0.19	0.26
Bwt:Sarea	E(I)	1.00	0.00	1.00	1.00
Bwt:Sarea	G(Ia)	1.00	0.00	1.00	1.00
Bwt:Sarea	P(I)	1.00	0.00	1.00	1.00
Bwt:Fd	E(I)	0.19	0.03	0.12	0.25
Bwt:Fd	G(Ia)	0.01	0.05	-0.08	0.11
Bwt:Fd	P(I)	0.13	0.02	0.10	0.17
Bwt:Fc	E(I)	0.24	0.05	0.15	0.34
Bwt:Fc	$\widetilde{G(Ia)}$	-0.13	0.03	-0.19	-0.08
Bwt:Fc	P(I)	0.05	0.02	0.01	0.08
Bwt:Fu	E(I)	0.08	0.04	0.01	0.16
Bwt:Fu	G(Ia)	-0.04	0.04	-0.11	0.03
Bwt:Fu	P(I)	0.03	0.02	-0.00	0.07
Bwt:Colour	$\mathrm{E}(\mathrm{I})$	-0.08	0.03	-0.13	-0.03
Bwt:Colour	G(Ia)	-0.09	0.05	-0.18	0.00
Bwt:Colour	P(I)	-0.08	0.02	-0.11	-0.05
Bwt:Fly	$\mathrm{E}(\mathrm{I})$	-0.03	0.03	-0.08	0.03
Bwt:Fly	G(Ia)	0.22	0.07	0.10	0.35
Bwt:Fly	P(I)	0.02	0.02	-0.01	0.05
Bwt:Flcrot	$\mathrm{E}(\mathrm{I})$	-0.04	0.03	-0.09	0.01
Bwt:Flcrot	G(Ia)	-0.12	0.11	-0.34	0.10
Bwt:Flcrot	P(I)	-0.04	0.02	-0.08	-0.01
Bwt:Bactst	$\mathrm{E}(\mathrm{I})$	-0.12	0.03	-0.19	-0.06
Bwt:Bactst	G(Ia)	0.33	0.14	0.04	0.61
Bwt:Bactst	P(I)	-0.06	0.02	-0.10	-0.02
Bwt:MycD	$\mathrm{E}(\mathrm{I})$	-0.09	0.03	-0.15	-0.03

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bwt:MycD	G(Ia)	0.01	0.17	-0.31	0.34		
Bwt:MycD	P(I)	-0.07	0.02	-0.11	-0.03		
Bwt:Bcts	E(I)	-0.04	0.06	-0.15	0.07		
Bwt:Bcts	G(Ia)	0.03	0.02	-0.02	0.08		
Bwt:Bcts	P(I)	-0.00	0.02	-0.04	0.03		
Bwt:Bctb	E(I)	0.03	0.05	-0.08	0.13		
Bwt:Bctb	G(Ia)	-0.02	0.03	-0.07	0.03		
Bwt:Bctb	P(I)	-0.00	0.02	-0.03	0.03		
Bwt:Weanwt	E(I)	0.51	0.02	0.46	0.55		
Bwt:Weanwt	G(Ia)	0.73	0.03	0.67	0.80		
Bwt:Weanwt	P(I)	0.57	0.01	0.54	0.59		
Bwt:NLB	E(I)	-0.13	0.03	-0.19	-0.08		
Bwt:NLB	G(Ia)	-0.23	0.04	-0.31	-0.15		
Bwt:NLB	P(I)	-0.16	0.02	-0.19	-0.12		
Bwt:NLW	E(I)	-0.13	0.03	-0.18	-0.08		
Bwt:NLW	G(Ia)	-0.20	0.04	-0.28	-0.12		
Bwt:NLW	P(I)	-0.15	0.02	-0.18	-0.12		
Bwt:Fnpua	E(I)	-0.28	0.03	-0.33	-0.22		
Bwt:Fnpua	G(Ia)	-0.07	0.04	-0.15	0.01		
Bwt:Fnpua	P(I)	-0.22	0.02	-0.25	-0.18		
Bwt:Fnsua	E(I)	-0.22	0.03	-0.28	-0.16		
Bwt:Fnsua	G(Ia)	-0.22	0.04	-0.29	-0.15		
Bwt:Fnsua	P(I)	-0.22	0.02	-0.25	-0.19		
Bwt:Fnpt	E(I)	0.12	0.03	0.06	0.18		
Bwt:Fnpt	G(Ia)	0.41	0.04	0.33	0.48		
Bwt:Fnpt	P(I)	0.21	0.02	0.18	0.24		
Bwt:Fnst	E(I)	0.20	0.03	0.14	0.26		
Bwt:Fnst	G(Ia)	0.25	0.03	0.18	0.32		
Bwt:Fnst	P(I)	0.22	0.02	0.19	0.25		
WrN:Stal	E(I)	-0.12	0.03	-0.18	-0.06		
WrN:Stal	G(Ia)	-0.21	0.03	-0.27	-0.15		
WrN:Stal	P(I)	-0.15	0.02	-0.18	-0.12		
WrN:Diam	E(I)	0.17	0.03	0.11	0.24		
WrN:Diam	G(Ia)	0.22	0.03	0.17	0.27		
WrN:Diam	P(I)	0.19	0.02	0.16	0.23		
WrN:Bwt	E(I)	0.24	0.03	0.18	0.30		
WrN:Bwt	G(Ia)	-0.34	0.03	-0.40	-0.28		
WrN:Bwt	P(I)	0.02	0.02	-0.01	0.05		
WrN:WrN	E(I)	1.00	0.00	1.00	1.00		
WrN:WrN	G(Ia)	1.00	0.00	1.00	1.00		
WrN:WrN	P(I)	1.00	0.00	1.00	1.00		
WrN:WrB	E(I)	0.52	0.02	0.48	0.57		
WrN:WrB	G(Ia)	0.95	0.02	0.92	0.98		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrN:WrB	P(I)	0.69	0.01	0.67	0.71		
WrN:WrT	E(I)	0.85	0.01	0.83	0.87		
WrN:WrT	G(Ia)	0.99	0.01	0.97	1.00		
WrN:WrT	P(I)	0.91	0.01	0.90	0.92		
WrN:Face	E(I)	-0.14	0.05	-0.23	-0.04		
WrN:Face	G(Ia)	0.25	0.02	0.21	0.29		
WrN:Face	P(I)	0.08	0.02	0.04	0.11		
WrN:Gfw	E(I)	0.30	0.03	0.24	0.36		
WrN:Gfw	G(Ia)	0.36	0.03	0.30	0.41		
WrN:Gfw	P(I)	0.32	0.02	0.29	0.35		
WrN:Yld	E(I)	-0.19	0.03	-0.25	-0.12		
WrN:Yld	G(Ia)	-0.31	0.02	-0.36	-0.27		
WrN:Yld	P(I)	-0.24	0.02	-0.27	-0.21		
WrN:Cww	E(I)	0.21	0.03	0.15	0.27		
WrN:Cww	G(Ia)	0.20	0.03	0.14	0.26		
WrN:Cww	P(I)	0.21	0.02	0.18	0.24		
WrN:Staladj	E(I)	-0.14	0.03	-0.20	-0.08		
WrN:Staladj	G(Ia)	-0.19	0.03	-0.25	-0.13		
WrN:Staladj	P(I)	-0.16	0.02	-0.19	-0.13		
WrN:Gfwadj	E(I)	0.28	0.03	0.22	0.34		
WrN:Gfwadj	G(Ia)	0.37	0.03	0.32	0.43		
WrN:Gfwadj	P(I)	0.32	0.02	0.29	0.35		
WrN:Cwwadj	E(I)	0.20	0.03	0.14	0.26		
WrN:Cwwadj	G(Ia)	0.22	0.03	0.16	0.28		
WrN:Cwwadj	P(I)	0.21	0.02	0.18	0.24		
WrN:Crimp	E(I)	-0.06	0.11	-0.27	0.15		
WrN:Crimp	G(Ia)	0.32	0.03	0.26	0.39		
WrN:Crimp	P(I)	0.15	0.02	0.11	0.19		
WrN:Crwvl	E(I)	-0.05	0.05	-0.15	0.04		
WrN:Crwvl	G(Ia)	-0.34	0.04	-0.42	-0.27		
WrN:Crwvl	P(I)	-0.17	0.02	-0.21	-0.13		
WrN:Crst	E(I)	-0.15	0.06	-0.26	-0.04		
WrN:Crst	G(Ia)	0.32	0.04	0.24	0.39		
WrN:Crst	P(I)	0.06	0.02	0.02	0.10		
WrN:Crstadj	E(I)	-0.12	0.05	-0.23	-0.02		
WrN:Crstadj	G(Ia)	0.29	0.04	0.21	0.37		
WrN:Crstadj	P(I)	0.06	0.02	0.02	0.10		
WrN:Crwvt	E(I)	0.06	0.04	-0.02	0.15		
WrN:Crwvt	G(Ia)	-0.32	0.05	-0.41	-0.23		
WrN:Crwvt	P(I)	-0.08	0.02	-0.12	-0.04		
WrN:Dp	E(I)	0.37	0.08	0.21	0.53		
WrN:Dp	G(Ia)	-0.21	0.05	-0.31	-0.10		
WrN:Dp	P(I)	0.07	0.03	0.01	0.13		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrN:Ds	E(I)	-0.07	0.08	-0.22	0.08		
WrN:Ds	G(Ia)	0.47	0.06	0.36	0.59		
WrN:Ds	P(I)	0.17	0.03	0.11	0.23		
WrN:Dps	E(I)	-0.04	0.07	-0.19	0.10		
WrN:Dps	G(Ia)	0.45	0.06	0.33	0.57		
WrN:Dps	P(I)	0.17	0.03	0.11	0.23		
WrN:DpovDs	E(I)	0.60	0.13	0.34	0.86		
WrN:DpovDs	G(Ia)	-0.38	0.04	-0.46	-0.29		
WrN:DpovDs	P(I)	-0.04	0.03	-0.10	0.02		
WrN:CVDp	E(I)	0.22	0.07	0.09	0.36		
WrN:CVDp	G(Ia)	-0.01	0.07	-0.15	0.13		
WrN:CVDp	P(I)	0.12	0.03	0.06	0.19		
WrN:CVDs	E(I)	0.21	0.07	0.08	0.35		
WrN:CVDs	G(Ia)	-0.24	0.07	-0.38	-0.09		
WrN:CVDs	P(I)	0.04	0.03	-0.03	0.10		
WrN:MaxDp	E(I)	0.37	0.08	0.21	0.53		
WrN:MaxDp	G(Ia)	-0.15	0.06	-0.26	-0.04		
WrN:MaxDp	P(I)	0.11	0.03	0.05	0.17		
WrN:MinDp	E(I)	-0.01	0.06	-0.13	0.11		
WrN:MinDp	G(Ia)	0.41	0.16	0.10	0.72		
WrN:MinDp	P(I)	0.07	0.03	0.01	0.13		
WrN:MaxDs	E(I)	0.11	0.06	-0.01	0.24		
WrN:MaxDs	G(Ia)	0.29	0.08	0.12	0.45		
WrN:MaxDs	P(I)	0.16	0.03	0.10	0.22		
WrN:MinDs	E(I)	0.07	0.06	-0.05	0.18		
WrN:MinDs	G(Ia)	0.27	0.17	-0.06	0.60		
WrN:MinDs	P(I)	0.09	0.03	0.03	0.16		
WrN:SDDp	E(I)	0.39	0.08	0.23	0.54		
WrN:SDDp	G(Ia)	-0.11	0.06	-0.22	-0.00		
WrN:SDDp	P(I)	0.14	0.03	0.08	0.20		
WrN:SDDs	E(I)	0.19	0.07	0.04	0.33		
WrN:SDDs	G(Ia)	0.08	0.06	-0.04	0.19		
WrN:SDDs	P(I)	0.14	0.03	0.08	0.20		
WrN:SDD	E(I)	0.23	0.07	0.09	0.38		
WrN:SDD	G(Ia)	0.05	0.06	-0.06	0.16		
WrN:SDD	P(I)	0.15	0.03	0.08	0.21		
WrN:CVD	E(I)	0.25	0.07	0.11	0.38		
WrN:CVD	G(Ia)	-0.25	0.07	-0.39	-0.11		
WrN:CVD	P(I)	0.05	0.03	-0.02	0.11		
WrN:Gt30Dp	E(I)	0.27	0.08	0.11	0.42		
WrN:Gt30Dp	G(Ia)	-0.12	0.06	-0.23	-0.01		
WrN:Gt30Dp	P(I)	0.08	0.03	0.01	0.14		
WrN:Gt30Ds	E(I)	0.08	0.07	-0.05	0.21		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrN:Gt30Ds	G(Ia)	0.21	0.07	0.07	0.35		
WrN:Gt30Ds	P(I)	0.13	0.03	0.06	0.19		
WrN:Gt30D	E(I)	0.13	0.07	-0.01	0.26		
WrN:Gt30D	G(Ia)	0.13	0.07	-0.00	0.27		
WrN:Gt30D	P(I)	0.13	0.03	0.06	0.19		
WrN:Fnua	E(I)	0.03	0.03	-0.03	0.10		
WrN:Fnua	G(Ia)	-0.09	0.04	-0.17	-0.02		
WrN:Fnua	P(I)	-0.01	0.02	-0.04	0.03		
WrN:Fr	E(I)	0.05	0.03	-0.02	0.11		
WrN:Fr	G(Ia)	0.35	0.04	0.28	0.42		
WrN:Fr	P(I)	0.15	0.02	0.11	0.18		
WrN:Fnt	E(I)	0.14	0.03	0.08	0.20		
WrN:Fnt	G(Ia)	-0.29	0.04	-0.36	-0.22		
WrN:Fnt	P(I)	-0.01	0.02	-0.04	0.03		
WrN:Sarea	E(I)	0.25	0.03	0.19	0.32		
WrN:Sarea	G(Ia)	-0.38	0.03	-0.45	-0.31		
WrN:Sarea	P(I)	0.02	0.02	-0.01	0.06		
WrN:Fd	E(I)	0.16	0.03	0.09	0.22		
WrN:Fd	G(Ia)	0.19	0.05	0.09	0.29		
WrN:Fd	P(I)	0.16	0.02	0.12	0.20		
WrN:Fc	E(I)	0.17	0.04	0.08	0.25		
WrN:Fc	G(Ia)	0.61	0.02	0.56	0.66		
WrN:Fc	P(I)	0.38	0.02	0.34	0.41		
WrN:Fu	E(I)	0.22	0.03	0.15	0.28		
WrN:Fu	G(Ia)	0.63	0.03	0.56	0.69		
WrN:Fu	P(I)	0.37	0.02	0.33	0.40		
WrN:Colour	E(I)	0.08	0.03	0.02	0.13		
WrN:Colour	G(Ia)	-0.08	0.04	-0.16	0.01		
WrN:Colour	P(I)	0.03	0.02	-0.00	0.07		
WrN:Fly	E(I)	0.04	0.03	-0.02	0.09		
WrN:Fly	G(Ia)	-0.02	0.06	-0.15	0.10		
WrN:Fly	P(I)	0.02	0.02	-0.01	0.06		
WrN:Flcrot	E(I)	0.04	0.03	-0.02	0.09		
WrN:Flcrot	G(Ia)	-0.30	0.11	-0.52	-0.08		
WrN:Flcrot	P(I)	-0.01	0.02	-0.04	0.03		
WrN:Bactst	E(I)	-0.01	0.04	-0.08	0.06		
WrN:Bactst	G(Ia)	-0.19	0.10	-0.39	0.00		
WrN:Bactst	P(I)	-0.04	0.02	-0.08	0.00		
WrN:MycD	E(I)	-0.08	0.04	-0.15	-0.01		
WrN:MycD	G(Ia)	0.33	0.12	0.10	0.56		
WrN:MycD	P(I)	-0.01	0.02	-0.05	0.03		
WrN:Bcts	E(I)	0.49	0.06	0.36	0.61		
WrN:Bcts	G(Ia)	-0.20	0.02	-0.25	-0.16		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrN:Bcts	P(I)	0.05	0.02	0.01	0.08		
WrN:Bctb	E(I)	0.44	0.06	0.33	0.56		
WrN:Bctb	G(Ia)	-0.19	0.02	-0.23	-0.14		
WrN:Bctb	P(I)	0.05	0.02	0.02	0.09		
WrN:Weanwt	E(I)	0.13	0.03	0.07	0.20		
WrN:Weanwt	G(Ia)	-0.20	0.04	-0.28	-0.13		
WrN:Weanwt	P(I)	0.02	0.02	-0.01	0.06		
WrN:NLB	E(I)	-0.18	0.03	-0.24	-0.13		
WrN:NLB	G(Ia)	0.10	0.04	0.02	0.18		
WrN:NLB	P(I)	-0.10	0.02	-0.13	-0.07		
WrN:NLW	E(I)	-0.16	0.03	-0.21	-0.10		
WrN:NLW	G(Ia)	0.01	0.04	-0.06	0.09		
WrN:NLW	P(I)	-0.10	0.02	-0.14	-0.07		
WrN:Fnpua	E(I)	-0.03	0.03	-0.08	0.03		
WrN:Fnpua	G(Ia)	-0.42	0.04	-0.50	-0.33		
WrN:Fnpua	P(I)	-0.14	0.02	-0.17	-0.10		
WrN:Fnsua	E(I)	0.04	0.03	-0.02	0.10		
WrN:Fnsua	G(Ia)	-0.08	0.04	-0.15	-0.00		
WrN:Fnsua	P(I)	-0.00	0.02	-0.03	0.03		
WrN:Fnpt	E(I)	0.07	0.03	0.01	0.13		
WrN:Fnpt	G(Ia)	-0.58	0.04	-0.66	-0.50		
WrN:Fnpt	P(I)	-0.13	0.02	-0.16	-0.10		
WrN:Fnst	E(I)	0.14	0.03	0.08	0.20		
WrN:Fnst	G(Ia)	-0.27	0.04	-0.34	-0.20		
WrN:Fnst	P(I)	0.00	0.02	-0.03	0.04		
WrB:Stal	E(I)	-0.09	0.03	-0.15	-0.03		
WrB:Stal	G(Ia)	-0.24	0.03	-0.30	-0.19		
WrB:Stal	P(I)	-0.15	0.02	-0.18	-0.11		
WrB:Diam	E(I)	0.20	0.03	0.13	0.26		
WrB:Diam	G(Ia)	0.15	0.03	0.10	0.20		
WrB:Diam	P(I)	0.18	0.02	0.15	0.21		
WrB:Bwt	E(I)	0.27	0.03	0.21	0.33		
WrB:Bwt	G(Ia)	-0.35	0.03	-0.41	-0.29		
WrB:Bwt	P(I)	0.04	0.02	0.01	0.07		
WrB:WrN	E(I)	0.52	0.02	0.48	0.57		
WrB:WrN	G(Ia)	0.95	0.02	0.92	0.98		
WrB:WrN	P(I)	0.69	0.01	0.67	0.71		
WrB:WrB	E(I)	1.00	0.00	1.00	1.00		
WrB:WrB	G(Ia)	1.00	0.00	1.00	1.00		
WrB:WrB	P(I)	1.00	0.00	1.00	1.00		
WrB:WrT	E(I)	0.85	0.01	0.83	0.88		
WrB:WrT	G(Ia)	0.99	0.01	0.97	1.00		
WrB:WrT	P(I)	0.91	0.01	0.90	0.92		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrB:Face	E(I)	-0.17	0.05	-0.26	-0.08		
WrB:Face	G(Ia)	0.23	0.02	0.19	0.27		
WrB:Face	P(I)	0.05	0.02	0.02	0.08		
WrB:Gfw	E(I)	0.35	0.03	0.29	0.40		
WrB:Gfw	G(Ia)	0.30	0.03	0.24	0.35		
WrB:Gfw	P(I)	0.33	0.01	0.30	0.36		
WrB:Yld	E(I)	-0.19	0.03	-0.26	-0.13		
WrB:Yld	G(Ia)	-0.38	0.02	-0.42	-0.33		
WrB:Yld	P(I)	-0.27	0.02	-0.30	-0.24		
WrB:Cww	E(I)	0.25	0.03	0.20	0.31		
WrB:Cww	G(Ia)	0.11	0.03	0.05	0.17		
WrB:Cww	P(I)	0.20	0.02	0.17	0.23		
WrB:Staladj	E(I)	-0.12	0.03	-0.18	-0.06		
WrB:Staladj	G(Ia)	-0.20	0.03	-0.26	-0.14		
WrB:Staladj	P(I)	-0.15	0.02	-0.18	-0.12		
WrB:Gfwadj	E(I)	0.32	0.03	0.26	0.37		
WrB:Gfwadj	G(Ia)	0.33	0.03	0.27	0.38		
WrB:Gfwadj	P(I)	0.32	0.02	0.29	0.35		
WrB:Cwwadj	E(I)	0.23	0.03	0.17	0.29		
WrB:Cwwadj	G(Ia)	0.14	0.03	0.08	0.20		
WrB:Cwwadj	P(I)	0.20	0.02	0.17	0.23		
WrB:Crimp	E(I)	-0.29	0.12	-0.52	-0.06		
WrB:Crimp	G(Ia)	0.54	0.03	0.48	0.60		
WrB:Crimp	P(I)	0.23	0.02	0.19	0.27		
WrB:Crwvl	E(I)	0.23	0.05	0.12	0.33		
WrB:Crwvl	G(Ia)	-0.57	0.04	-0.64	-0.50		
WrB:Crwvl	P(I)	-0.14	0.02	-0.18	-0.10		
WrB:Crst	E(I)	-0.30	0.06	-0.42	-0.19		
WrB:Crst	G(Ia)	0.51	0.04	0.43	0.58		
WrB:Crst	P(I)	0.09	0.02	0.05	0.14		
WrB:Crstadj	E(I)	-0.28	0.05	-0.38	-0.17		
WrB:Crstadj	G(Ia)	0.49	0.04	0.41	0.57		
WrB:Crstadj	P(I)	0.08	0.02	0.04	0.13		
WrB:Crwvt	E(I)	0.25	0.05	0.16	0.34		
WrB:Crwvt	G(Ia)	-0.51	0.04	-0.59	-0.43		
WrB:Crwvt	P(I)	-0.06	0.02	-0.10	-0.02		
WrB:Dp	E(I)	0.28	0.08	0.13	0.42		
WrB:Dp	G(Ia)	-0.05	0.06	-0.17	0.07		
WrB:Dp	P(I)	0.12	0.03	0.06	0.18		
WrB:Ds	E(I)	0.06	0.07	-0.07	0.20		
WrB:Ds	G(Ia)	0.43	0.07	0.30	0.55		
WrB:Ds	P(I)	0.21	0.03	0.15	0.27		
WrB:Dps	E(I)	0.08	0.07	-0.06	0.21		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
WrB:Dps	G(Ia)	0.42	0.07	0.29	0.55	
WrB:Dps	P(I)	0.21	0.03	0.15	0.27	
WrB:DpovDs	E(I)	0.33	0.12	0.10	0.55	
WrB:DpovDs	G(Ia)	-0.23	0.05	-0.32	-0.13	
WrB:DpovDs	P(I)	-0.01	0.03	-0.08	0.05	
WrB:CVDp	E(I)	0.25	0.06	0.13	0.38	
WrB:CVDp	G(Ia)	-0.06	0.08	-0.21	0.09	
WrB:CVDp	P(I)	0.14	0.03	0.07	0.20	
WrB:CVDs	E(I)	0.25	0.06	0.12	0.37	
WrB:CVDs	G(Ia)	-0.38	0.09	-0.55	-0.21	
WrB:CVDs	P(I)	0.03	0.03	-0.03	0.10	
WrB:MaxDp	E(I)	0.32	0.07	0.17	0.46	
WrB:MaxDp	G(Ia)	-0.06	0.06	-0.18	0.06	
WrB:MaxDp	P(I)	0.15	0.03	0.08	0.21	
WrB:MinDp	E(I)	0.04	0.06	-0.07	0.15	
WrB:MinDp	G(Ia)	0.55	0.18	0.19	0.90	
WrB:MinDp	P(I)	0.13	0.03	0.06	0.19	
WrB:MaxDs	E(I)	0.20	0.06	0.08	0.31	
WrB:MaxDs	G(Ia)	0.22	0.09	0.04	0.40	
WrB:MaxDs	P(I)	0.20	0.03	0.14	0.26	
WrB:MinDs	E(I)	-0.09	0.06	-0.20	0.02	
WrB:MinDs	G(Ia)	0.60	0.23	0.15	1.05	
WrB:MinDs	P(I)	0.03	0.03	-0.04	0.09	
WrB:SDDp	E(I)	0.36	0.07	0.22	0.51	
WrB:SDDp	G(Ia)	-0.12	0.06	-0.24	0.01	
WrB:SDDp	P(I)	0.15	0.03	0.08	0.21	
WrB:SDDs	E(I)	0.30	0.07	0.17	0.44	
WrB:SDDs	G(Ia)	-0.07	0.07	-0.20	0.07	
WrB:SDDs	P(I)	0.15	0.03	0.09	0.21	
WrB:SDD	E(I)	0.34	0.07	0.21	0.48	
WrB:SDD	G(Ia)	-0.09	0.07	-0.22	0.05	
WrB:SDD	P(I)	0.16	0.03	0.10	0.23	
WrB:CVD	E(I)	0.28	0.07	0.15	0.41	
WrB:CVD	G(Ia)	-0.38	0.08	-0.54	-0.22	
WrB:CVD	P(I)	0.04	0.03	-0.02	0.11	
WrB:Gt30Dp	E(I)	0.23	0.07	0.09	0.38	
WrB:Gt30Dp	G(Ia)	-0.07	0.06	-0.19	0.05	
WrB:Gt30Dp	P(I)	0.10	0.03	0.03	0.16	
WrB:Gt30Ds	E(I)	0.20	0.06	0.08	0.32	
WrB:Gt30Ds	G(Ia)	0.15	0.08	-0.00	0.31	
WrB:Gt30Ds	P(I)	0.18	0.03	0.12	0.24	
WrB:Gt30D	E(I)	0.22	0.06	0.10	0.34	
WrB:Gt30D	G(Ia)	0.09	0.08	-0.06	0.24	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrB:Gt30D	P(I)	0.17	0.03	0.11	0.24		
WrB:Fnua	E(I)	0.07	0.03	0.00	0.13		
WrB:Fnua	G(Ia)	-0.14	0.04	-0.21	-0.07		
WrB:Fnua	P(I)	-0.00	0.02	-0.04	0.03		
WrB:Fr	E(I)	0.13	0.03	0.07	0.19		
WrB:Fr	G(Ia)	0.20	0.03	0.13	0.27		
WrB:Fr	P(I)	0.16	0.02	0.12	0.19		
WrB:Fnt	E(I)	0.18	0.03	0.12	0.24		
WrB:Fnt	G(Ia)	-0.34	0.04	-0.41	-0.26		
WrB:Fnt	P(I)	0.00	0.02	-0.03	0.04		
WrB:Sarea	E(I)	0.28	0.03	0.21	0.35		
WrB:Sarea	G(Ia)	-0.39	0.03	-0.46	-0.33		
WrB:Sarea	P(I)	0.03	0.02	-0.00	0.06		
WrB:Fd	E(I)	0.22	0.03	0.15	0.28		
WrB:Fd	G(Ia)	0.13	0.05	0.04	0.23		
WrB:Fd	P(I)	0.19	0.02	0.15	0.22		
WrB:Fc	E(I)	0.10	0.05	0.01	0.19		
WrB:Fc	G(Ia)	0.73	0.02	0.68	0.77		
WrB:Fc	P(I)	0.42	0.02	0.38	0.45		
WrB:Fu	E(I)	0.19	0.04	0.12	0.26		
WrB:Fu	G(Ia)	0.70	0.03	0.64	0.76		
WrB:Fu	P(I)	0.39	0.02	0.36	0.42		
WrB:Colour	E(I)	0.07	0.03	0.01	0.13		
WrB:Colour	G(Ia)	-0.09	0.04	-0.18	-0.01		
WrB:Colour	P(I)	0.02	0.02	-0.01	0.06		
WrB:Fly	E(I)	0.02	0.03	-0.04	0.07		
WrB:Fly	G(Ia)	0.10	0.06	-0.02	0.23		
WrB:Fly	P(I)	0.03	0.02	-0.00	0.07		
WrB:Flcrot	E(I)	0.03	0.03	-0.02	0.09		
WrB:Flcrot	G(Ia)	-0.25	0.11	-0.46	-0.03		
WrB:Flcrot	P(I)	-0.00	0.02	-0.04	0.03		
WrB:Bactst	E(I)	-0.02	0.03	-0.09	0.05		
WrB:Bactst	G(Ia)	-0.13	0.10	-0.33	0.08		
WrB:Bactst	P(I)	-0.03	0.02	-0.07	0.01		
WrB:MycD	E(I)	-0.09	0.03	-0.16	-0.02		
WrB:MycD	G(Ia)	0.41	0.13	0.16	0.66		
WrB:MycD	P(I)	-0.01	0.02	-0.05	0.03		
WrB:Bcts	E(I)	0.44	0.06	0.32	0.56		
WrB:Bcts	G(Ia)	-0.21	0.02	-0.26	-0.17		
WrB:Bcts	P(I)	0.04	0.02	0.00	0.07		
WrB:Bctb	E(I)	0.44	0.06	0.33	0.55		
WrB:Bctb	G(Ia)	-0.23	0.02	-0.28	-0.19		
WrB:Bctb	P(I)	0.04	0.02	0.01	0.08		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrB:Weanwt	E(I)	0.10	0.03	0.04	0.16		
WrB:Weanwt	G(Ia)	-0.11	0.04	-0.19	-0.02		
WrB:Weanwt	P(I)	0.03	0.02	-0.00	0.07		
WrB:NLB	E(I)	-0.24	0.03	-0.29	-0.18		
WrB:NLB	G(Ia)	0.17	0.04	0.09	0.25		
WrB:NLB	P(I)	-0.12	0.02	-0.15	-0.09		
WrB:NLW	E(I)	-0.18	0.03	-0.24	-0.13		
WrB:NLW	G(Ia)	0.02	0.04	-0.06	0.10		
WrB:NLW	P(I)	-0.12	0.02	-0.15	-0.09		
WrB:Fnpua	E(I)	-0.06	0.03	-0.12	0.00		
WrB:Fnpua	G(Ia)	-0.30	0.04	-0.38	-0.22		
WrB:Fnpua	P(I)	-0.13	0.02	-0.16	-0.09		
WrB:Fnsua	E(I)	0.07	0.03	0.01	0.13		
WrB:Fnsua	G(Ia)	-0.13	0.04	-0.20	-0.06		
WrB:Fnsua	P(I)	0.00	0.02	-0.03	0.04		
WrB:Fnpt	E(I)	0.05	0.03	-0.01	0.11		
WrB:Fnpt	G(Ia)	-0.48	0.04	-0.56	-0.40		
WrB:Fnpt	P(I)	-0.12	0.02	-0.15	-0.08		
WrB:Fnst	E(I)	0.18	0.03	0.12	0.24		
WrB:Fnst	G(Ia)	-0.32	0.04	-0.39	-0.25		
WrB:Fnst	P(I)	0.01	0.02	-0.03	0.04		
WrT:Stal	E(I)	-0.11	0.03	-0.17	-0.05		
WrT:Stal	G(Ia)	-0.22	0.03	-0.28	-0.17		
WrT:Stal	P(I)	-0.16	0.02	-0.19	-0.12		
WrT:Diam	E(I)	0.21	0.03	0.15	0.28		
WrT:Diam	G(Ia)	0.19	0.02	0.15	0.24		
WrT:Diam	P(I)	0.20	0.02	0.17	0.23		
WrT:Bwt	E(I)	0.29	0.03	0.23	0.35		
WrT:Bwt	G(Ia)	-0.35	0.03	-0.41	-0.29		
WrT:Bwt	P(I)	0.03	0.02	0.00	0.07		
WrT:WrN	E(I)	0.85	0.01	0.83	0.87		
WrT:WrN	G(Ia)	0.99	0.01	0.97	1.00		
WrT:WrN	P(I)	0.91	0.01	0.90	0.92		
WrT:WrB	E(I)	0.85	0.01	0.83	0.88		
WrT:WrB	G(Ia)	0.99	0.01	0.97	1.00		
WrT:WrB	P(I)	0.91	0.01	0.90	0.92		
WrT:WrT	E(I)	1.00	0.00	1.00	1.00		
WrT:WrT	G(Ia)	1.00	0.00	1.00	1.00		
WrT:WrT	P(I)	1.00	0.00	1.00	1.00		
WrT:Face	E(I)	-0.18	0.05	-0.28	-0.08		
WrT:Face	G(Ia)	0.25	0.02	0.21	0.29		
WrT:Face	P(I)	0.07	0.02	0.04	0.10		
WrT:Gfw	E(I)	0.37	0.03	0.31	0.43		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
WrT:Gfw	G(Ia)	0.33	0.03	0.28	0.38	
WrT:Gfw	P(I)	0.35	0.01	0.32	0.38	
WrT:Yld	E(I)	-0.20	0.03	-0.26	-0.13	
WrT:Yld	G(Ia)	-0.36	0.02	-0.40	-0.31	
WrT:Yld	P(I)	-0.27	0.02	-0.30	-0.24	
WrT:Cww	E(I)	0.27	0.03	0.21	0.33	
WrT:Cww	G(Ia)	0.15	0.03	0.10	0.21	
WrT:Cww	P(I)	0.22	0.02	0.19	0.26	
WrT:Staladj	E(I)	-0.14	0.03	-0.20	-0.08	
WrT:Staladj	G(Ia)	-0.19	0.03	-0.24	-0.14	
WrT:Staladj	P(I)	-0.16	0.02	-0.19	-0.13	
WrT:Gfwadj	E(I)	0.34	0.03	0.28	0.40	
WrT:Gfwadj	G(Ia)	0.36	0.03	0.30	0.41	
WrT:Gfwadj	P(I)	0.34	0.01	0.32	0.37	
WrT:Cwwadj	E(I)	0.25	0.03	0.19	0.31	
WrT:Cwwadj	G(Ia)	0.18	0.03	0.12	0.24	
WrT:Cwwadj	P(I)	0.22	0.02	0.19	0.25	
WrT:Crimp	E(I)	-0.23	0.12	-0.46	-0.00	
WrT:Crimp	G(Ia)	0.46	0.03	0.40	0.51	
WrT:Crimp	P(I)	0.20	0.02	0.17	0.24	
WrT:Crwvl	E(I)	0.13	0.05	0.02	0.23	
WrT:Crwvl	G(Ia)	-0.49	0.04	-0.56	-0.42	
WrT:Crwvl	P(I)	-0.16	0.02	-0.20	-0.12	
WrT:Crst	E(I)	-0.27	0.06	-0.39	-0.15	
WrT:Crst	G(Ia)	0.44	0.04	0.37	0.51	
WrT:Crst	P(I)	0.09	0.02	0.05	0.13	
WrT:Crstadj	E(I)	-0.24	0.06	-0.35	-0.13	
WrT:Crstadj	G(Ia)	0.42	0.04	0.35	0.50	
WrT:Crstadj	P(I)	0.08	0.02	0.04	0.12	
WrT:Crwvt	E(I)	0.20	0.05	0.10	0.29	
WrT:Crwvt	G(Ia)	-0.45	0.04	-0.53	-0.37	
WrT:Crwvt	P(I)	-0.07	0.02	-0.11	-0.03	
WrT:Dp	E(I)	0.37	0.08	0.21	0.53	
WrT:Dp	G(Ia)	-0.14	0.05	-0.25	-0.03	
WrT:Dp	P(I)	0.11	0.03	0.04	0.17	
WrT:Ds	E(I)	-0.00	0.20	-0.39	0.39	
WrT:Ds	G(Ia)	0.47	0.06	0.36	0.59	
WrT:Ds	P(I)	0.21	0.03	0.15	0.27	
WrT:Dps	E(I)	0.02	0.07	-0.12	0.16	
WrT:Dps	G(Ia)	0.46	0.06	0.34	0.58	
WrT:Dps	P(I)	0.21	0.03	0.15	0.27	
WrT:DpovDs	E(I)	0.53	0.13	0.27	0.78	
WrT:DpovDs	G(Ia)	-0.32	0.04	-0.41	-0.24	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrT:DpovDs	P(I)	-0.03	0.03	-0.09	0.03		
WrT:CVDp	E(I)	0.27	0.07	0.14	0.41		
WrT:CVDp	G(Ia)	-0.04	0.07	-0.17	0.10		
WrT:CVDp	P(I)	0.14	0.03	0.08	0.21		
WrT:CVDs	E(I)	0.26	0.07	0.13	0.40		
WrT:CVDs	G(Ia)	-0.32	0.08	-0.47	-0.17		
WrT:CVDs	P(I)	0.04	0.03	-0.03	0.10		
WrT:MaxDp	E(I)	0.39	0.08	0.24	0.55		
WrT:MaxDp	G(Ia)	-0.11	0.06	-0.22	-0.00		
WrT:MaxDp	P(I)	0.14	0.03	0.08	0.20		
WrT:MinDp	E(I)	0.02	0.06	-0.10	0.14		
WrT:MinDp	G(Ia)	0.50	0.17	0.18	0.83		
WrT:MinDp	P(I)	0.11	0.03	0.04	0.17		
WrT:MaxDs	E(I)	0.18	0.06	0.05	0.30		
WrT:MaxDs	G(Ia)	0.27	0.08	0.10	0.43		
WrT:MaxDs	P(I)	0.20	0.03	0.14	0.26		
WrT:MinDs	E(I)	-0.01	0.06	-0.14	0.11		
WrT:MinDs	G(Ia)	0.45	0.19	0.07	0.82		
WrT:MinDs	P(I)	0.07	0.03	0.00	0.13		
WrT:SDDp	E(I)	0.43	0.08	0.28	0.58		
WrT:SDDp	G(Ia)	-0.12	0.06	-0.23	-0.01		
WrT:SDDp	P(I)	0.16	0.03	0.09	0.22		
WrT:SDDs	E(I)	0.28	0.07	0.14	0.43		
WrT:SDDs	G(Ia)	0.01	0.06	-0.10	0.12		
WrT:SDDs	P(I)	0.16	0.03	0.10	0.22		
WrT:SDD	E(I)	0.33	0.07	0.19	0.48		
WrT:SDD	G(Ia)	-0.02	0.06	-0.14	0.11		
WrT:SDD	P(I)	0.17	0.03	0.11	0.23		
WrT:CVD	E(I)	0.30	0.07	0.16	0.44		
WrT:CVD	G(Ia)	-0.33	0.07	-0.47	-0.18		
WrT:CVD	P(I)	0.05	0.03	-0.01	0.11		
WrT:Gt30Dp	E(I)	0.28	0.08	0.13	0.44		
WrT:Gt30Dp	G(Ia)	-0.10	0.06	-0.21	0.01		
WrT:Gt30Dp	P(I)	0.09	0.03	0.03	0.16		
WrT:Gt30Ds	E(I)	0.16	0.07	0.03	0.29		
WrT:Gt30Ds	G(Ia)	0.19	0.07	0.05	0.33		
WrT:Gt30Ds	P(I)	0.17	0.03	0.11	0.23		
WrT:Gt30D	E(I)	0.20	0.07	0.07	0.33		
WrT:Gt30D	G(Ia)	0.12	0.07	-0.02	0.26		
WrT:Gt30D	P(I)	0.17	0.03	0.10	0.23		
WrT:Fnua	E(I)	0.06	0.03	-0.00	0.13		
WrT:Fnua	G(Ia)	-0.13	0.03	-0.20	-0.07		
WrT:Fnua	P(I)	-0.01	0.02	-0.04	0.03		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
WrT:Fr	E(I)	0.10	0.03	0.04	0.17	
WrT:Fr	G(Ia)	0.27	0.03	0.20	0.33	
WrT:Fr	P(I)	0.16	0.02	0.13	0.19	
WrT:Fnt	E(I)	0.19	0.03	0.12	0.25	
WrT:Fnt	G(Ia)	-0.33	0.03	-0.40	-0.27	
WrT:Fnt	P(I)	-0.00	0.02	-0.04	0.03	
WrT:Sarea	E(I)	0.30	0.03	0.23	0.37	
WrT:Sarea	G(Ia)	-0.39	0.03	-0.46	-0.33	
WrT:Sarea	P(I)	0.03	0.02	-0.00	0.06	
WrT:Fd	E(I)	0.22	0.03	0.16	0.29	
WrT:Fd	G(Ia)	0.16	0.05	0.07	0.25	
WrT:Fd	P(I)	0.20	0.02	0.16	0.23	
WrT:Fc	E(I)	0.12	0.05	0.03	0.22	
WrT:Fc	G(Ia)	0.69	0.02	0.65	0.74	
WrT:Fc	P(I)	0.42	0.02	0.39	0.45	
WrT:Fu	E(I)	0.21	0.04	0.14	0.28	
WrT:Fu	G(Ia)	0.68	0.03	0.63	0.74	
WrT:Fu	P(I)	0.40	0.02	0.36	0.43	
WrT:Colour	E(I)	0.08	0.03	0.02	0.14	
WrT:Colour	G(Ia)	-0.09	0.04	-0.17	-0.01	
WrT:Colour	P(I)	0.03	0.02	-0.00	0.06	
WrT:Fly	E(I)	0.03	0.03	-0.03	0.09	
WrT:Fly	G(Ia)	0.04	0.06	-0.07	0.16	
WrT:Fly	P(I)	0.03	0.02	-0.00	0.06	
WrT:Flcrot	E(I)	0.04	0.03	-0.01	0.10	
WrT:Flcrot	G(Ia)	-0.28	0.11	-0.48	-0.07	
WrT:Flcrot	P(I)	-0.01	0.02	-0.04	0.03	
WrT:Bactst	E(I)	-0.02	0.04	-0.09	0.05	
WrT:Bactst	G(Ia)	-0.16	0.10	-0.35	0.02	
WrT:Bactst	P(I)	-0.04	0.02	-0.08	0.00	
WrT:MycD	E(I)	-0.10	0.04	-0.17	-0.03	
WrT:MycD	G(Ia)	0.37	0.12	0.14	0.60	
WrT:MycD	P(I)	-0.01	0.02	-0.05	0.03	
WrT:Bcts	E(I)	0.51	0.07	0.38	0.64	
WrT:Bcts	G(Ia)	-0.19	0.02	-0.24	-0.15	
WrT:Bcts	P(I)	0.05	0.02	0.02	0.09	
WrT:Bctb	E(I)	0.50	0.06	0.38	0.61	
WrT:Bctb	G(Ia)	-0.20	0.02	-0.25	-0.16	
WrT:Bctb	P(I)	0.06	0.02	0.03	0.09	
WrT:Weanwt	E(I)	0.12	0.03	0.06	0.19	
WrT:Weanwt	G(Ia)	-0.15	0.04	-0.22	-0.07	
WrT:Weanwt	P(I)	0.03	0.02	-0.00	0.07	
WrT:NLB	E(I)	-0.23	0.03	-0.29	-0.18	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
WrT:NLB	G(Ia)	0.14	0.04	0.06	0.21		
WrT:NLB	P(I)	-0.12	0.02	-0.15	-0.08		
WrT:NLW	$\mid E(I) \mid$	-0.19	0.03	-0.25	-0.14		
WrT:NLW	G(Ia)	0.02	0.04	-0.05	0.09		
WrT:NLW	P(I)	-0.12	0.02	-0.15	-0.09		
WrT:Fnpua	$\mid E(I) \mid$	-0.04	0.03	-0.10	0.02		
WrT:Fnpua	G(Ia)	-0.37	0.04	-0.44	-0.29		
WrT:Fnpua	P(I)	-0.14	0.02	-0.17	-0.11		
WrT:Fnsua	$\mid E(I) \mid$	0.07	0.03	0.00	0.13		
WrT:Fnsua	G(Ia)	-0.12	0.03	-0.19	-0.05		
WrT:Fnsua	P(I)	0.00	0.02	-0.03	0.03		
WrT:Fnpt	E(I)	0.07	0.03	0.01	0.14		
WrT:Fnpt	G(Ia)	-0.54	0.04	-0.61	-0.47		
WrT:Fnpt	P(I)	-0.13	0.02	-0.16	-0.09		
WrT:Fnst	E(I)	0.19	0.03	0.12	0.25		
WrT:Fnst	G(Ia)	-0.32	0.04	-0.39	-0.25		
WrT:Fnst	P(I)	0.01	0.02	-0.03	0.04		
Face:Stal	E(I)	-0.02	0.04	-0.10	0.07		
Face:Stal	G(Ia)	-0.31	0.02	-0.35	-0.27		
Face:Stal	P(I)	-0.16	0.02	-0.19	-0.13		
Face:Diam	E(I)	-0.03	0.05	-0.12	0.07		
Face:Diam	G(Ia)	-0.12	0.02	-0.16	-0.08		
Face:Diam	P(I)	-0.08	0.02	-0.11	-0.05		
Face:Bwt	E(I)	-0.06	0.04	-0.14	0.03		
Face:Bwt	G(Ia)	-0.31	0.02	-0.36	-0.27		
Face:Bwt	P(I)	-0.18	0.02	-0.21	-0.15		
Face:WrN	E(I)	-0.14	0.05	-0.23	-0.04		
Face:WrN	G(Ia)	0.25	0.02	0.21	0.29		
Face:WrN	P(I)	0.08	0.02	0.04	0.11		
Face:WrB	$\mid E(I) \mid$	-0.17	0.05	-0.26	-0.08		
Face:WrB	G(Ia)	0.23	0.02	0.19	0.27		
Face:WrB	P(I)	0.05	0.02	0.02	0.08		
Face:WrT	E(I)	-0.18	0.05	-0.28	-0.08		
Face:WrT	G(Ia)	0.25	0.02	0.21	0.29		
Face:WrT	P(I)	0.07	0.02	0.04	0.10		
Face:Face	$\mid E(I) \mid$	1.00	0.00	1.00	1.00		
Face:Face	G(Ia)	1.00	0.00	1.00	1.00		
Face:Face	P(I)	1.00	0.00	1.00	1.00		
Face:Gfw	E(I)	-0.06	0.04	-0.15	0.03		
Face:Gfw	G(Ia)	-0.09	0.02	-0.14	-0.05		
Face:Gfw	P(I)	-0.07	0.02	-0.11	-0.04		
Face:Yld	E(I)	0.16	0.05	0.07	0.26		
Face:Yld	G(Ia)	-0.23	0.02	-0.27	-0.19		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Face:Yld	P(I)	-0.07	0.02	-0.10	-0.04		
Face:Cww	E(I)	0.01	0.05	-0.08	0.10		
Face:Cww	G(Ia)	-0.22	0.02	-0.26	-0.17		
Face:Cww	P(I)	-0.10	0.02	-0.13	-0.07		
Face:Staladj	E(I)	-0.09	0.04	-0.17	0.00		
Face:Staladj	G(Ia)	-0.25	0.02	-0.30	-0.21		
Face:Staladj	P(I)	-0.16	0.02	-0.20	-0.13		
Face:Gfwadj	E(I)	-0.10	0.04	-0.18	-0.01		
Face:Gfwadj	G(Ia)	-0.06	0.02	-0.10	-0.01		
Face:Gfwadj	P(I)	-0.07	0.02	-0.10	-0.04		
Face:Cwwadj	E(I)	-0.04	0.04	-0.12	0.05		
Face:Cwwadj	G(Ia)	-0.18	0.02	-0.22	-0.13		
Face:Cwwadj	P(I)	-0.10	0.02	-0.13	-0.07		
Face:Crimp	E(I)	-0.79	0.19	-1.15	-0.42		
Face:Crimp	G(Ia)	0.45	0.02	0.41	0.49		
Face:Crimp	P(I)	0.22	0.02	0.18	0.25		
Face:Crwvl	E(I)	0.57	0.08	0.42	0.72		
Face:Crwvl	G(Ia)	-0.41	0.02	-0.46	-0.36		
Face:Crwvl	P(I)	-0.05	0.02	-0.09	-0.02		
Face:Crst	E(I)	-0.51	0.08	-0.66	-0.35		
Face:Crst	G(Ia)	0.31	0.02	0.26	0.36		
Face:Crst	P(I)	0.04	0.02	0.00	0.08		
Face:Crstadj	E(I)	-0.48	0.07	-0.63	-0.34		
Face:Crstadj	G(Ia)	0.29	0.02	0.24	0.34		
Face:Crstadj	P(I)	0.02	0.02	-0.02	0.06		
Face:Crwvt	E(I)	0.47	0.06	0.35	0.60		
Face:Crwvt	G(Ia)	-0.27	0.03	-0.32	-0.21		
Face:Crwvt	P(I)	0.04	0.02	0.00	0.08		
Face:Dp	E(I)	-0.62	0.09	-0.80	-0.45		
Face:Dp	G(Ia)	0.53	0.04	0.45	0.60		
Face:Dp	P(I)	0.07	0.03	0.01	0.12		
Face:Ds	E(I)	-0.19	0.07	-0.33	-0.05		
Face:Ds	G(Ia)	-0.15	0.04	-0.23	-0.07		
Face:Ds	P(I)	-0.16	0.03	-0.22	-0.11		
Face:Dps	E(I)	-0.23	0.07	-0.37	-0.09		
Face:Dps	G(Ia)	-0.10	0.04	-0.19	-0.02		
Face:Dps	P(I)	-0.16	0.03	-0.21	-0.11		
Face:DpovDs	E(I)	-0.69	0.14	-0.98	-0.41		
Face:DpovDs	G(Ia)	0.52	0.03	0.46	0.57		
Face:DpovDs	P(I)	0.19	0.03	0.14	0.24		
Face:CVDp	E(I)	-0.44	0.08	-0.58	-0.29		
Face:CVDp	G(Ia)	0.56	0.05	0.46	0.67		
Face:CVDp	P(I)	0.06	0.03	0.01	0.11		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Face:CVDs	E(I)	-0.26	0.07	-0.40	-0.12	
Face:CVDs	G(Ia)	0.50	0.05	0.39	0.61	
Face:CVDs	P(I)	0.09	0.03	0.04	0.14	
Face:MaxDp	E(I)	-0.70	0.09	-0.88	-0.53	
Face:MaxDp	G(Ia)	0.58	0.04	0.49	0.66	
Face:MaxDp	P(I)	0.04	0.03	-0.01	0.10	
Face:MinDp	E(I)	-0.08	0.06	-0.20	0.04	
Face:MinDp	G(Ia)	0.18	0.11	-0.03	0.40	
Face:MinDp	P(I)	-0.00	0.03	-0.05	0.05	
Face:MaxDs	E(I)	-0.23	0.07	-0.36	-0.11	
Face:MaxDs	G(Ia)	0.29	0.07	0.16	0.42	
Face:MaxDs	P(I)	-0.02	0.03	-0.07	0.04	
Face:MinDs	E(I)	0.05	0.06	-0.07	0.17	
Face:MinDs	G(Ia)	-0.34	0.14	-0.61	-0.07	
Face:MinDs	P(I)	-0.04	0.03	-0.09	0.01	
Face:SDDp	E(I)	-0.67	0.09	-0.85	-0.50	
Face:SDDp	G(Ia)	0.63	0.04	0.54	0.71	
Face:SDDp	P(I)	0.08	0.03	0.03	0.13	
Face:SDDs	E(I)	-0.37	0.08	-0.53	-0.22	
Face:SDDs	G(Ia)	0.28	0.04	0.20	0.37	
Face:SDDs	P(I)	-0.02	0.03	-0.07	0.03	
Face:SDD	E(I)	-0.46	0.08	-0.62	-0.30	
Face:SDD	G(Ia)	0.37	0.04	0.28	0.45	
Face:SDD	P(I)	-0.00	0.03	-0.06	0.05	
Face:CVD	E(I)	-0.32	0.07	-0.46	-0.17	
Face:CVD	G(Ia)	0.56	0.05	0.46	0.66	
Face:CVD	P(I)	0.10	0.03	0.05	0.15	
Face:Gt30Dp	E(I)	-0.77	0.09	-0.95	-0.59	
Face:Gt30Dp	G(Ia)	0.61	0.04	0.53	0.69	
Face:Gt30Dp	P(I)	0.03	0.03	-0.02	0.08	
Face:Gt30Ds	E(I)	-0.11	0.07	-0.25	0.02	
Face:Gt30Ds	G(Ia)	0.10	0.05	-0.00	0.20	
Face:Gt30Ds	P(I)	-0.01	0.03	-0.06	0.04	
Face:Gt30D	E(I)	-0.28	0.07	-0.42	-0.14	
Face:Gt30D	G(Ia)	0.28	0.05	0.18	0.38	
Face:Gt30D	P(I)	-0.01	0.03	-0.06	0.04	
Face:Fnua	E(I)	0.13	0.05	0.04	0.23	
Face:Fnua	G(Ia)	0.09	0.03	0.04	0.14	
Face:Fnua	P(I)	0.10	0.02	0.06	0.13	
Face:Fr	E(I)	0.02	0.05	-0.07	0.12	
Face:Fr	G(Ia)	0.09	0.03	0.04	0.14	
Face:Fr	P(I)	0.05	0.02	0.02	0.09	
Face:Fnt	E(I)	0.12	0.05	0.02	0.22	

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Face:Fnt	G(Ia)	-0.07	0.03	-0.12	-0.02
Face:Fnt	P(I)	0.02	0.02	-0.02	0.05
Face:Sarea	E(I)	-0.07	0.05	-0.17	0.03
Face:Sarea	G(Ia)	-0.30	0.02	-0.34	-0.25
Face:Sarea	P(I)	-0.18	0.02	-0.21	-0.15
Face:Fd	E(I)	-0.12	0.05	-0.22	-0.01
Face:Fd	G(Ia)	-0.13	0.04	-0.20	-0.05
Face:Fd	P(I)	-0.10	0.02	-0.14	-0.06
Face:Fc	E(I)	-0.44	0.08	-0.60	-0.29
Face:Fc	G(Ia)	0.23	0.02	0.19	0.27
Face:Fc	P(I)	0.02	0.02	-0.01	0.06
Face:Fu	E(I)	-0.06	0.06	-0.18	0.05
Face:Fu	G(Ia)	0.03	0.03	-0.02	0.08
Face:Fu	P(I)	-0.01	0.02	-0.05	0.03
Face:Colour	E(I)	0.15	0.04	0.07	0.23
Face:Colour	G(Ia)	0.19	0.03	0.13	0.26
Face:Colour	P(I)	0.14	0.02	0.11	0.17
Face:Fly	E(I)	-0.12	0.04	-0.20	-0.04
Face:Fly	G(Ia)	0.30	0.05	0.20	0.41
Face:Fly	P(I)	0.01	0.02	-0.02	0.04
Face:Flcrot	E(I)	0.07	0.04	-0.01	0.15
Face:Flcrot	G(Ia)	-0.33	0.10	-0.52	-0.15
Face:Flcrot	P(I)	-0.01	0.02	-0.05	0.02
Face:Bactst	E(I)	-0.02	0.04	-0.10	0.06
Face:Bactst	G(Ia)	0.24	0.09	0.05	0.42
Face:Bactst	P(I)	0.03	0.02	-0.01	0.07
Face:MycD	E(I)	0.04	0.04	-0.04	0.12
Face:MycD	G(Ia)	0.12	0.09	-0.06	0.30
Face:MycD	P(I)	0.04	0.02	0.00	0.08
Face:Bcts	E(I)	-0.74	0.09	-0.91	-0.57
Face:Bcts	G(Ia)	0.25	0.02	0.22	0.29
Face:Bcts	P(I)	-0.02	0.02	-0.06	0.01
Face:Bctb	E(I)	-0.67	0.08	-0.82	-0.52
Face:Bctb	G(Ia)	0.24	0.02	0.20	0.28
Face:Bctb	P(I)	-0.03	0.02	-0.06	0.00
Face:Weanwt	E(I)	0.12	0.04	0.04	0.20
Face:Weanwt	G(Ia)	-0.42	0.03	-0.49	-0.36
Face:Weanwt	P(I)	-0.10	0.02	-0.14	-0.07
Face:NLB	E(I)	-0.13	0.04	-0.21	-0.05
Face:NLB	G(Ia)	0.10	0.03	0.04	0.16
Face:NLB	P(I)	-0.02	0.02	-0.06	0.01
Face:NLW	E(I)	-0.18	0.04	-0.26	-0.10
Face:NLW	G(Ia)	0.21	0.03	0.15	0.27

Table 24 – Continued from previous page

	le 24 – Contin			CIOTIC	CIOEL:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Face:NLW	P(I)	-0.01	0.02	-0.04	0.02
Face:Fnpua	E(I)	0.09	0.05	-0.00	0.18
Face:Fnpua	G(Ia)	-0.00	0.03	-0.06	0.06
Face:Fnpua	P(I)	0.04	0.02	0.01	0.07
Face:Fnsua	E(I)	0.13	0.05	0.04	0.23
Face:Fnsua	G(Ia)	0.09	0.03	0.04	0.14
Face:Fnsua	P(I)	0.10	0.02	0.06	0.13
Face:Fnpt	E(I)	0.07	0.05	-0.03	0.16
Face:Fnpt	G(Ia)	-0.15	0.03	-0.20	-0.10
Face:Fnpt	P(I)	-0.04	0.02	-0.07	-0.00
Face:Fnst	E(I)	0.12	0.05	0.02	0.22
Face:Fnst	G(Ia)	-0.07	0.03	-0.12	-0.02
Face:Fnst	P(I)	0.02	0.02	-0.02	0.05
Gfw:Stal	E(I)	0.17	0.03	0.11	0.23
Gfw:Stal	G(Ia)	0.53	0.03	0.47	0.58
Gfw:Stal	P(I)	0.30	0.02	0.27	0.33
Gfw:Diam	$\mid E(I) \mid$	0.29	0.03	0.23	0.35
Gfw:Diam	G(Ia)	0.56	0.02	0.51	0.60
Gfw:Diam	P(I)	0.39	0.01	0.37	0.42
Gfw:Bwt	$\mid E(I) \mid$	0.57	0.02	0.52	0.62
Gfw:Bwt	G(Ia)	0.24	0.03	0.18	0.29
Gfw:Bwt	P(I)	0.45	0.01	0.42	0.48
Gfw:WrN	E(I)	0.30	0.03	0.24	0.36
Gfw:WrN	G(Ia)	0.36	0.03	0.30	0.41
Gfw:WrN	P(I)	0.32	0.02	0.29	0.35
Gfw:WrB	$\mid E(I) \mid$	0.35	0.03	0.29	0.40
Gfw:WrB	G(Ia)	0.30	0.03	0.24	0.35
Gfw:WrB	P(I)	0.33	0.01	0.30	0.36
Gfw:WrT	E(I)	0.37	0.03	0.31	0.43
Gfw:WrT	G(Ia)	0.33	0.03	0.28	0.38
Gfw:WrT	P(I)	0.35	0.01	0.32	0.38
Gfw:Face	E(I)	-0.06	0.04	-0.15	0.03
Gfw:Face	G(Ia)	-0.09	0.02	-0.14	-0.05
Gfw:Face	P(I)	-0.07	0.02	-0.11	-0.04
Gfw:Gfw	E(I)	1.00	0.00	1.00	1.00
Gfw:Gfw	G(Ia)	1.00	0.00	1.00	1.00
Gfw:Gfw	P(I)	1.00	0.00	1.00	1.00
Gfw:Yld	E(I)	-0.09	0.03	-0.16	-0.03
Gfw:Yld	G(Ia)	-0.27	0.03	-0.32	-0.22
Gfw:Yld	P(I)	-0.16	0.02	-0.20	-0.13
Gfw:Cww	E(I)	0.92	0.01	0.90	0.94
Gfw:Cww	G(Ia)	0.87	0.01	0.85	0.89
Gfw:Cww	P(I)	0.90	0.01	0.89	0.91

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gfw:Staladj	E(I)	0.18	0.03	0.13	0.24		
Gfw:Staladj	G(Ia)	0.54	0.03	0.48	0.59		
Gfw:Staladj	P(I)	0.31	0.02	0.28	0.34		
Gfw:Gfwadj	E(I)	0.98	0.00	0.97	0.99		
Gfw:Gfwadj	G(Ia)	1.00	0.00	0.99	1.00		
Gfw:Gfwadj	P(I)	0.99	0.00	0.98	0.99		
Gfw:Cwwadj	E(I)	0.90	0.01	0.88	0.92		
Gfw:Cwwadj	G(Ia)	0.88	0.01	0.86	0.90		
Gfw:Cwwadj	P(I)	0.89	0.01	0.88	0.91		
Gfw:Crimp	E(I)	0.65	0.24	0.18	1.12		
Gfw:Crimp	G(Ia)	-0.60	0.03	-0.66	-0.55		
Gfw:Crimp	P(I)	-0.23	0.02	-0.26	-0.20		
Gfw:Crwvl	E(I)	-0.51	0.05	-0.62	-0.41		
Gfw:Crwvl	G(Ia)	0.60	0.03	0.53	0.66		
Gfw:Crwvl	P(I)	0.01	0.02	-0.03	0.04		
Gfw:Crst	E(I)	0.54	0.05	0.43	0.64		
Gfw:Crst	G(Ia)	-0.39	0.03	-0.46	-0.33		
Gfw:Crst	P(I)	0.06	0.02	0.03	0.10		
Gfw:Crstadj	E(I)	0.49	0.05	0.40	0.59		
Gfw:Crstadj	G(Ia)	-0.40	0.03	-0.46	-0.33		
Gfw:Crstadj	P(I)	0.06	0.02	0.03	0.10		
Gfw:Crwvt	E(I)	-0.51	0.04	-0.59	-0.43		
Gfw:Crwvt	G(Ia)	0.35	0.04	0.27	0.43		
Gfw:Crwvt	P(I)	-0.15	0.02	-0.19	-0.12		
Gfw:Dp	E(I)	0.20	0.08	0.05	0.35		
Gfw:Dp	G(Ia)	0.03	0.06	-0.08	0.13		
Gfw:Dp	P(I)	0.12	0.03	0.05	0.18		
Gfw:Ds	E(I)	-0.07	0.07	-0.21	0.07		
Gfw:Ds	G(Ia)	0.69	0.06	0.56	0.81		
Gfw:Ds	P(I)	0.24	0.03	0.18	0.30		
Gfw:Dps	E(I)	-0.06	0.07	-0.19	0.08		
Gfw:Dps	G(Ia)	0.69	0.07	0.56	0.82		
Gfw:Dps	P(I)	0.24	0.03	0.18	0.30		
Gfw:DpovDs	E(I)	0.40	0.13	0.15	0.65		
Gfw:DpovDs	G(Ia)	-0.31	0.05	-0.40	-0.22		
Gfw:DpovDs	P(I)	-0.05	0.03	-0.11	0.02		
Gfw:CVDp	E(I)	-0.01	0.07	-0.14	0.12		
Gfw:CVDp	G(Ia)	0.15	0.07	0.01	0.30		
Gfw:CVDp	P(I)	0.05	0.03	-0.01	0.11		
Gfw:CVDs	E(I)	-0.02	0.06	-0.15	0.10		
Gfw:CVDs	G(Ia)	0.05	0.08	-0.10	0.21		
Gfw:CVDs	P(I)	0.00	0.03	-0.06	0.07		
Gfw:MaxDp	E(I)	0.11	0.07	-0.03	0.26		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gfw:MaxDp	G(Ia)	0.03	0.06	-0.08	0.14	
Gfw:MaxDp	P(I)	0.08	0.03	0.01	0.14	
Gfw:MinDp	E(I)	0.11	0.05	0.00	0.22	
Gfw:MinDp	G(Ia)	0.04	0.15	-0.26	0.34	
Gfw:MinDp	P(I)	0.09	0.03	0.02	0.15	
Gfw:MaxDs	E(I)	0.01	0.06	-0.10	0.12	
Gfw:MaxDs	G(Ia)	0.61	0.09	0.42	0.79	
Gfw:MaxDs	P(I)	0.18	0.03	0.12	0.25	
Gfw:MinDs	E(I)	0.04	0.05	-0.07	0.15	
Gfw:MinDs	G(Ia)	0.21	0.17	-0.13	0.54	
Gfw:MinDs	P(I)	0.06	0.03	0.00	0.13	
Gfw:SDDp	E(I)	0.12	0.07	-0.02	0.26	
Gfw:SDDp	G(Ia)	0.01	0.06	-0.10	0.13	
Gfw:SDDp	P(I)	0.07	0.03	0.01	0.13	
Gfw:SDDs	E(I)	-0.05	0.07	-0.19	0.08	
Gfw:SDDs	G(Ia)	0.40	0.06	0.28	0.53	
Gfw:SDDs	P(I)	0.13	0.03	0.07	0.20	
Gfw:SDD	E(I)	-0.04	0.07	-0.17	0.10	
Gfw:SDD	G(Ia)	0.38	0.06	0.25	0.50	
Gfw:SDD	P(I)	0.14	0.03	0.08	0.20	
Gfw:CVD	E(I)	-0.02	0.06	-0.14	0.11	
Gfw:CVD	G(Ia)	0.04	0.08	-0.11	0.19	
Gfw:CVD	P(I)	0.00	0.03	-0.06	0.07	
Gfw:Gt30Dp	E(I)	0.15	0.07	0.00	0.29	
Gfw:Gt30Dp	G(Ia)	-0.01	0.06	-0.13	0.12	
Gfw:Gt30Dp	P(I)	0.08	0.03	0.02	0.14	
Gfw:Gt30Ds	E(I)	0.01	0.06	-0.10	0.12	
Gfw:Gt30Ds	G(Ia)	0.55	0.08	0.40	0.70	
Gfw:Gt30Ds	P(I)	0.19	0.03	0.13	0.25	
Gfw:Gt30D	E(I)	0.03	0.06	-0.09	0.15	
Gfw:Gt30D	G(Ia)	0.48	0.07	0.33	0.62	
Gfw:Gt30D	P(I)	0.19	0.03	0.13	0.25	
Gfw:Fnua	E(I)	-0.04	0.03	-0.10	0.03	
Gfw:Fnua	G(Ia)	-0.20	0.04	-0.27	-0.12	
Gfw:Fnua	P(I)	-0.09	0.02	-0.12	-0.05	
Gfw:Fr	E(I)	0.18	0.03	0.12	0.25	
Gfw:Fr	G(Ia)	0.02	0.04	-0.05	0.09	
Gfw:Fr	P(I)	0.13	0.02	0.10	0.16	
Gfw:Fnt	E(I)	0.22	0.03	0.16	0.28	
Gfw:Fnt	G(Ia)	-0.10	0.04	-0.17	-0.02	
Gfw:Fnt	P(I)	0.11	0.02	0.08	0.15	
Gfw:Sarea	E(I)	0.58	0.03	0.53	0.63	
Gfw:Sarea	G(Ia)	0.23	0.03	0.17	0.29	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gfw:Sarea	P(I)	0.45	0.01	0.42	0.48		
Gfw:Fd	E(I)	0.17	0.03	0.11	0.23		
Gfw:Fd	G(Ia)	0.51	0.05	0.41	0.61		
Gfw:Fd	P(I)	0.25	0.02	0.22	0.29		
Gfw:Fc	E(I)	0.38	0.05	0.29	0.47		
Gfw:Fc	G(Ia)	-0.15	0.03	-0.20	-0.09		
Gfw:Fc	P(I)	0.11	0.02	0.08	0.15		
Gfw:Fu	E(I)	0.25	0.04	0.18	0.32		
Gfw:Fu	G(Ia)	-0.00	0.04	-0.08	0.07		
Gfw:Fu	P(I)	0.16	0.02	0.12	0.19		
Gfw:Colour	E(I)	-0.03	0.03	-0.08	0.03		
Gfw:Colour	G(Ia)	0.24	0.04	0.15	0.32		
Gfw:Colour	P(I)	0.04	0.02	0.01	0.07		
Gfw:Fly	E(I)	0.09	0.03	0.03	0.14		
Gfw:Fly	G(Ia)	-0.36	0.07	-0.49	-0.23		
Gfw:Fly	P(I)	-0.00	0.02	-0.04	0.03		
Gfw:Flcrot	E(I)	0.01	0.03	-0.04	0.06		
Gfw:Flcrot	G(Ia)	-0.20	0.12	-0.43	0.03		
Gfw:Flcrot	P(I)	-0.01	0.02	-0.05	0.02		
Gfw:Bactst	E(I)	-0.00	0.03	-0.07	0.06		
Gfw:Bactst	G(Ia)	-0.25	0.11	-0.47	-0.03		
Gfw:Bactst	P(I)	-0.04	0.02	-0.08	0.00		
Gfw:MycD	E(I)	0.01	0.03	-0.05	0.08		
Gfw:MycD	G(Ia)	0.31	0.12	0.07	0.55		
Gfw:MycD	P(I)	0.05	0.02	0.01	0.09		
Gfw:Bcts	E(I)	0.29	0.06	0.18	0.40		
Gfw:Bcts	G(Ia)	-0.08	0.02	-0.12	-0.03		
Gfw:Bcts	P(I)	0.07	0.02	0.03	0.10		
Gfw:Bctb	E(I)	0.31	0.05	0.20	0.41		
Gfw:Bctb	G(Ia)	-0.10	0.02	-0.15	-0.05		
Gfw:Bctb	P(I)	0.07	0.02	0.04	0.10		
Gfw:Weanwt	E(I)	0.47	0.03	0.42	0.52		
Gfw:Weanwt	G(Ia)	0.14	0.04	0.06	0.23		
Gfw:Weanwt	P(I)	0.37	0.02	0.34	0.40		
Gfw:NLB	E(I)	-0.25	0.03	-0.30	-0.20		
Gfw:NLB	G(Ia)	0.13	0.04	0.05	0.21		
Gfw:NLB	P(I)	-0.14	0.02	-0.17	-0.11		
Gfw:NLW	E(I)	-0.21	0.03	-0.26	-0.16		
Gfw:NLW	G(Ia)	0.09	0.04	0.01	0.17		
Gfw:NLW	P(I)	-0.13	0.02	-0.16	-0.10		
Gfw:Fnpua	E(I)	-0.23	0.03	-0.28	-0.17		
Gfw:Fnpua	G(Ia)	-0.18	0.04	-0.26	-0.10		
Gfw:Fnpua	P(I)	-0.21	0.02	-0.25	-0.18		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gfw:Fnsua	E(I)	-0.02	0.03	-0.09	0.04		
Gfw:Fnsua	G(Ia)	-0.19	0.04	-0.26	-0.12		
Gfw:Fnsua	P(I)	-0.08	0.02	-0.11	-0.04		
Gfw:Fnpt	E(I)	0.00	0.03	-0.06	0.07		
Gfw:Fnpt	G(Ia)	-0.06	0.04	-0.14	0.01		
Gfw:Fnpt	P(I)	-0.02	0.02	-0.05	0.02		
Gfw:Fnst	E(I)	0.22	0.03	0.16	0.28		
Gfw:Fnst	G(Ia)	-0.10	0.04	-0.17	-0.02		
Gfw:Fnst	P(I)	0.12	0.02	0.08	0.15		
Yld:Stal	E(I)	0.36	0.03	0.30	0.42		
Yld:Stal	G(Ia)	0.11	0.03	0.06	0.17		
Yld:Stal	P(I)	0.26	0.02	0.23	0.29		
Yld:Diam	$\mid E(I) \mid$	-0.05	0.04	-0.12	0.02		
Yld:Diam	G(Ia)	-0.17	0.02	-0.22	-0.12		
Yld:Diam	P(I)	-0.10	0.02	-0.13	-0.07		
Yld:Bwt	E(I)	0.02	0.03	-0.04	0.09		
Yld:Bwt	G(Ia)	0.05	0.03	-0.00	0.11		
Yld:Bwt	P(I)	0.03	0.02	0.00	0.07		
Yld:WrN	E(I)	-0.19	0.03	-0.25	-0.12		
Yld:WrN	G(Ia)	-0.31	0.02	-0.36	-0.27		
Yld:WrN	P(I)	-0.24	0.02	-0.27	-0.21		
Yld:WrB	E(I)	-0.19	0.03	-0.26	-0.13		
Yld:WrB	G(Ia)	-0.38	0.02	-0.42	-0.33		
Yld:WrB	P(I)	-0.27	0.02	-0.30	-0.24		
Yld:WrT	$\mid E(I) \mid$	-0.20	0.03	-0.26	-0.13		
Yld:WrT	G(Ia)	-0.36	0.02	-0.40	-0.31		
Yld:WrT	P(I)	-0.27	0.02	-0.30	-0.24		
Yld:Face	E(I)	0.16	0.05	0.07	0.26		
Yld:Face	G(Ia)	-0.23	0.02	-0.27	-0.19		
Yld:Face	P(I)	-0.07	0.02	-0.10	-0.04		
Yld:Gfw	E(I)	-0.09	0.03	-0.16	-0.03		
Yld:Gfw	G(Ia)	-0.27	0.03	-0.32	-0.22		
Yld:Gfw	P(I)	-0.16	0.02	-0.20	-0.13		
Yld:Yld	E(I)	1.00	0.00	1.00	1.00		
Yld:Yld	G(Ia)	1.00	0.00	1.00	1.00		
Yld:Yld	P(I)	1.00	0.00	1.00	1.00		
Yld:Cww	E(I)	0.30	0.03	0.24	0.35		
Yld:Cww	G(Ia)	0.23	0.03	0.18	0.28		
Yld:Cww	P(I)	0.27	0.02	0.24	0.30		
Yld:Staladj	E(I)	0.36	0.03	0.29	0.42		
Yld:Staladj	G(Ia)	0.08	0.03	0.03	0.14		
Yld:Staladj	P(I)	0.24	0.02	0.21	0.27		
Yld:Gfwadj	E(I)	-0.09	0.03	-0.16	-0.03		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Yld:Gfwadj	G(Ia)	-0.31	0.03	-0.37	-0.26	
Yld:Gfwadj	P(I)	-0.18	0.02	-0.21	-0.15	
Yld:Cwwadj	E(I)	0.29	0.03	0.23	0.35	
Yld:Cwwadj	G(Ia)	0.20	0.03	0.14	0.25	
Yld:Cwwadj	P(I)	0.25	0.02	0.22	0.28	
Yld:Crimp	E(I)	-0.39	0.16	-0.70	-0.08	
Yld:Crimp	G(Ia)	-0.36	0.03	-0.41	-0.30	
Yld:Crimp	P(I)	-0.27	0.02	-0.30	-0.23	
Yld:Crwvl	E(I)	0.18	0.05	0.08	0.27	
Yld:Crwvl	G(Ia)	0.38	0.04	0.31	0.45	
Yld:Crwvl	P(I)	0.26	0.02	0.22	0.30	
Yld:Crst	E(I)	0.15	0.06	0.03	0.26	
Yld:Crst	G(Ia)	-0.38	0.04	-0.45	-0.31	
Yld:Crst	P(I)	-0.11	0.02	-0.15	-0.07	
Yld:Crstadj	E(I)	0.14	0.05	0.03	0.24	
Yld:Crstadj	G(Ia)	-0.39	0.04	-0.46	-0.31	
Yld:Crstadj	P(I)	-0.11	0.02	-0.15	-0.07	
Yld:Crwvt	E(I)	-0.07	0.05	-0.16	0.02	
Yld:Crwvt	G(Ia)	0.40	0.04	0.32	0.49	
Yld:Crwvt	P(I)	0.12	0.02	0.08	0.16	
Yld:Dp	E(I)	0.03	0.08	-0.12	0.19	
Yld:Dp	G(Ia)	-0.19	0.06	-0.31	-0.07	
Yld:Dp	P(I)	-0.07	0.03	-0.13	-0.00	
Yld:Ds	E(I)	-0.07	0.07	-0.21	0.06	
Yld:Ds	G(Ia)	0.02	0.07	-0.12	0.16	
Yld:Ds	P(I)	-0.04	0.03	-0.10	0.03	
Yld:Dps	E(I)	-0.07	0.07	-0.20	0.07	
Yld:Dps	G(Ia)	-0.00	0.07	-0.14	0.13	
Yld:Dps	P(I)	-0.04	0.03	-0.11	0.02	
Yld:DpovDs	E(I)	0.13	0.12	-0.11	0.37	
Yld:DpovDs	G(Ia)	-0.17	0.05	-0.27	-0.07	
Yld:DpovDs	P(I)	-0.05	0.03	-0.11	0.01	
Yld:CVDp	E(I)	-0.08	0.06	-0.20	0.05	
Yld:CVDp	G(Ia)	-0.26	0.08	-0.41	-0.11	
Yld:CVDp	P(I)	-0.14	0.03	-0.21	-0.08	
Yld:CVDs	E(I)	-0.07	0.06	-0.19	0.05	
Yld:CVDs	G(Ia)	-0.30	0.09	-0.47	-0.13	
Yld:CVDs	P(I)	-0.14	0.03	-0.21	-0.08	
Yld:MaxDp	E(I)	-0.01	0.07	-0.15	0.13	
Yld:MaxDp	G(Ia)	-0.19	0.06	-0.32	-0.07	
Yld:MaxDp	P(I)	-0.09	0.03	-0.15	-0.02	
Yld:MinDp	E(I)	0.08	0.06	-0.03	0.19	
Yld:MinDp	G(Ia)	-0.35	0.20	-0.73	0.04	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Yld:MinDp	P(I)	0.00	0.03	-0.06	0.07	
Yld:MaxDs	E(I)	-0.11	0.06	-0.23	0.01	
Yld:MaxDs	G(Ia)	-0.21	0.10	-0.41	-0.01	
Yld:MaxDs	P(I)	-0.14	0.03	-0.20	-0.07	
Yld:MinDs	E(I)	0.02	0.06	-0.09	0.13	
Yld:MinDs	G(Ia)	-0.14	0.19	-0.52	0.23	
Yld:MinDs	P(I)	-0.01	0.03	-0.07	0.06	
Yld:SDDp	E(I)	-0.05	0.07	-0.20	0.09	
Yld:SDDp	G(Ia)	-0.26	0.06	-0.38	-0.13	
Yld:SDDp	P(I)	-0.14	0.03	-0.21	-0.08	
Yld:SDDs	$\mid E(I) \mid$	-0.14	0.07	-0.28	-0.01	
Yld:SDDs	G(Ia)	-0.22	0.07	-0.36	-0.08	
Yld:SDDs	P(I)	-0.17	0.03	-0.24	-0.11	
Yld:SDD	E(I)	-0.14	0.07	-0.27	-0.00	
Yld:SDD	G(Ia)	-0.25	0.07	-0.38	-0.12	
Yld:SDD	P(I)	-0.18	0.03	-0.25	-0.12	
Yld:CVD	E(I)	-0.07	0.06	-0.19	0.05	
Yld:CVD	G(Ia)	-0.32	0.08	-0.48	-0.16	
Yld:CVD	P(I)	-0.15	0.03	-0.22	-0.09	
Yld:Gt30Dp	E(I)	0.11	0.08	-0.04	0.26	
Yld:Gt30Dp	G(Ia)	-0.33	0.07	-0.46	-0.20	
Yld:Gt30Dp	P(I)	-0.08	0.03	-0.14	-0.01	
Yld:Gt30Ds	E(I)	-0.10	0.06	-0.23	0.02	
Yld:Gt30Ds	G(Ia)	-0.21	0.09	-0.38	-0.04	
Yld:Gt30Ds	P(I)	-0.14	0.03	-0.20	-0.07	
Yld:Gt30D	$\mid E(I) \mid$	-0.06	0.06	-0.19	0.06	
Yld:Gt30D	G(Ia)	-0.30	0.08	-0.46	-0.14	
Yld:Gt30D	P(I)	-0.14	0.03	-0.21	-0.08	
Yld:Fnua	$\mid E(I) \mid$	-0.06	0.03	-0.12	0.01	
Yld:Fnua	G(Ia)	0.42	0.03	0.36	0.49	
Yld:Fnua	P(I)	0.12	0.02	0.09	0.15	
Yld:Fr	E(I)	0.02	0.03	-0.05	0.08	
Yld:Fr	G(Ia)	0.11	0.03	0.05	0.17	
Yld:Fr	P(I)	0.05	0.02	0.02	0.09	
Yld:Fnt	E(I)	-0.03	0.03	-0.10	0.04	
Yld:Fnt	G(Ia)	0.43	0.03	0.37	0.49	
Yld:Fnt	P(I)	0.14	0.02	0.11	0.18	
Yld:Sarea	E(I)	0.05	0.04	-0.02	0.12	
Yld:Sarea	G(Ia)	-0.01	0.03	-0.07	0.05	
Yld:Sarea	P(I)	0.03	0.02	-0.01	0.06	
Yld:Fd	E(I)	-0.04	0.04	-0.11	0.03	
Yld:Fd	G(Ia)	-0.15	0.05	-0.24	-0.06	
Yld:Fd	P(I)	-0.07	0.02	-0.11	-0.03	

Table 24 – Continued from previous page

Table 24 – Continued from previous page					
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Yld:Fc	E(I)	-0.28	0.05	-0.37	-0.18
Yld:Fc	G(Ia)	-0.47	0.02	-0.51	-0.42
Yld:Fc	P(I)	-0.38	0.02	-0.41	-0.34
Yld:Fu	E(I)	-0.26	0.04	-0.33	-0.19
Yld:Fu	G(Ia)	-0.43	0.03	-0.49	-0.37
Yld:Fu	P(I)	-0.33	0.02	-0.37	-0.30
Yld:Colour	E(I)	-0.09	0.03	-0.14	-0.03
Yld:Colour	G(Ia)	-0.29	0.04	-0.37	-0.21
Yld:Colour	P(I)	-0.14	0.02	-0.17	-0.11
Yld:Fly	E(I)	0.01	0.03	-0.05	0.06
Yld:Fly	G(Ia)	0.00	0.05	-0.10	0.11
Yld:Fly	P(I)	0.00	0.02	-0.03	0.04
Yld:Flcrot	E(I)	-0.02	0.03	-0.07	0.04
Yld:Flcrot	G(Ia)	0.35	0.12	0.12	0.58
Yld:Flcrot	P(I)	0.03	0.02	-0.00	0.06
Yld:Bactst	E(I)	0.03	0.04	-0.04	0.11
Yld:Bactst	G(Ia)	0.33	0.10	0.13	0.53
Yld:Bactst	P(I)	0.07	0.02	0.03	0.11
Yld:MycD	E(I)	0.11	0.04	0.04	0.18
Yld:MycD	G(Ia)	-0.41	0.12	-0.65	-0.17
Yld:MycD	P(I)	0.01	0.02	-0.03	0.05
Yld:Bcts	E(I)	0.01	0.07	-0.13	0.14
Yld:Bcts	G(Ia)	-0.05	0.02	-0.09	-0.02
Yld:Bcts	P(I)	-0.03	0.02	-0.07	-0.00
Yld:Bctb	E(I)	-0.02	0.06	-0.15	0.10
Yld:Bctb	G(Ia)	-0.04	0.02	-0.08	-0.00
Yld:Bctb	P(I)	-0.04	0.02	-0.07	-0.00
Yld:Weanwt	E(I)	0.06	0.04	-0.01	0.13
Yld:Weanwt	G(Ia)	-0.05	0.04	-0.12	0.02
Yld:Weanwt	P(I)	0.02	0.02	-0.01	0.05
Yld:NLB	E(I)	-0.05	0.03	-0.10	0.01
Yld:NLB	G(Ia)	0.05	0.04	-0.02	0.12
Yld:NLB	P(I)	-0.02	0.02	-0.05	0.02
Yld:NLW	E(I)	-0.03	0.03	-0.09	0.02
Yld:NLW	G(Ia)	0.03	0.04	-0.04	0.10
Yld:NLW	P(I)	-0.01	0.02	-0.05	0.02
Yld:Fnpua	E(I)	-0.05	0.03	-0.11	0.01
Yld:Fnpua	G(Ia)	0.31	0.04	0.24	0.39
Yld:Fnpua	P(I)	0.07	0.02	0.03	0.10
Yld:Fnsua	E(I)	-0.05	0.03	-0.12	0.01
Yld:Fnsua	G(Ia)	0.42	0.03	0.35	0.48
Yld:Fnsua	P(I)	0.12	0.02	0.09	0.15
Yld:Fnpt	E(I)	-0.02	0.03	-0.09	0.04

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Yld:Fnpt	G(Ia)	0.29	0.03	0.22	0.36
Yld:Fnpt	P(I)	0.08	0.02	0.05	0.12
Yld:Fnst	E(I)	-0.03	0.03	-0.10	0.04
Yld:Fnst	G(Ia)	0.43	0.03	0.36	0.49
Yld:Fnst	P(I)	0.14	0.02	0.11	0.17
Cww:Stal	E(I)	0.31	0.03	0.25	0.36
Cww:Stal	G(Ia)	0.59	0.03	0.54	0.64
Cww:Stal	P(I)	0.41	0.01	0.38	0.43
Cww:Diam	E(I)	0.25	0.03	0.19	0.31
Cww:Diam	G(Ia)	0.48	0.03	0.43	0.53
Cww:Diam	P(I)	0.34	0.01	0.31	0.37
Cww:Bwt	E(I)	0.55	0.02	0.50	0.60
Cww:Bwt	G(Ia)	0.26	0.03	0.21	0.32
Cww:Bwt	P(I)	0.45	0.01	0.42	0.48
Cww:WrN	E(I)	0.21	0.03	0.15	0.27
Cww:WrN	G(Ia)	0.20	0.03	0.14	0.26
Cww:WrN	P(I)	0.21	0.02	0.18	0.24
Cww:WrB	E(I)	0.25	0.03	0.20	0.31
Cww:WrB	G(Ia)	0.11	0.03	0.05	0.17
Cww:WrB	P(I)	0.20	0.02	0.17	0.23
Cww:WrT	E(I)	0.27	0.03	0.21	0.33
Cww:WrT	G(Ia)	0.15	0.03	0.10	0.21
Cww:WrT	P(I)	0.22	0.02	0.19	0.26
Cww:Face	E(I)	0.01	0.05	-0.08	0.10
Cww:Face	G(Ia)	-0.22	0.02	-0.26	-0.17
Cww:Face	P(I)	-0.10	0.02	-0.13	-0.07
Cww:Gfw	E(I)	0.92	0.01	0.90	0.94
Cww:Gfw	G(Ia)	0.87	0.01	0.85	0.89
Cww:Gfw	P(I)	0.90	0.01	0.89	0.91
Cww:Yld	E(I)	0.30	0.03	0.24	0.35
Cww:Yld	G(Ia)	0.23	0.03	0.18	0.28
Cww:Yld	P(I)	0.27	0.02	0.24	0.30
Cww:Cww	E(I)	1.00	0.00	1.00	1.00
Cww:Cww	G(Ia)	1.00	0.00	1.00	1.00
Cww:Cww	P(I)	1.00	0.00	1.00	1.00
Cww:Staladj	E(I)	0.31	0.03	0.26	0.37
Cww:Staladj	G(Ia)	0.59	0.03	0.53	0.64
Cww:Staladj	P(I)	0.41	0.01	0.38	0.44
Cww:Gfwadj	E(I)	0.89	0.01	0.87	0.91
Cww:Gfwadj	G(Ia)	0.85	0.01	0.83	0.88
Cww:Gfwadj	P(I)	0.88	0.01	0.87	0.89
Cww:Cwwadj	E(I)	0.98	0.00	0.97	0.99
Cww:Cwwadj	G(Ia)	1.00	0.00	0.99	1.01

Table 24 – Continued from previous page

	$\frac{1}{C}$ le 24 – Contin			CIOFI	CTOF1:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Cww:Cwwadj	P(I)	0.99	0.00	0.98	0.99
Cww:Crimp	E(I)	0.50	0.22	0.06	0.94
Cww:Crimp	G(Ia)	-0.68	0.02	-0.73	-0.64
Cww:Crimp	P(I)	-0.32	0.02	-0.35	-0.29
Cww:Crwvl	E(I)	-0.44	0.05	-0.54	-0.33
Cww:Crwvl	G(Ia)	0.69	0.03	0.62	0.75
Cww:Crwvl	P(I)	0.11	0.02	0.07	0.14
Cww:Crst	E(I)	0.59	0.06	0.48	0.70
Cww:Crst	G(Ia)	-0.50	0.03	-0.56	-0.43
Cww:Crst	P(I)	0.02	0.02	-0.01	0.06
Cww:Crstadj	E(I)	0.54	0.05	0.44	0.64
Cww:Crstadj	G(Ia)	-0.50	0.03	-0.57	-0.44
Cww:Crstadj	P(I)	0.02	0.02	-0.01	0.06
Cww:Crwvt	E(I)	-0.53	0.04	-0.61	-0.44
Cww:Crwvt	G(Ia)	0.47	0.04	0.39	0.54
Cww:Crwvt	P(I)	-0.10	0.02	-0.14	-0.07
Cww:Dp	E(I)	0.18	0.08	0.03	0.34
Cww:Dp	G(Ia)	-0.01	0.06	-0.12	0.10
Cww:Dp	P(I)	0.09	0.03	0.03	0.15
Cww:Ds	E(I)	-0.11	0.07	-0.25	0.04
Cww:Ds	G(Ia)	0.63	0.06	0.50	0.75
Cww:Ds	P(I)	0.20	0.03	0.14	0.27
Cww:Dps	E(I)	-0.09	0.07	-0.23	0.05
Cww:Dps	G(Ia)	0.63	0.06	0.50	0.75
Cww:Dps	P(I)	0.20	0.03	0.14	0.26
Cww:DpovDs	E(I)	0.40	0.13	0.14	0.66
Cww:DpovDs	G(Ia)	-0.31	0.04	-0.40	-0.22
Cww:DpovDs	P(I)	-0.06	0.03	-0.12	0.00
Cww:CVDp	E(I)	-0.03	0.07	-0.17	0.10
Cww:CVDp	G(Ia)	0.03	0.07	-0.11	0.17
Cww:CVDp	P(I)	-0.01	0.03	-0.07	0.05
Cww:CVDs	E(I)	-0.06	0.06	-0.19	0.07
Cww:CVDs	G(Ia)	-0.04	0.08	-0.19	0.11
Cww:CVDs	P(I)	-0.05	0.03	-0.12	0.01
Cww:MaxDp	E(I)	0.09	0.08	-0.06	0.24
Cww:MaxDp	G(Ia)	-0.02	0.06	-0.14	0.09
Cww:MaxDp	P(I)	0.04	0.03	-0.03	0.10
Cww:MinDp	E(I)	0.13	0.06	0.02	0.24
Cww:MinDp	G(Ia)	-0.04	0.17	-0.38	0.30
Cww:MinDp	P(I)	0.09	0.03	0.02	0.15
Cww:MaxDs	E(I)	-0.05	0.06	-0.17	0.07
Cww:MaxDs	G(Ia)	0.48	0.09	0.30	0.66
Cww:MaxDs	P(I)	0.11	0.03	0.05	0.17

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
Cww:MinDs	E(I)	0.05	0.06	-0.06	0.16
Cww:MinDs	G(Ia)	0.16	0.16	-0.16	0.10
Cww:MinDs	P(I)	0.16	0.10	-0.10	0.40
Cww:SDDp	E(I)	0.00	0.03	-0.06	0.12
Cww.SDDp Cww:SDDp	G(Ia)	-0.07	0.06	-0.18	0.24
Cww.SDDp Cww:SDDp	P(I)	0.01	0.00	-0.16	0.04
Cww:SDDp Cww:SDDs	E(I)	-0.12	0.03	-0.26	0.00
Cww.SDDs Cww:SDDs	G(Ia)	0.30	0.07	0.18	0.02
Cww.SDDs Cww:SDDs	P(I)	0.06	0.00	-0.00	0.43
Cww.SDDs Cww:SDD	E(I)	-0.11	0.03	-0.25	0.12
Cww.SDD Cww:SDD	G(Ia)	0.27	0.07	0.14	0.04
Cww.SDD Cww:SDD	P(I)	0.27	0.00	-0.01	0.39
Cww:CVD	E(I)	-0.05	0.03	-0.01	0.12
Cww:CVD	G(Ia)	-0.06	0.07	-0.18	0.08
Cww.CVD Cww:CVD	P(I)	-0.06	0.07	-0.21	0.08
Cww.Gt30Dp	E(I)	0.17	0.03	0.02	0.01
Cww.Gt30Dp Cww:Gt30Dp	G(Ia)	-0.09	0.08	-0.21	0.32
Cww:Gt30Dp	P(I)	0.05	0.00	-0.21	0.02
Cww:Gt30Dp Cww:Gt30Ds	E(I)	-0.04	0.03	-0.02	0.11
Cww:Gt30Ds Cww:Gt30Ds	l ' '	0.43	0.07	0.28	0.09
Cww:Gt30Ds Cww:Gt30Ds	G(Ia)	$0.43 \\ 0.13$	0.08	0.28	0.38
Cww:Gt30Ds Cww:Gt30D	P(I) E(I)	-0.01	0.03	-0.15	0.19
Cww:Gt30D	G(Ia)	0.34	0.07	0.13	0.13
Cww:Gt30D	\ /	$0.34 \\ 0.12$	0.07	0.20	0.49
Cww:Gt30D Cww:Fnua	P(I) E(I)	-0.05	0.03	-0.11	0.18
Cww:Fnua	\ \ /	0.01	0.03	-0.11	0.01
Cww:Fnua	G(Ia)	-0.03	0.04		0.08
Cww:Fnua Cww:Fr	P(I)	0.19	0.02	-0.07 0.13	$0.00 \\ 0.25$
Cww:Fr	E(I)			-0.01	
Cww:Fr	G(Ia)	0.06	0.04		0.13
Cww:Fnt	P(I)	$\begin{vmatrix} 0.15 \\ 0.21 \end{vmatrix}$	0.02 0.03	0.12 0.15	0.18 0.26
Cww:Fnt	E(I)	0.21	0.03	0.13	0.20
Cww:Fnt	G(Ia)				
Cww:Fnt Cww:Sarea	P(I)	0.17	0.02	0.14	0.21
Cww:Sarea Cww:Sarea	E(I)	0.58	0.03	0.53	0.63
Cww:Sarea Cww:Sarea	G(Ia)	0.22		0.16	0.28
	P(I)	0.45	0.01	0.42	0.48
Cww:Fd	E(I)	0.15	0.03	0.09	0.21
Cww:Fd	G(Ia)	0.43	0.05	0.33	0.53
Cww:Fd Cww:Fc	P(I)	0.22	0.02	0.18	0.25
	E(I)	0.26	0.05	0.16	0.35
Cww:Fc	G(Ia)	-0.38	0.03	-0.43	-0.32
Cww:Fc	P(I)	-0.05	0.02	-0.09	-0.01
Cww:Fu	E(I)	0.14	Continued of	0.07	0.21

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Cww:Fu	G(Ia)	-0.23	0.04	-0.30	-0.15		
Cww:Fu	P(I)	0.01	0.02	-0.03	0.05		
Cww:Colour	E(I)	-0.06	0.03	-0.12	-0.01		
Cww:Colour	G(Ia)	0.11	0.05	0.02	0.20		
Cww:Colour	P(I)	-0.02	0.02	-0.05	0.01		
Cww:Fly	E(I)	0.08	0.03	0.03	0.14		
Cww:Fly	G(Ia)	-0.36	0.07	-0.49	-0.22		
Cww:Fly	P(I)	-0.00	0.02	-0.03	0.03		
Cww:Flcrot	E(I)	0.01	0.03	-0.04	0.06		
Cww:Flcrot	G(Ia)	-0.04	0.12	-0.27	0.18		
Cww:Flcrot	P(I)	0.00	0.02	-0.03	0.03		
Cww:Bactst	E(I)	0.01	0.03	-0.05	0.07		
Cww:Bactst	G(Ia)	-0.09	0.12	-0.31	0.14		
Cww:Bactst	P(I)	-0.00	0.02	-0.04	0.04		
Cww:MycD	E(I)	0.06	0.03	-0.00	0.12		
Cww:MycD	G(Ia)	0.10	0.12	-0.14	0.34		
Cww:MycD	P(I)	0.06	0.02	0.02	0.10		
Cww:Bcts	E(I)	0.27	0.06	0.16	0.38		
Cww:Bcts	G(Ia)	-0.10	0.03	-0.15	-0.05		
Cww:Bcts	P(I)	0.05	0.02	0.02	0.09		
Cww:Bctb	E(I)	0.28	0.05	0.18	0.38		
Cww:Bctb	G(Ia)	-0.12	0.03	-0.18	-0.07		
Cww:Bctb	P(I)	0.06	0.02	0.02	0.09		
Cww:Weanwt	E(I)	0.48	0.03	0.43	0.53		
Cww:Weanwt	G(Ia)	0.11	0.05	0.03	0.20		
Cww:Weanwt	P(I)	0.38	0.02	0.35	0.41		
Cww:NLB	E(I)	-0.26	0.03	-0.31	-0.21		
Cww:NLB	G(Ia)	0.15	0.04	0.07	0.24		
Cww:NLB	P(I)	-0.15	0.02	-0.18	-0.12		
Cww:NLW	E(I)	-0.22	0.03	-0.27	-0.16		
Cww:NLW	G(Ia)	0.10	0.04	0.02	0.18		
Cww:NLW	P(I)	-0.13	0.02	-0.16	-0.10		
Cww:Fnpua	E(I)	-0.24	0.03	-0.30	-0.18		
Cww:Fnpua	G(Ia)	-0.02	0.04	-0.11	0.06		
Cww:Fnpua	P(I)	-0.18	0.02	-0.21	-0.14		
Cww:Fnsua	E(I)	-0.04	0.03	-0.10	0.02		
Cww:Fnsua	G(Ia)	0.01	0.04	-0.07	0.08		
Cww:Fnsua	P(I)	-0.02	0.02	-0.06	0.01		
Cww:Fnpt	E(I)	-0.01	0.03	-0.06	0.05		
Cww:Fnpt	G(Ia)	0.08	0.04	0.00	0.16		
Cww:Fnpt	P(I)	0.02	0.02	-0.01	0.06		
Cww:Fnst	E(I)	0.21	0.03	0.15	0.27		
Cww:Fnst	G(Ia)	0.10	0.04	0.03	0.18		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Cww:Fnst	P(I)	0.18	0.02	0.14	0.21
Staladj:Stal	E(I)	0.97	0.00	0.96	0.98
Staladj:Stal	G(Ia)	0.99	0.00	0.99	1.00
Staladj:Stal	P(I)	0.98	0.00	0.97	0.98
Staladj:Diam	E(I)	0.13	0.03	0.07	0.19
Staladj:Diam	G(Ia)	0.13	0.03	0.08	0.18
Staladj:Diam	P(I)	0.13	0.02	0.10	0.16
Staladj:Bwt	E(I)	0.24	0.03	0.18	0.30
Staladj:Bwt	G(Ia)	0.09	0.03	0.03	0.15
Staladj:Bwt	P(I)	0.18	0.02	0.15	0.22
Staladj:WrN	E(I)	-0.14	0.03	-0.20	-0.08
Staladj:WrN	G(Ia)	-0.19	0.03	-0.25	-0.13
Staladj:WrN	P(I)	-0.16	0.02	-0.19	-0.13
Staladj:WrB	E(I)	-0.12	0.03	-0.18	-0.06
Staladj:WrB	G(Ia)	-0.20	0.03	-0.26	-0.14
Staladj:WrB	P(I)	-0.15	0.02	-0.18	-0.12
Staladj:WrT	E(I)	-0.14	0.03	-0.20	-0.08
Staladj:WrT	G(Ia)	-0.19	0.03	-0.24	-0.14
Staladj:WrT	P(I)	-0.16	0.02	-0.19	-0.13
Staladj:Face	E(I)	-0.09	0.04	-0.17	0.00
Staladj:Face	G(Ia)	-0.25	0.02	-0.30	-0.21
Staladj:Face	P(I)	-0.16	0.02	-0.20	-0.13
Staladj:Gfw	E(I)	0.18	0.03	0.13	0.24
Staladj:Gfw	G(Ia)	0.54	0.03	0.48	0.59
Staladj:Gfw	P(I)	0.31	0.02	0.28	0.34
Staladj:Yld	E(I)	0.36	0.03	0.29	0.42
Staladj:Yld	G(Ia)	0.08	0.03	0.03	0.14
Staladj:Yld	P(I)	0.24	0.02	0.21	0.27
Staladj:Cww	E(I)	0.31	0.03	0.26	0.37
Staladj:Cww	G(Ia)	0.59	0.03	0.53	0.64
Staladj:Cww	P(I)	0.41	0.01	0.38	0.44
Staladj:Staladj	E(I)	1.00	0.00	1.00	1.00
Staladj:Staladj	G(Ia)	1.00	0.00	1.00	1.00
Staladj:Staladj	P(I)	1.00	0.00	1.00	1.00
Staladj:Gfwadj	E(I)	0.19	0.03	0.13	0.24
Staladj:Gfwadj	G(Ia)	0.52	0.03	0.47	0.58
Staladj:Gfwadj	P(I)	0.31	0.02	0.28	0.34
Staladj:Cwwadj	E(I)	0.32	0.03	0.27	0.37
Staladj:Cwwadj	G(Ia)	0.58	0.03	0.52	0.63
Staladj:Cwwadj	P(I)	0.41	0.01	0.38	0.44
Staladj:Crimp	E(I)	0.32	0.25	-0.18	0.82
Staladj:Crimp	G(Ia)	-0.53	0.03	-0.58	-0.48
Staladj:Crimp	P(I)	-0.27	0.02	-0.30	-0.23

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Staladj:Crwvl	E(I)	0.01	0.05	-0.08	0.10	
Staladj:Crwvl	G(Ia)	0.50	0.03	0.44	0.57	
Staladj:Crwvl	P(I)	0.23	0.02	0.20	0.27	
Staladj:Crst	E(I)	0.89	0.06	0.78	1.00	
Staladj:Crst	G(Ia)	-0.17	0.04	-0.24	-0.09	
Staladj:Crst	P(I)	0.32	0.02	0.28	0.36	
Staladj:Crstadj	E(I)	0.84	0.05	0.74	0.94	
Staladj:Crstadj	G(Ia)	-0.16	0.04	-0.23	-0.08	
Staladj:Crstadj	P(I)	0.33	0.02	0.30	0.37	
Staladj:Crwvt	$\mid E(I) \mid$	-0.64	0.04	-0.72	-0.56	
Staladj:Crwvt	G(Ia)	0.10	0.04	0.02	0.19	
Staladj:Crwvt	P(I)	-0.32	0.02	-0.36	-0.28	
Staladj:Dp	$\mid E(I) \mid$	0.09	0.09	-0.08	0.26	
Staladj:Dp	G(Ia)	-0.19	0.05	-0.30	-0.09	
Staladj:Dp	P(I)	-0.05	0.03	-0.12	0.01	
Staladj:Ds	$\mid E(I) \mid$	-0.05	0.08	-0.21	0.10	
Staladj:Ds	G(Ia)	0.36	0.06	0.23	0.48	
Staladj:Ds	P(I)	0.13	0.03	0.06	0.19	
Staladj:Dps	E(I)	-0.05	0.08	-0.20	0.10	
Staladj:Dps	G(Ia)	0.35	0.06	0.22	0.47	
Staladj:Dps	P(I)	0.12	0.03	0.06	0.19	
Staladj:DpovDs	E(I)	0.18	0.14	-0.10	0.45	
Staladj:DpovDs	G(Ia)	-0.33	0.04	-0.42	-0.25	
Staladj:DpovDs	P(I)	-0.15	0.03	-0.22	-0.09	
Staladj:CVDp	E(I)	-0.14	0.07	-0.29	-0.00	
Staladj:CVDp	G(Ia)	0.05	0.07	-0.09	0.19	
Staladj:CVDp	P(I)	-0.07	0.03	-0.13	0.00	
Staladj:CVDs	E(I)	-0.18	0.07	-0.32	-0.05	
Staladj:CVDs	G(Ia)	-0.08	0.07	-0.23	0.07	
Staladj:CVDs	P(I)	-0.14	0.03	-0.21	-0.08	
Staladj:MaxDp	E(I)	0.10	0.08	-0.07	0.26	
Staladj:MaxDp	G(Ia)	-0.19	0.06	-0.30	-0.08	
Staladj:MaxDp	P(I)	-0.04	0.03	-0.11	0.02	
Staladj:MinDp	E(I)	0.22	0.06	0.10	0.35	
Staladj:MinDp	G(Ia)	-0.74	0.18	-1.09	-0.39	
Staladj:MinDp	P(I)	-0.01	0.03	-0.07	0.06	
Staladj:MaxDs	E(I)	-0.22	0.07	-0.35	-0.09	
Staladj:MaxDs	G(Ia)	0.19	0.09	0.01	0.37	
Staladj:MaxDs	P(I)	-0.08	0.03	-0.15	-0.02	
Staladj:MinDs	E(I)	-0.02	0.06	-0.14	0.10	
Staladj:MinDs	G(Ia)	0.19	0.16	-0.12	0.49	
Staladj:MinDs	P(I)	0.02	0.03	-0.04	0.09	
Staladj:SDDp	E(I)	-0.03	0.08	-0.19	0.12	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Staladj:SDDp	G(Ia)	-0.13	0.06	-0.24	-0.02		
Staladj:SDDp	P(I)	-0.08	0.03	-0.15	-0.01		
Staladj:SDDs	E(I)	-0.20	0.08	-0.35	-0.05		
Staladj:SDDs	G(Ia)	0.11	0.06	-0.02	0.23		
Staladj:SDDs	P(I)	-0.06	0.03	-0.13	0.00		
Staladj:SDD	E(I)	-0.19	0.08	-0.34	-0.04		
Staladj:SDD	G(Ia)	0.08	0.06	-0.04	0.20		
Staladj:SDD	P(I)	-0.07	0.03	-0.13	-0.00		
Staladj:CVD	E(I)	-0.18	0.07	-0.32	-0.04		
Staladj:CVD	G(Ia)	-0.10	0.07	-0.24	0.04		
Staladj:CVD	P(I)	-0.14	0.03	-0.21	-0.08		
Staladj:Gt30Dp	E(I)	0.07	0.08	-0.10	0.23		
Staladj:Gt30Dp	G(Ia)	-0.21	0.06	-0.32	-0.10		
Staladj:Gt30Dp	P(I)	-0.07	0.03	-0.13	-0.00		
Staladj:Gt30Ds	E(I)	-0.06	0.07	-0.20	0.08		
Staladj:Gt30Ds	G(Ia)	0.11	0.08	-0.04	0.26		
Staladj:Gt30Ds	P(I)	0.00	0.03	-0.06	0.07		
Staladj:Gt30D	E(I)	-0.05	0.07	-0.19	0.10		
Staladj:Gt30D	G(Ia)	0.05	0.07	-0.09	0.20		
Staladj:Gt30D	P(I)	-0.01	0.03	-0.07	0.06		
Staladj:Fnua	E(I)	-0.18	0.03	-0.23	-0.12		
Staladj:Fnua	G(Ia)	-0.15	0.04	-0.22	-0.07		
Staladj:Fnua	P(I)	-0.17	0.02	-0.20	-0.13		
Staladj:Fr	E(I)	-0.08	0.03	-0.14	-0.02		
Staladj:Fr	G(Ia)	-0.25	0.04	-0.32	-0.17		
Staladj:Fr	P(I)	-0.13	0.02	-0.17	-0.10		
Staladj:Fnt	E(I)	-0.07	0.03	-0.13	-0.01		
Staladj:Fnt	G(Ia)	-0.08	0.04	-0.16	-0.00		
Staladj:Fnt	P(I)	-0.07	0.02	-0.11	-0.04		
Staladj:Sarea	E(I)	0.23	0.03	0.17	0.29		
Staladj:Sarea	G(Ia)	0.12	0.03	0.05	0.18		
Staladj:Sarea	P(I)	0.19	0.02	0.16	0.23		
Staladj:Fd	E(I)	0.15	0.03	0.10	0.21		
Staladj:Fd	G(Ia)	0.42	0.06	0.32	0.53		
Staladj:Fd	P(I)	0.22	0.02	0.18	0.25		
Staladj:Fc	E(I)	-0.02	0.05	-0.11	0.07		
Staladj:Fc	G(Ia)	-0.40	0.03	-0.46	-0.34		
Staladj:Fc	P(I)	-0.19	0.02	-0.22	-0.15		
Staladj:Fu	E(I)	-0.09	0.03	-0.16	-0.02		
Staladj:Fu	G(Ia)	-0.33	0.04	-0.41	-0.25		
Staladj:Fu	P(I)	-0.17	0.02	-0.21	-0.13		
Staladj:Colour	E(I)	-0.12	0.03	-0.17	-0.06		
Staladj:Colour	G(Ia)	0.02	0.05	-0.07	0.12		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Staladj:Colour	P(I)	-0.08	0.02	-0.11	-0.04		
Staladj:Fly	E(I)	0.11	0.03	0.05	0.16		
Staladj:Fly	G(Ia)	-0.46	0.07	-0.60	-0.32		
Staladj:Fly	P(I)	-0.00	0.02	-0.04	0.03		
Staladj:Flcrot	E(I)	0.00	0.03	-0.05	0.06		
Staladj:Flcrot	G(Ia)	-0.14	0.10	-0.34	0.07		
Staladj:Flcrot	P(I)	-0.01	0.02	-0.05	0.02		
Staladj:Bactst	E(I)	-0.05	0.03	-0.12	0.01		
Staladj:Bactst	G(Ia)	-0.51	0.11	-0.74	-0.29		
Staladj:Bactst	P(I)	-0.12	0.02	-0.16	-0.08		
Staladj:MycD	E(I)	0.03	0.03	-0.03	0.10		
Staladj:MycD	G(Ia)	-0.29	0.14	-0.56	-0.01		
Staladj:MycD	P(I)	-0.01	0.02	-0.05	0.03		
Staladj:Bcts	E(I)	0.40	0.06	0.28	0.52		
Staladj:Bcts	G(Ia)	-0.19	0.02	-0.23	-0.14		
Staladj:Bcts	P(I)	0.04	0.02	0.00	0.07		
Staladj:Bctb	E(I)	0.40	0.06	0.29	0.51		
Staladj:Bctb	G(Ia)	-0.22	0.02	-0.27	-0.18		
Staladj:Bctb	P(I)	0.03	0.02	-0.00	0.06		
Staladj:Weanwt	E(I)	0.10	0.03	0.03	0.16		
Staladj:Weanwt	G(Ia)	0.00	0.03	-0.07	0.07		
Staladj:Weanwt	P(I)	0.06	0.02	0.03	0.10		
Staladj:NLB	E(I)	-0.04	0.03	-0.10	0.01		
Staladj:NLB	G(Ia)	0.29	0.04	0.20	0.37		
Staladj:NLB	P(I)	0.05	0.02	0.01	0.08		
Staladj:NLW	E(I)	0.03	0.03	-0.03	0.08		
Staladj:NLW	G(Ia)	0.14	0.04	0.06	0.22		
Staladj:NLW	P(I)	0.06	0.02	0.03	0.09		
Staladj:Fnpua	E(I)	-0.09	0.03	-0.15	-0.03		
Staladj:Fnpua	G(Ia)	0.09	0.05	0.00	0.18		
Staladj:Fnpua	P(I)	-0.04	0.02	-0.07	-0.01		
Staladj:Fnsua	E(I)	-0.17	0.03	-0.23	-0.12		
Staladj:Fnsua	G(Ia)	-0.16	0.04	-0.23	-0.08		
Staladj:Fnsua	P(I)	-0.17	0.02	-0.20	-0.13		
Staladj:Fnpt	E(I)	0.01	0.03	-0.05	0.07		
Staladj:Fnpt	G(Ia)	0.15	0.04	0.07	0.23		
Staladj:Fnpt	P(I)	0.05	0.02	0.01	0.08		
Staladj:Fnst	E(I)	-0.07	0.03	-0.13	-0.01		
Staladj:Fnst	G(Ia)	-0.09	0.04	-0.16	-0.01		
Staladj:Fnst	P(I)	-0.08	0.02	-0.11	-0.04		
Gfwadj:Stal	E(I)	0.14	0.03	0.09	0.20		
Gfwadj:Stal	G(Ia)	0.51	0.03	0.45	0.56		
Gfwadj:Stal	P(I)	0.27	0.02	0.24	0.30		

Table 24 – Continued from previous page

Traitpair	$\frac{\text{de } 24 - Contin}{\text{Component}}$	Estimate	StdErr	CI95lo	CI95hi
Gfwadj:Diam	E(I)	0.29	0.03	0.23	0.35
Gfwadj:Diam Gfwadj:Diam	G(Ia)	0.55	0.03	0.50	0.60
Gfwadj:Diam Gfwadj:Diam	P(I)	0.39	0.02	0.36	0.42
Gfwadj:Bwt	E(I)	0.53	0.01	0.30	0.42
Gfwadj:Bwt	G(Ia)	0.33	0.03	0.48	0.38
Gfwadj:Bwt	P(I)	0.43	0.03	0.40	0.25
Gfwadj:WrN	E(I)	0.28	0.01	0.40	0.43
Gfwadj:WrN	G(Ia)	0.28	0.03	0.22	0.43
Gfwadj:WrN	P(I)	0.37	0.03	0.32	0.45
Gfwadj:WrB	E(I)	0.32	0.02	0.26	0.37
Gfwadj:WrB	G(Ia)	0.32 0.33	0.03	0.20	0.37
Gfwadj:WrB	P(I)	0.33 0.32	0.03	0.27	0.35
Gfwadj:WrT	E(I)	0.32	0.02	0.29	0.33
Gfwadj:WrT	G(Ia)	0.34	0.03	0.28	0.40
Gfwadj:WrT	P(I)	0.34	0.03	0.30	0.41
Gfwadj:Face	E(I)	-0.10	0.01	-0.18	-0.01
Gfwadj:Face Gfwadj:Face	G(Ia)	-0.10	0.04	-0.10	-0.01
Gfwadj:Face Gfwadj:Face	P(I)	-0.07	0.02	-0.10	-0.01
Gfwadj:Face Gfwadj:Gfw	E(I)	0.98	0.02	0.97	0.99
Gfwadj:Gfw	G(Ia)	1.00	0.00	0.99	1.00
Gfwadj:Gfw	P(I)	0.99	0.00	0.99	0.99
Gfwadj:Yld	E(I)	-0.09	0.00	-0.16	-0.03
Gfwadj:Yld	G(Ia)	-0.09	0.03	-0.10	-0.03
Gfwadj:Yld	P(I)	-0.31	0.03	-0.37	-0.20
Gfwadj: Cww	E(I)	0.89	0.02	0.87	0.13
Gfwadj:Cww	G(Ia)	0.85	0.01	0.87	0.91
Gfwadj:Cww	P(I)	0.88	0.01	0.87	0.89
Gfwadj:Staladj	E(I)	0.00	0.01	0.37	0.39
Gfwadj:Staladj Gfwadj:Staladj	G(Ia)	$0.19 \\ 0.52$	0.03	0.13	0.24
Gfwadj:Staladj Gfwadj:Staladj	P(I)	$0.32 \\ 0.31$	0.03	0.47	0.34
Gfwadj:Gfwadj	E(I)	1.00	0.02	1.00	1.00
Gfwadj:Gfwadj	G(Ia)	1.00	0.00	1.00	1.00
Gfwadj:Gfwadj	P(I)	1.00	0.00	1.00	1.00
Gfwadj:Cwwadj	E(I)	0.92	0.00	0.90	0.94
Gfwadj:Cwwadj	G(Ia)	0.92	0.01	0.84	0.89
Gfwadj:Cwwadj Gfwadj:Cwwadj	P(I)	0.87	0.01	0.89	0.89
Gfwadj:Crimp	E(I)	0.55	0.01	0.04	1.06
Gfwadj:Crimp	G(Ia)	-0.59	0.20	-0.64	-0.54
Gfwadj:Crimp Gfwadj:Crimp	P(I)	-0.39	0.03	-0.04	-0.34
Gfwadj:Crwvl	E(I)	-0.24	0.02	-0.27	-0.20
Gfwadj:Crwvl	G(Ia)	0.59	0.03	0.52	0.65
Gfwadj:Crwvl	P(I)	-0.09	0.03	-0.12	-0.05
Gfwadj:Crst	E(I)	0.45	0.02	0.35	0.55
Giwauj. Cist	12(1)	0.40	Continued of	0.00	0.00

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gfwadj:Crst	G(Ia)	-0.39	0.03	-0.46	-0.32		
Gfwadj:Crst	P(I)	0.04	0.02	0.00	0.07		
Gfwadj:Crstadj	E(I)	0.45	0.05	0.36	0.54		
Gfwadj:Crstadj	G(Ia)	-0.39	0.04	-0.46	-0.32		
Gfwadj:Crstadj	P(I)	0.05	0.02	0.02	0.09		
Gfwadj:Crwvt	E(I)	-0.51	0.04	-0.59	-0.44		
Gfwadj:Crwvt	G(Ia)	0.35	0.04	0.27	0.43		
Gfwadj:Crwvt	P(I)	-0.17	0.02	-0.20	-0.14		
Gfwadj:Dp	E(I)	0.20	0.08	0.05	0.34		
Gfwadj:Dp	G(Ia)	0.02	0.06	-0.10	0.13		
Gfwadj:Dp	P(I)	0.11	0.03	0.05	0.18		
Gfwadj:Ds	E(I)	-0.07	0.07	-0.21	0.07		
Gfwadj:Ds	G(Ia)	0.71	0.06	0.58	0.83		
Gfwadj:Ds	P(I)	0.24	0.03	0.18	0.30		
Gfwadj:Dps	E(I)	-0.06	0.07	-0.20	0.08		
Gfwadj:Dps	G(Ia)	0.71	0.07	0.58	0.85		
Gfwadj:Dps	P(I)	0.24	0.03	0.18	0.31		
Gfwadj:DpovDs	E(I)	0.39	0.13	0.14	0.64		
Gfwadj:DpovDs	G(Ia)	-0.32	0.05	-0.42	-0.23		
Gfwadj:DpovDs	P(I)	-0.05	0.03	-0.11	0.01		
Gfwadj:CVDp	E(I)	0.00	0.06	-0.11	0.12		
Gfwadj:CVDp	G(Ia)	0.15	0.08	0.00	0.30		
Gfwadj:CVDp	P(I)	0.06	0.03	-0.01	0.12		
Gfwadj:CVDs	E(I)	-0.02	0.06	-0.14	0.10		
Gfwadj:CVDs	G(Ia)	0.04	0.08	-0.12	0.20		
Gfwadj:CVDs	P(I)	-0.00	0.03	-0.07	0.06		
Gfwadj:MaxDp	E(I)	0.13	0.07	-0.02	0.27		
Gfwadj:MaxDp	G(Ia)	0.03	0.06	-0.09	0.15		
Gfwadj:MaxDp	P(I)	0.08	0.03	0.02	0.15		
Gfwadj:MinDp	E(I)	0.10	0.06	-0.01	0.21		
Gfwadj:MinDp	G(Ia)	-0.06	0.15	-0.35	0.23		
Gfwadj:MinDp	P(I)	0.06	0.03	-0.00	0.13		
Gfwadj:MaxDs	E(I)	0.01	0.06	-0.10	0.13		
Gfwadj:MaxDs	G(Ia)	0.63	0.10	0.44	0.82		
Gfwadj:MaxDs	P(I)	0.19	0.03	0.13	0.25		
Gfwadj:MinDs	E(I)	0.04	0.05	-0.06	0.15		
Gfwadj:MinDs	G(Ia)	0.34	0.17	0.01	0.67		
Gfwadj:MinDs	P(I)	0.09	0.03	0.03	0.15		
Gfwadj:SDDp	E(I)	0.13	0.07	-0.01	0.27		
Gfwadj:SDDp	G(Ia)	0.03	0.06	-0.09	0.15		
Gfwadj:SDDp	P(I)	0.09	0.03	0.02	0.15		
Gfwadj:SDDs	E(I)	-0.05	0.07	-0.19	0.09		
Gfwadj:SDDs	G(Ia)	0.41	0.07	0.28	0.54		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gfwadj:SDDs	P(I)	0.14	0.03	0.07	0.20		
Gfwadj:SDD	E(I)	-0.03	0.07	-0.17	0.11		
Gfwadj:SDD	G(Ia)	0.39	0.06	0.26	0.51		
Gfwadj:SDD	P(I)	0.14	0.03	0.08	0.20		
Gfwadj:CVD	E(I)	-0.01	0.06	-0.14	0.11		
Gfwadj:CVD	G(Ia)	0.02	0.08	-0.13	0.18		
Gfwadj:CVD	P(I)	0.00	0.03	-0.06	0.07		
Gfwadj:Gt30Dp	E(I)	0.15	0.07	0.01	0.29		
Gfwadj:Gt30Dp	G(Ia)	0.00	0.05	-0.10	0.11		
Gfwadj:Gt30Dp	P(I)	0.08	0.03	0.02	0.15		
Gfwadj:Gt30Ds	E(I)	0.01	0.06	-0.10	0.12		
Gfwadj:Gt30Ds	G(Ia)	0.56	0.08	0.40	0.71		
Gfwadj:Gt30Ds	P(I)	0.20	0.03	0.13	0.26		
Gfwadj:Gt30D	E(I)	0.03	0.06	-0.09	0.16		
Gfwadj:Gt30D	G(Ia)	0.50	0.08	0.35	0.64		
Gfwadj:Gt30D	P(I)	0.19	0.03	0.13	0.26		
Gfwadj:Fnua	E(I)	-0.03	0.03	-0.09	0.03		
Gfwadj:Fnua	G(Ia)	-0.21	0.04	-0.28	-0.14		
Gfwadj:Fnua	P(I)	-0.09	0.02	-0.12	-0.05		
Gfwadj:Fr	E(I)	0.18	0.03	0.12	0.24		
Gfwadj:Fr	G(Ia)	0.02	0.04	-0.05	0.09		
Gfwadj:Fr	P(I)	0.13	0.02	0.09	0.16		
Gfwadj:Fnt	E(I)	0.20	0.03	0.14	0.26		
Gfwadj:Fnt	G(Ia)	-0.11	0.04	-0.19	-0.04		
Gfwadj:Fnt	P(I)	0.10	0.02	0.07	0.13		
Gfwadj:Sarea	E(I)	0.53	0.03	0.48	0.59		
Gfwadj:Sarea	G(Ia)	0.23	0.03	0.17	0.29		
Gfwadj:Sarea	P(I)	0.42	0.02	0.39	0.45		
Gfwadj:Fd	E(I)	0.15	0.03	0.09	0.21		
Gfwadj:Fd	G(Ia)	0.50	0.05	0.40	0.60		
Gfwadj:Fd	P(I)	0.24	0.02	0.20	0.27		
Gfwadj:Fc	E(I)	0.31	0.05	0.22	0.40		
Gfwadj:Fc	G(Ia)	-0.11	0.03	-0.17	-0.05		
Gfwadj:Fc	P(I)	0.11	0.02	0.07	0.14		
Gfwadj:Fu	E(I)	0.20	0.04	0.13	0.27		
Gfwadj:Fu	G(Ia)	0.03	0.04	-0.04	0.11		
Gfwadj:Fu	P(I)	0.14	0.02	0.11	0.18		
Gfwadj:Colour	E(I)	-0.03	0.03	-0.08	0.03		
Gfwadj:Colour	G(Ia)	0.24	0.05	0.15	0.33		
Gfwadj:Colour	P(I)	0.04	0.02	0.01	0.08		
Gfwadj:Fly	E(I)	0.07	0.03	0.02	0.12		
Gfwadj:Fly	G(Ia)	-0.31	0.07	-0.44	-0.18		
Gfwadj:Fly	P(I)	-0.00	0.02	-0.04	0.03		

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
Gfwadj:Flcrot	E(I)	0.01	0.03	-0.04	0.06
Gfwadj:Flcrot	G(Ia)	-0.15	0.10	-0.35	0.06
Gfwadj:Flcrot	P(I)	-0.01	0.02	-0.04	0.02
Gfwadj:Bactst	E(I)	-0.01	0.02	-0.08	0.05
Gfwadj:Bactst	G(Ia)	-0.24	0.11	-0.44	-0.03
Gfwadj:Bactst	P(I)	-0.05	0.02	-0.09	-0.00
Gfwadj:MycD	E(I)	0.02	0.03	-0.04	0.09
Gfwadj:MycD	G(Ia)	0.36	0.15	0.07	0.65
Gfwadj:MycD	P(I)	0.06	0.02	0.02	0.10
Gfwadj:Bcts	E(I)	0.30	0.06	0.18	0.41
Gfwadj:Bcts	G(Ia)	-0.08	0.02	-0.12	-0.03
Gfwadj:Bcts	P(I)	0.07	0.02	0.03	0.10
Gfwadj:Bctb	E(I)	0.33	0.05	0.22	0.43
Gfwadj:Bctb	G(Ia)	-0.11	0.02	-0.15	-0.06
Gfwadj:Bctb	P(I)	0.07	0.02	0.04	0.11
Gfwadj:Weanwt	E(I)	0.45	0.03	0.39	0.50
Gfwadj:Weanwt	G(Ia)	0.14	0.04	0.06	0.23
Gfwadj:Weanwt	P(I)	0.35	0.02	0.32	0.39
Gfwadj:NLB	E(I)	-0.24	0.03	-0.29	-0.19
Gfwadj:NLB	G(Ia)	0.13	0.04	0.04	0.21
Gfwadj:NLB	P(I)	-0.14	0.02	-0.17	-0.11
Gfwadj:NLW	E(I)	-0.22	0.03	-0.27	-0.16
Gfwadj:NLW	G(Ia)	0.08	0.04	-0.00	0.16
Gfwadj:NLW	P(I)	-0.13	0.02	-0.16	-0.10
Gfwadj:Fnpua	E(I)	-0.21	0.03	-0.27	-0.16
Gfwadj:Fnpua	G(Ia)	-0.20	0.04	-0.28	-0.11
Gfwadj:Fnpua	P(I)	-0.21	0.02	-0.24	-0.17
Gfwadj:Fnsua	E(I)	-0.02	0.03	-0.08	0.04
Gfwadj:Fnsua	G(Ia)	-0.20	0.04	-0.28	-0.13
Gfwadj:Fnsua	P(I)	-0.08	0.02	-0.11	-0.04
Gfwadj:Fnpt	E(I)	-0.00	0.03	-0.06	0.06
Gfwadj:Fnpt	G(Ia)	-0.08	0.04	-0.16	0.00
Gfwadj:Fnpt	P(I)	-0.02	0.02	-0.06	0.01
Gfwadj:Fnst	E(I)	0.21	0.03	0.15	0.27
Gfwadj:Fnst	G(Ia)	-0.11	0.04	-0.18	-0.04
Gfwadj:Fnst	P(I)	0.10	0.02	0.07	0.14
Cwwadj:Stal	E(I)	0.28	0.03	0.23	0.33
Cwwadj:Stal	G(Ia)	0.58	0.03	0.52	0.63
Cwwadj:Stal	P(I)	0.38	0.01	0.35	0.41
Cwwadj:Diam	E(I)	0.26	0.03	0.20	0.31
Cwwadj:Diam	G(Ia)	0.48	0.03	0.43	0.53
Cwwadj:Diam	P(I)	0.34	0.01	0.31	0.37
Cwwadj:Bwt	E(I)	0.52	Continued of	0.47	0.57

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Cwwadj:Bwt	G(Ia)	0.26	0.03	0.20	0.32	
Cwwadj:Bwt	P(I)	0.43	0.01	0.40	0.46	
Cwwadj:WrN	E(I)	0.20	0.03	0.14	0.26	
Cwwadj:WrN	G(Ia)	0.22	0.03	0.16	0.28	
Cwwadj:WrN	P(I)	0.21	0.02	0.18	0.24	
Cwwadj:WrB	E(I)	0.23	0.03	0.17	0.29	
Cwwadj:WrB	G(Ia)	0.14	0.03	0.08	0.20	
Cwwadj:WrB	P(I)	0.20	0.02	0.17	0.23	
Cwwadj:WrT	E(I)	0.25	0.03	0.19	0.31	
Cwwadj:WrT	G(Ia)	0.18	0.03	0.12	0.24	
Cwwadj:WrT	P(I)	0.22	0.02	0.19	0.25	
Cwwadj:Face	E(I)	-0.04	0.04	-0.12	0.05	
Cwwadj:Face	G(Ia)	-0.18	0.02	-0.22	-0.13	
Cwwadj:Face	P(I)	-0.10	0.02	-0.13	-0.07	
Cwwadj:Gfw	E(I)	0.90	0.01	0.88	0.92	
Cwwadj:Gfw	G(Ia)	0.88	0.01	0.86	0.90	
Cwwadj:Gfw	P(I)	0.89	0.01	0.88	0.91	
Cwwadj:Yld	E(I)	0.29	0.03	0.23	0.35	
Cwwadj:Yld	G(Ia)	0.20	0.03	0.14	0.25	
Cwwadj:Yld	P(I)	0.25	0.02	0.22	0.28	
Cwwadj:Cww	E(I)	0.98	0.00	0.97	0.99	
Cwwadj:Cww	G(Ia)	1.00	0.00	0.99	1.01	
Cwwadj:Cww	P(I)	0.99	0.00	0.98	0.99	
Cwwadj:Staladj	E(I)	0.32	0.03	0.27	0.37	
Cwwadj:Staladj	G(Ia)	0.58	0.03	0.52	0.63	
Cwwadj:Staladj	P(I)	0.41	0.01	0.38	0.44	
Cwwadj:Gfwadj	E(I)	0.92	0.01	0.90	0.94	
Cwwadj:Gfwadj	G(Ia)	0.87	0.01	0.84	0.89	
Cwwadj:Gfwadj	P(I)	0.90	0.01	0.89	0.91	
Cwwadj:Cwwadj	E(I)	1.00	0.00	1.00	1.00	
Cwwadj:Cwwadj	G(Ia)	1.00	0.00	1.00	1.00	
Cwwadj:Cwwadj	P(I)	1.00	0.00	1.00	1.00	
Cwwadj:Crimp	E(I)	0.56	0.29	-0.01	1.13	
Cwwadj:Crimp	G(Ia)	-0.68	0.02	-0.73	-0.63	
Cwwadj:Crimp	P(I)	-0.32	0.02	-0.35	-0.28	
Cwwadj:Crwvl	E(I)	-0.50	0.05	-0.60	-0.41	
Cwwadj:Crwvl	G(Ia)	0.68	0.03	0.62	0.75	
Cwwadj:Crwvl	P(I)	0.04	0.02	0.01	0.08	
Cwwadj:Crst	E(I)	0.54	0.06	0.43	0.66	
Cwwadj:Crst	G(Ia)	-0.50	0.03	-0.56	-0.43	
Cwwadj:Crst	P(I)	-0.00	0.02	-0.04	0.04	
Cwwadj:Crstadj	E(I)	0.52	0.05	0.42	0.63	
Cwwadj:Crstadj	G(Ia)	-0.50	0.03	-0.57	-0.44	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Cwwadj:Crstadj	P(I)	0.01	0.02	-0.02	0.05	
Cwwadj:Crwvt	E(I)	-0.54	0.04	-0.62	-0.45	
Cwwadj:Crwvt	G(Ia)	0.47	0.04	0.40	0.55	
Cwwadj:Crwvt	P(I)	-0.11	0.02	-0.15	-0.07	
Cwwadj:Dp	E(I)	0.19	0.08	0.04	0.34	
Cwwadj:Dp	G(Ia)	-0.04	0.06	-0.16	0.08	
Cwwadj:Dp	P(I)	0.08	0.03	0.02	0.15	
Cwwadj:Ds	E(I)	-0.11	0.07	-0.26	0.03	
Cwwadj:Ds	G(Ia)	0.69	0.07	0.56	0.82	
Cwwadj:Ds	P(I)	0.21	0.03	0.15	0.28	
Cwwadj:Dps	E(I)	-0.10	0.07	-0.24	0.05	
Cwwadj:Dps	G(Ia)	0.69	0.07	0.55	0.82	
Cwwadj:Dps	P(I)	0.21	0.03	0.15	0.28	
Cwwadj:DpovDs	E(I)	0.42	0.13	0.15	0.68	
Cwwadj:DpovDs	G(Ia)	-0.36	0.05	-0.46	-0.27	
Cwwadj:DpovDs	P(I)	-0.07	0.03	-0.13	-0.00	
Cwwadj:CVDp	E(I)	-0.02	0.07	-0.16	0.11	
Cwwadj:CVDp	G(Ia)	0.03	0.08	-0.13	0.18	
Cwwadj:CVDp	P(I)	-0.01	0.03	-0.07	0.06	
Cwwadj:CVDs	E(I)	-0.05	0.07	-0.18	0.08	
Cwwadj:CVDs	G(Ia)	-0.07	0.08	-0.23	0.10	
Cwwadj:CVDs	P(I)	-0.06	0.03	-0.12	0.01	
Cwwadj:MaxDp	E(I)	0.11	0.08	-0.04	0.26	
Cwwadj:MaxDp	G(Ia)	-0.03	0.06	-0.15	0.09	
Cwwadj:MaxDp	P(I)	0.05	0.03	-0.02	0.11	
Cwwadj:MinDp	E(I)	0.13	0.06	0.01	0.24	
Cwwadj:MinDp	G(Ia)	-0.07	0.15	-0.37	0.23	
Cwwadj:MinDp	P(I)	0.08	0.03	0.01	0.14	
Cwwadj:MaxDs	E(I)	-0.04	0.06	-0.17	0.08	
Cwwadj:MaxDs	G(Ia)	0.51	0.10	0.32	0.71	
Cwwadj:MaxDs	P(I)	0.12	0.03	0.05	0.19	
Cwwadj:MinDs	E(I)	0.05	0.06	-0.06	0.16	
Cwwadj:MinDs	G(Ia)	0.29	0.17	-0.04	0.62	
Cwwadj:MinDs	P(I)	0.09	0.03	0.02	0.16	
Cwwadj:SDDp	E(I)	0.10	0.08	-0.05	0.25	
Cwwadj:SDDp	G(Ia)	-0.06	0.06	-0.19	0.06	
Cwwadj:SDDp	P(I)	0.03	0.03	-0.04	0.09	
Cwwadj:SDDs	E(I)	-0.12	0.07	-0.26	0.02	
Cwwadj:SDDs	G(Ia)	0.32	0.07	0.19	0.46	
Cwwadj:SDDs	P(I)	0.06	0.03	-0.00	0.13	
Cwwadj:SDD	E(I)	-0.10	0.07	-0.25	0.04	
Cwwadj:SDD	G(Ia)	0.29	0.07	0.16	0.42	
Cwwadj:SDD	P(I)	0.06	0.03	-0.00	0.13	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Cwwadj:CVD	E(I)	-0.04	0.07	-0.17	0.09		
Cwwadj:CVD	G(Ia)	-0.08	0.08	-0.24	0.07		
Cwwadj:CVD	P(I)	-0.06	0.03	-0.12	0.01		
Cwwadj:Gt30Dp	E(I)	0.17	0.08	0.02	0.32		
Cwwadj:Gt30Dp	G(Ia)	-0.09	0.06	-0.22	0.03		
Cwwadj:Gt30Dp	P(I)	0.05	0.03	-0.01	0.12		
Cwwadj:Gt30Ds	E(I)	-0.04	0.07	-0.17	0.09		
Cwwadj:Gt30Ds	G(Ia)	0.48	0.08	0.31	0.64		
Cwwadj:Gt30Ds	P(I)	0.14	0.03	0.07	0.20		
Cwwadj:Gt30D	E(I)	-0.01	0.07	-0.15	0.14		
Cwwadj:Gt30D	G(Ia)	0.38	0.08	0.23	0.54		
Cwwadj:Gt30D	P(I)	0.13	0.03	0.07	0.20		
Cwwadj:Fnua	E(I)	-0.04	0.03	-0.10	0.02		
Cwwadj:Fnua	G(Ia)	-0.02	0.04	-0.09	0.06		
Cwwadj:Fnua	P(I)	-0.03	0.02	-0.07	0.00		
Cwwadj:Fr	E(I)	0.18	0.03	0.12	0.24		
Cwwadj:Fr	G(Ia)	0.07	0.04	-0.01	0.14		
Cwwadj:Fr	P(I)	0.15	0.02	0.11	0.18		
Cwwadj:Fnt	E(I)	0.20	0.03	0.14	0.26		
Cwwadj:Fnt	G(Ia)	0.09	0.04	0.01	0.16		
Cwwadj:Fnt	P(I)	0.16	0.02	0.13	0.20		
Cwwadj:Sarea	E(I)	0.54	0.03	0.48	0.59		
Cwwadj:Sarea	G(Ia)	0.22	0.03	0.16	0.29		
Cwwadj:Sarea	P(I)	0.43	0.02	0.40	0.46		
Cwwadj:Fd	E(I)	0.14	0.03	0.08	0.20		
Cwwadj:Fd	G(Ia)	0.43	0.06	0.32	0.54		
Cwwadj:Fd	P(I)	0.21	0.02	0.17	0.24		
Cwwadj:Fc	E(I)	0.20	0.05	0.11	0.29		
Cwwadj:Fc	G(Ia)	-0.35	0.03	-0.41	-0.29		
Cwwadj:Fc	P(I)	-0.06	0.02	-0.09	-0.02		
Cwwadj:Fu	E(I)	0.11	0.04	0.04	0.18		
Cwwadj:Fu	G(Ia)	-0.21	0.04	-0.29	-0.12		
Cwwadj:Fu	P(I)	0.00	0.02	-0.04	0.04		
Cwwadj:Colour	E(I)	-0.06	0.03	-0.12	-0.01		
Cwwadj:Colour	G(Ia)	0.11	0.05	0.02	0.21		
Cwwadj:Colour	P(I)	-0.02	0.02	-0.05	0.01		
Cwwadj:Fly	E(I)	0.07	0.03	0.01	0.12		
Cwwadj:Fly	G(Ia)	-0.31	0.07	-0.45	-0.17		
Cwwadj:Fly	P(I)	-0.00	0.02	-0.04	0.03		
Cwwadj:Flcrot	E(I)	0.01	0.03	-0.04	0.06		
Cwwadj:Flcrot	G(Ia)	-0.00	0.11	-0.22	0.21		
Cwwadj:Flcrot	P(I)	0.00	0.02	-0.03	0.04		
Cwwadj:Bactst	E(I)	-0.00	0.03	-0.07	0.06		

Table 24 – Continued from previous page

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Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Cwwadj:Bactst	G(Ia)	-0.08	0.11	-0.30	0.14
Cwwadj:Bactst	P(I)	-0.01	0.02	-0.06	0.03
Cwwadj:MycD	E(I)	0.06	0.03	0.00	0.13
Cwwadj:MycD	G(Ia)	0.16	0.14	-0.12	0.43
Cwwadj:MycD	P(I)	0.07	0.02	0.03	0.11
Cwwadj:Bcts	E(I)	0.30	0.06	0.18	0.41
Cwwadj:Bcts	G(Ia)	-0.11	0.03	-0.16	-0.06
Cwwadj:Bcts	P(I)	0.06	0.02	0.02	0.09
Cwwadj:Bctb	E(I)	0.31	0.05	0.21	0.42
Cwwadj:Bctb	G(Ia)	-0.13	0.03	-0.19	-0.08
Cwwadj:Bctb	P(I)	0.06	0.02	0.03	0.10
Cwwadj:Weanwt	E(I)	0.46	0.03	0.41	0.51
Cwwadj:Weanwt	G(Ia)	0.12	0.04	0.03	0.21
Cwwadj:Weanwt	P(I)	0.36	0.02	0.33	0.40
Cwwadj:NLB	E(I)	-0.25	0.03	-0.30	-0.20
Cwwadj:NLB	G(Ia)	0.15	0.04	0.06	0.24
Cwwadj:NLB	P(I)	-0.14	0.02	-0.18	-0.11
Cwwadj:NLW	E(I)	-0.22	0.03	-0.27	-0.17
Cwwadj:NLW	G(Ia)	0.09	0.04	0.01	0.18
Cwwadj:NLW	P(I)	-0.14	0.02	-0.17	-0.10
Cwwadj:Fnpua	E(I)	-0.22	0.03	-0.28	-0.17
Cwwadj:Fnpua	G(Ia)	-0.05	0.04	-0.13	0.04
Cwwadj:Fnpua	P(I)	-0.17	0.02	-0.21	-0.14
Cwwadj:Fnsua	E(I)	-0.03	0.03	-0.09	0.03
Cwwadj:Fnsua	G(Ia)	-0.01	0.04	-0.09	0.06
Cwwadj:Fnsua	P(I)	-0.02	0.02	-0.06	0.01
Cwwadj:Fnpt	E(I)	-0.01	0.03	-0.06	0.05
Cwwadj:Fnpt	G(Ia)	0.06	0.04	-0.02	0.14
Cwwadj:Fnpt	P(I)	0.01	0.02	-0.02	0.05
Cwwadj:Fnst	E(I)	0.20	0.03	0.14	0.26
Cwwadj:Fnst	G(Ia)	0.09	0.04	0.01	0.16
Cwwadj:Fnst	P(I)	0.16	0.02	0.13	0.20
Crimp:Stal	E(I)	0.41	0.21	-0.00	0.82
Crimp:Stal	G(Ia)	-0.58	0.03	-0.63	-0.53
Crimp:Stal	P(I)	-0.28	0.02	-0.32	-0.24
Crimp:Diam	E(I)	0.33	0.18	-0.03	0.68
Crimp:Diam	G(Ia)	-0.44	0.03	-0.49	-0.38
Crimp:Diam	P(I)	-0.20	0.02	-0.23	-0.16
Crimp:Bwt	E(I)	0.66	0.21	0.24	1.07
Crimp:Bwt	G(Ia)	-0.21	0.03	-0.26	-0.15
Crimp:Bwt	P(I)	-0.00	0.02	-0.04	0.04
Crimp:WrN	E(I)	-0.06	0.11	-0.27	0.15
Crimp:WrN	G(Ia)	0.32	0.03	0.26	0.39

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Crimp:WrN	P(I)	0.15	0.02	0.11	0.19	
Crimp:WrB	E(I)	-0.29	0.12	-0.52	-0.06	
Crimp:WrB	G(Ia)	0.54	0.03	0.48	0.60	
Crimp:WrB	P(I)	0.23	0.02	0.19	0.27	
Crimp:WrT	E(I)	-0.23	0.12	-0.46	-0.00	
Crimp:WrT	G(Ia)	0.46	0.03	0.40	0.51	
Crimp:WrT	P(I)	0.20	0.02	0.17	0.24	
Crimp:Face	E(I)	-0.79	0.19	-1.15	-0.42	
Crimp:Face	G(Ia)	0.45	0.02	0.41	0.49	
Crimp:Face	P(I)	0.22	0.02	0.18	0.25	
Crimp:Gfw	E(I)	0.65	0.24	0.18	1.12	
Crimp:Gfw	G(Ia)	-0.60	0.03	-0.66	-0.55	
Crimp:Gfw	P(I)	-0.23	0.02	-0.26	-0.20	
Crimp:Yld	E(I)	-0.39	0.16	-0.70	-0.08	
Crimp:Yld	G(Ia)	-0.36	0.03	-0.41	-0.30	
Crimp:Yld	P(I)	-0.27	0.02	-0.30	-0.23	
Crimp:Cww	E(I)	0.50	0.22	0.06	0.94	
Crimp:Cww	G(Ia)	-0.68	0.02	-0.73	-0.64	
Crimp:Cww	P(I)	-0.32	0.02	-0.35	-0.29	
Crimp:Staladj	E(I)	0.32	0.25	-0.18	0.82	
Crimp:Staladj	G(Ia)	-0.53	0.03	-0.58	-0.48	
Crimp:Staladj	P(I)	-0.27	0.02	-0.30	-0.23	
Crimp:Gfwadj	E(I)	0.55	0.26	0.04	1.06	
Crimp:Gfwadj	G(Ia)	-0.59	0.03	-0.64	-0.54	
Crimp:Gfwadj	P(I)	-0.24	0.02	-0.27	-0.20	
Crimp:Cwwadj	E(I)	0.56	0.29	-0.01	1.13	
Crimp:Cwwadj	G(Ia)	-0.68	0.02	-0.73	-0.63	
Crimp:Cwwadj	P(I)	-0.32	0.02	-0.35	-0.28	
Crimp:Crimp	E(I)	1.00	0.00	1.00	1.00	
Crimp:Crimp	G(Ia)	1.00	0.00	1.00	1.00	
Crimp:Crimp	P(I)	1.00	0.00	1.00	1.00	
Crimp:Crwvl	E(I)	-0.63	0.06	-0.75	-0.51	
Crimp:Crwvl	G(Ia)	-0.99	0.01	-1.00	-0.98	
Crimp:Crwvl	P(I)	-0.81	0.01	-0.82	-0.80	
Crimp:Crst	E(I)	0.50	0.12	0.26	0.74	
Crimp:Crst	G(Ia)	0.92	0.01	0.90	0.94	
Crimp:Crst	P(I)	0.79	0.01	0.77	0.81	
Crimp:Crstadj	E(I)	0.69	0.13	0.44	0.94	
Crimp:Crstadj	G(Ia)	0.92	0.01	0.90	0.94	
Crimp:Crstadj	P(I)	0.79	0.01	0.77	0.81	
Crimp:Crwvt	E(I)	-0.66	0.14	-0.93	-0.40	
Crimp:Crwvt	G(Ia)	-0.89	0.01	-0.92	-0.87	
Crimp:Crwvt	P(I)	-0.69	0.01	-0.71	-0.67	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Crimp:Dp	E(I)	0.12	0.16	-0.19	0.44	
Crimp:Dp	G(Ia)	-0.49	0.09	-0.67	-0.31	
Crimp:Dp	P(I)	-0.21	0.04	-0.30	-0.13	
Crimp:Ds	E(I)	0.08	0.13	-0.18	0.33	
Crimp:Ds	G(Ia)	-0.41	0.11	-0.63	-0.19	
Crimp:Ds	P(I)	-0.15	0.04	-0.24	-0.06	
Crimp:Dps	E(I)	0.08	0.13	-0.17	0.33	
Crimp:Dps	G(Ia)	-0.45	0.11	-0.67	-0.22	
Crimp:Dps	P(I)	-0.16	0.04	-0.25	-0.07	
Crimp:DpovDs	E(I)	0.11	0.19	-0.27	0.49	
Crimp:DpovDs	G(Ia)	-0.25	0.08	-0.41	-0.08	
Crimp:DpovDs	P(I)	-0.11	0.04	-0.20	-0.03	
Crimp:CVDp	E(I)	0.19	0.12	-0.05	0.42	
Crimp:CVDp	G(Ia)	-0.33	0.13	-0.59	-0.08	
Crimp:CVDp	P(I)	-0.04	0.05	-0.13	0.05	
Crimp:CVDs	E(I)	0.12	0.11	-0.10	0.34	
Crimp:CVDs	G(Ia)	-0.68	0.15	-0.97	-0.39	
Crimp:CVDs	P(I)	-0.17	0.04	-0.26	-0.09	
Crimp:MaxDp	E(I)	0.18	0.15	-0.11	0.47	
Crimp:MaxDp	G(Ia)	-0.49	0.10	-0.69	-0.30	
Crimp:MaxDp	P(I)	-0.17	0.04	-0.26	-0.09	
Crimp:MinDp	E(I)	-0.06	0.09	-0.25	0.12	
Crimp:MinDp	G(Ia)	-0.35	0.27	-0.88	0.17	
Crimp:MinDp	P(I)	-0.12	0.04	-0.20	-0.03	
Crimp:MaxDs	E(I)	0.06	0.12	-0.18	0.30	
Crimp:MaxDs	G(Ia)	-0.62	0.13	-0.86	-0.37	
Crimp:MaxDs	P(I)	-0.22	0.04	-0.31	-0.14	
Crimp:MinDs	E(I)	0.02	0.10	-0.17	0.21	
Crimp:MinDs	G(Ia)	-0.17	0.29	-0.74	0.40	
Crimp:MinDs	P(I)	-0.02	0.04	-0.11	0.07	
Crimp:SDDp	E(I)	0.18	0.14	-0.09	0.46	
Crimp:SDDp	G(Ia)	-0.41	0.11	-0.62	-0.20	
Crimp:SDDp	P(I)	-0.12	0.04	-0.20	-0.03	
Crimp:SDDs	E(I)	0.17	0.13	-0.09	0.42	
Crimp:SDDs	G(Ia)	-0.70	0.11	-0.92	-0.49	
Crimp:SDDs	P(I)	-0.24	0.04	-0.32	-0.15	
Crimp:SDD	E(I)	0.19	0.14	-0.08	0.45	
Crimp:SDD	G(Ia)	-0.70	0.11	-0.90	-0.49	
Crimp:SDD	P(I)	-0.24	0.04	-0.32	-0.15	
Crimp:CVD	E(I)	0.13	0.12	-0.09	0.36	
Crimp:CVD	G(Ia)	-0.65	0.14	-0.91	-0.38	
Crimp:CVD	P(I)	-0.17	0.04	-0.26	-0.09	
Crimp:Gt30Dp	E(I)	0.00	0.58	-1.14	1.14	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Crimp:Gt30Dp	G(Ia)	-0.36	0.10	-0.55	-0.16	
Crimp:Gt30Dp	P(I)	-0.18	0.04	-0.27	-0.10	
Crimp:Gt30Ds	E(I)	0.11	0.12	-0.12	0.33	
Crimp:Gt30Ds	G(Ia)	-0.60	0.14	-0.88	-0.32	
Crimp:Gt30Ds	P(I)	-0.16	0.04	-0.25	-0.07	
Crimp:Gt30D	E(I)	0.09	0.12	-0.14	0.33	
Crimp:Gt30D	G(Ia)	-0.60	0.13	-0.85	-0.34	
Crimp:Gt30D	P(I)	-0.19	0.04	-0.28	-0.10	
Crimp:Fnua	E(I)	0.60	0.13	0.36	0.85	
Crimp:Fnua	G(Ia)	-0.40	0.04	-0.47	-0.32	
Crimp:Fnua	P(I)	-0.03	0.02	-0.07	0.01	
Crimp:Fr	E(I)	0.40	0.11	0.18	0.61	
Crimp:Fr	G(Ia)	-0.22	0.04	-0.30	-0.14	
Crimp:Fr	P(I)	0.01	0.02	-0.03	0.05	
Crimp:Fnt	E(I)	0.76	0.14	0.48	1.03	
Crimp:Fnt	G(Ia)	-0.46	0.04	-0.53	-0.39	
Crimp:Fnt	P(I)	-0.04	0.02	-0.08	0.00	
Crimp:Sarea	E(I)	0.20	0.11	-0.01	0.41	
Crimp:Sarea	G(Ia)	-0.18	0.03	-0.24	-0.12	
Crimp:Sarea	P(I)	-0.05	0.02	-0.10	-0.01	
Crimp:Fd	E(I)	-0.23	0.14	-0.50	0.04	
Crimp:Fd	G(Ia)	-0.64	0.04	-0.73	-0.56	
Crimp:Fd	P(I)	-0.32	0.02	-0.36	-0.27	
Crimp:Fc	E(I)	-0.34	0.24	-0.81	0.13	
Crimp:Fc	G(Ia)	0.92	0.02	0.88	0.95	
Crimp:Fc	P(I)	0.59	0.02	0.55	0.62	
Crimp:Fu	E(I)	-0.30	0.21	-0.71	0.10	
Crimp:Fu	G(Ia)	0.54	0.03	0.47	0.60	
Crimp:Fu	P(I)	0.24	0.02	0.19	0.28	
Crimp:Colour	E(I)	0.17	0.19	-0.20	0.53	
Crimp:Colour	G(Ia)	-0.33	0.07	-0.46	-0.19	
Crimp:Colour	P(I)	-0.06	0.02	-0.10	-0.02	
Crimp:Fly	E(I)	-0.86	0.36	-1.56	-0.15	
Crimp:Fly	G(Ia)	0.71	0.07	0.57	0.85	
Crimp:Fly	P(I)	0.10	0.02	0.06	0.14	
Crimp:Flcrot	E(I)	0.10	0.18	-0.25	0.45	
Crimp:Flcrot	G(Ia)	-0.55	0.19	-0.93	-0.17	
Crimp:Flcrot	P(I)	-0.07	0.02	-0.11	-0.03	
Crimp:Bactst	E(I)	-0.17	0.07	-0.30	-0.04	
Crimp:Bactst	G(Ia)	-0.21	0.21	-0.63	0.20	
Crimp:Bactst	P(I)	-0.16	0.03	-0.22	-0.09	
Crimp:MycD	E(I)	-0.15	0.07	-0.29	-0.02	
Crimp:MycD	G(Ia)	0.04	0.22	-0.38	0.47	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crimp:MycD	P(I)	-0.10	0.03	-0.17	-0.03		
Crimp:Bcts	E(I)	0.08	0.10	-0.12	0.28		
Crimp:Bcts	G(Ia)	-0.26	0.04	-0.34	-0.19		
Crimp:Bcts	P(I)	-0.14	0.02	-0.19	-0.10		
Crimp:Bctb	E(I)	0.12	0.09	-0.05	0.29		
Crimp:Bctb	G(Ia)	-0.30	0.04	-0.38	-0.22		
Crimp:Bctb	P(I)	-0.13	0.02	-0.18	-0.09		
Crimp:Weanwt	E(I)	0.07	0.06	-0.04	0.18		
Crimp:Weanwt	G(Ia)	0.08	0.07	-0.06	0.22		
Crimp:Weanwt	P(I)	0.07	0.02	0.02	0.11		
Crimp:NLB	E(I)	-0.06	0.16	-0.38	0.26		
Crimp:NLB	G(Ia)	-0.12	0.03	-0.19	-0.06		
Crimp:NLB	P(I)	-0.07	0.02	-0.11	-0.03		
Crimp:NLW	E(I)	-0.08	0.17	-0.41	0.24		
Crimp:NLW	G(Ia)	-0.11	0.03	-0.17	-0.04		
Crimp:NLW	P(I)	-0.07	0.02	-0.11	-0.03		
Crimp:Fnpua	E(I)	0.13	0.11	-0.08	0.34		
Crimp:Fnpua	G(Ia)	-0.17	0.03	-0.24	-0.10		
Crimp:Fnpua	P(I)	-0.05	0.02	-0.09	-0.01		
Crimp:Fnsua	E(I)	0.62	0.13	0.36	0.87		
Crimp:Fnsua	G(Ia)	-0.40	0.04	-0.48	-0.33		
Crimp:Fnsua	P(I)	-0.03	0.02	-0.07	0.02		
Crimp:Fnpt	E(I)	0.27	0.11	0.05	0.48		
Crimp:Fnpt	G(Ia)	-0.28	0.03	-0.34	-0.21		
Crimp:Fnpt	P(I)	-0.07	0.02	-0.11	-0.03		
Crimp:Fnst	E(I)	0.76	0.14	0.48	1.05		
Crimp:Fnst	G(Ia)	-0.46	0.04	-0.53	-0.39		
Crimp:Fnst	P(I)	-0.04	0.02	-0.08	0.00		
Crwvl:Stal	E(I)	-0.06	0.04	-0.14	0.03		
Crwvl:Stal	G(Ia)	0.55	0.03	0.48	0.61		
Crwvl:Stal	P(I)	0.21	0.02	0.17	0.24		
Crwvl:Diam	E(I)	-0.17	0.04	-0.25	-0.09		
Crwvl:Diam	G(Ia)	0.48	0.03	0.41	0.55		
Crwvl:Diam	P(I)	0.10	0.02	0.07	0.14		
Crwvl:Bwt	E(I)	-0.24	0.04	-0.32	-0.16		
Crwvl:Bwt	G(Ia)	0.23	0.04	0.16	0.31		
Crwvl:Bwt	P(I)	-0.04	0.02	-0.08	-0.00		
Crwvl:WrN	E(I)	-0.05	0.05	-0.15	0.04		
Crwvl:WrN	G(Ia)	-0.34	0.04	-0.42	-0.27		
Crwvl:WrN	P(I)	-0.17	0.02	-0.21	-0.13		
Crwvl:WrB	E(I)	0.23	0.05	0.12	0.33		
Crwvl:WrB	G(Ia)	-0.57	0.04	-0.64	-0.50		
Crwvl:WrB	P(I)	-0.14	0.02	-0.18	-0.10		

Table 24 – Continued from previous page

Crwvl:WrT G(Ia) -0.49 0.04 -0.56 -0.42 Crwvl:WrT P(I) -0.16 0.02 -0.20 -0.12 Crwvl:Face E(I) 0.57 0.08 0.42 -0.72 Crwvl:Face E(I) 0.57 0.08 0.42 -0.36 Crwvl:Face E(I) -0.05 0.02 -0.09 -0.02 Crwvl:Face P(I) -0.05 0.02 -0.09 -0.02 Crwvl:Gfw E(I) -0.51 0.05 -0.62 -0.41 Crwvl:Gfw G(Ia) 0.60 0.03 0.53 0.66 Crwvl:Gfw P(I) 0.01 0.02 -0.03 0.04 Crwvl:Yld E(I) 0.18 0.05 0.08 0.27 Crwvl:Yld E(I) 0.18 0.05 0.08 0.27 Crwvl:Yld P(I) 0.26 0.02 0.22 0.30 Crwvl:Cww E(I) -0.44 0.05 -0.54 -0.33 Crwvl:Cww G(Ia) 0.69 0.03 0.62 0.75 Crwvl:Staladj E(I) 0.11 0.02 0.07 0.14 Crwvl:Staladj E(I) 0.01 0.05 -0.08 0.10 Crwvl:Staladj G(Ia) 0.50 0.03 0.44 0.57 Crwvl:Gfwadj E(I) 0.23 0.02 0.20 0.27 Crwvl:Gfwadj E(I) -0.60 0.05 -0.69 -0.51 Crwvl:Gfwadj E(I) -0.60 0.05 -0.69 -0.51 Crwvl:Gfwadj E(I) -0.60 0.05 -0.69 -0.51 Crwvl:Gfwadj E(I) -0.50 0.05 -0.60 -0.41 Crwvl:Crwwdj E(I) -0.50 0.05 -0.60 -0.41 Crwvl:Crimp E(I) -0.50 0.05 -0.60 -0.41 Crwvl:Crimp E(I) -0.50 0.05 -0.60 -0.41 Crwvl:Crimp E(I) -0.63 0.06 -0.75 -0.51 Crwvl:Crimp E(I) -0.63 0.06 -0.75 -0.51 Crwvl:Crimp E(I) -0.63 0.06 -0.75 -0.51 Crwvl:Crwvl E(I) -0.63 0.06 -0.75 -0.51 Crwvl:Crwvl E(I) -0.81 0.01 -0.82 -0.80 Crwvl:Crst E(I) -0.41 0.05 -0.50 -0.52 -0.50 Crwvl:Crwvl E(I) -0.41 0.05 -0.50 -0.50 -0.50 -0.50 Crwvl:Crst E(I) -0.47 0.04 -0.55 -0.39 Crwvl:Crst E(I) -0.47 0.04 -0.55 -0.39 Crwvl:Crstadj E(I) -0.74 0.01 -0.75 -0.70 Crwvl:Crstadj E(I) -0.74 0.01 -0.75 -0.70 Crwvl:Crstadj E(I) -0.74 0.01 -0.75 -0.79 Crwvl:Crstadj E(I) -0.74 0.01 -0.75 -0.79 Crwvl:Crstadj E(I) -0.74 0.01 -0.75 -0.79 Crwvl:Crstadj E(I) -0	Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crwvl:Crwvl		1.00	0.00	1.00	1.00
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crwvl:Crwvl	\ /				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crwvl:Crst		-0.41	0.05	-0.50	-0.32
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvl:Crst	G(Ia)	-0.92	0.01	-0.95	-0.90
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvl:Crst	P(I)	-0.72	0.01	-0.75	-0.70
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvl:Crstadj		-0.47	0.04	-0.55	-0.39
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						
	Crwvl:Crstadj	\ /	-0.74	0.01	-0.76	-0.72
Crwvl:Crwvt G(Ia) 0.91 0.01 0.88 0.93 Crwvl:Crwvt P(I) 0.83 0.01 0.81 0.85	Crwvl:Crwvt		0.75	0.03	0.70	
Crwvl:Crwvt P(I) 0.83 0.01 0.81 0.85	Crwvl:Crwvt				0.88	
	Crwvl:Crwvt					0.85
Crwvl:Dp E(I) -0.11 0.15 -0.41 0.19	Crwvl:Dp	E(I)	-0.11	0.15	-0.41	0.19
Crwvl:Dp G(Ia) 0.51 0.09 0.33 0.70	Crwvl:Dp		0.51	0.09	0.33	0.70
Crwvl:Dp P(I) 0.22 0.04 0.14 0.30	Crwvl:Dp	P(I)	0.22	0.04	0.14	0.30
Crwvl:Ds E(I) -0.06 0.12 -0.31 0.18	Crwvl:Ds		-0.06	0.12	-0.31	0.18

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Crwvl:Ds	G(Ia)	0.43	0.12	0.20	0.65	
Crwvl:Ds	P(I)	0.16	0.04	0.07	0.24	
Crwvl:Dps	E(I)	-0.07	0.12	-0.31	0.18	
Crwvl:Dps	G(Ia)	0.46	0.12	0.24	0.69	
Crwvl:Dps	P(I)	0.17	0.04	0.08	0.25	
Crwvl:DpovDs	E(I)	-0.10	0.18	-0.46	0.26	
Crwvl:DpovDs	G(Ia)	0.27	0.09	0.10	0.44	
Crwvl:DpovDs	P(I)	0.12	0.04	0.04	0.20	
Crwvl:CVDp	E(I)	-0.16	0.11	-0.39	0.06	
Crwvl:CVDp	G(Ia)	0.29	0.13	0.03	0.54	
Crwvl:CVDp	P(I)	0.02	0.04	-0.06	0.11	
Crwvl:CVDs	E(I)	-0.10	0.11	-0.31	0.11	
Crwvl:CVDs	G(Ia)	0.67	0.15	0.36	0.97	
Crwvl:CVDs	P(I)	0.17	0.04	0.08	0.25	
Crwvl:MaxDp	E(I)	-0.14	0.14	-0.42	0.14	
Crwvl:MaxDp	G(Ia)	0.46	0.10	0.26	0.66	
Crwvl:MaxDp	P(I)	0.16	0.04	0.08	0.25	
Crwvl:MinDp	E(I)	0.05	0.09	-0.12	0.23	
Crwvl:MinDp	G(Ia)	0.34	0.27	-0.19	0.88	
Crwvl:MinDp	P(I)	0.10	0.04	0.02	0.19	
Crwvl:MaxDs	E(I)	-0.06	0.12	-0.28	0.17	
Crwvl:MaxDs	G(Ia)	0.58	0.13	0.33	0.83	
Crwvl:MaxDs	P(I)	0.20	0.04	0.11	0.28	
Crwvl:MinDs	E(I)	-0.08	0.09	-0.26	0.10	
Crwvl:MinDs	G(Ia)	0.33	0.31	-0.28	0.95	
Crwvl:MinDs	P(I)	0.01	0.04	-0.08	0.09	
Crwvl:SDDp	E(I)	-0.16	0.13	-0.42	0.10	
Crwvl:SDDp	G(Ia)	0.39	0.11	0.17	0.60	
Crwvl:SDDp	P(I)	0.10	0.04	0.02	0.19	
Crwvl:SDDs	E(I)	-0.13	0.12	-0.37	0.11	
Crwvl:SDDs	G(Ia)	0.70	0.11	0.47	0.92	
Crwvl:SDDs	P(I)	0.24	0.04	0.15	0.32	
Crwvl:SDD	E(I)	-0.15	0.13	-0.40	0.10	
Crwvl:SDD	G(Ia)	0.69	0.11	0.47	0.90	
Crwvl:SDD	P(I)	0.24	0.04	0.15	0.32	
Crwvl:CVD	E(I)	-0.11	0.11	-0.33	0.10	
Crwvl:CVD	G(Ia)	0.63	0.14	0.36	0.90	
Crwvl:CVD	P(I)	0.17	0.04	0.08	0.25	
Crwvl:Gt30Dp	E(I)	0.01	0.08	-0.16	0.17	
Crwvl:Gt30Dp	G(Ia)	0.37	0.10	0.17	0.57	
Crwvl:Gt30Dp	P(I)	0.18	0.04	0.10	0.27	
Crwvl:Gt30Ds	E(I)	-0.06	0.11	-0.28	0.15	
Crwvl:Gt30Ds	G(Ia)	0.55	0.14	0.27	0.84	

Table 24 – Continued from previous page

Traitpair Crwvl:Gt30Ds	Component P(I)	Estimate	StdErr	CI95lo	CI95hi
I I	P(I)				C195111
		0.16	0.04	0.08	0.25
Crwvl:Gt30D	E(I)	-0.05	0.12	-0.28	0.18
Crwvl:Gt30D	G(Ia)	0.56	0.13	0.30	0.82
Crwvl:Gt30D	P(I)	0.19	0.04	0.10	0.27
Crwvl:Fnua	E(I)	-0.37	0.06	-0.50	-0.25
Crwvl:Fnua	G(Ia)	0.40	0.05	0.31	0.49
Crwvl:Fnua	P(I)	-0.01	0.02	-0.06	0.04
Crwvl:Fr	E(I)	-0.25	0.06	-0.37	-0.13
Crwvl:Fr	G(Ia)	0.21	0.05	0.12	0.31
Crwvl:Fr	P(I)	-0.04	0.02	-0.09	0.01
Crwvl:Fnt	E(I)	-0.47	0.07	-0.60	-0.34
Crwvl:Fnt	G(Ia)	0.48	0.04	0.40	0.57
Crwvl:Fnt	P(I)	-0.00	0.02	-0.05	0.04
Crwvl:Sarea	E(I)	-0.24	0.07	-0.37	-0.11
Crwvl:Sarea	G(Ia)	0.22	0.04	0.14	0.29
Crwvl:Sarea	P(I)	0.00	0.02	-0.04	0.05
Crwvl:Fd	E(I)	-0.11	0.07	-0.24	0.02
Crwvl:Fd	G(Ia)	0.61	0.05	0.51	0.71
Crwvl:Fd	P(I)	0.17	0.02	0.12	0.22
Crwvl:Fc	E(I)	0.55	0.10	0.35	0.74
Crwvl:Fc	G(Ia)	-0.93	0.02	-0.98	-0.88
Crwvl:Fc	P(I)	-0.36	0.02	-0.40	-0.32
Crwvl:Fu	E(I)	0.20	0.08	0.04	0.36
Crwvl:Fu	G(Ia)	-0.58	0.04	-0.66	-0.50
Crwvl:Fu	P(I)	-0.19	0.03	-0.24	-0.13
Crwvl:Colour	E(I)	-0.03	0.05	-0.13	0.07
Crwvl:Colour	G(Ia)	0.25	0.08	0.09	0.42
Crwvl:Colour	P(I)	0.04	0.02	-0.00	0.09
Crwvl:Fly	E(I)	0.22	0.05	0.12	0.33
Crwvl:Fly	G(Ia)	-0.64	0.08	-0.79	-0.48
Crwvl:Fly	P(I)	-0.06	0.02	-0.10	-0.01
Crwvl:Flcrot	E(I)	-0.01	0.05	-0.11	0.09
Crwvl:Flcrot	G(Ia)	0.44	0.19	0.07	0.81
Crwvl:Flcrot	P(I)	0.05	0.02	0.01	0.10
Crwvl:Bactst	E(I)	0.19	0.07	0.06	0.32
Crwvl:Bactst	G(Ia)	0.26	0.21	-0.16	0.67
Crwvl:Bactst	P(I)	0.18	0.03	0.11	0.25
Crwvl:MycD	E(I)	0.11	0.07	-0.02	0.25
Crwvl:MycD	G(Ia)	0.04	0.17	-0.30	0.37
Crwvl:MycD	P(I)	0.09	0.03	0.02	0.16
Crwvl:Bcts	E(I)	-0.03	0.09	-0.21	0.15
Crwvl:Bcts	G(Ia)	0.29	0.04	0.20	0.38
Crwvl:Bcts	P(I)	0.15	0.02	0.10	0.19

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crwvl:Bctb	E(I)	-0.05	0.08	-0.20	0.10		
Crwvl:Bctb	G(Ia)	0.31	0.05	0.22	0.41		
Crwvl:Bctb	P(I)	0.14	0.02	0.09	0.18		
Crwvl:Weanwt	E(I)	-0.05	0.05	-0.15	0.05		
Crwvl:Weanwt	G(Ia)	-0.08	0.09	-0.24	0.09		
Crwvl:Weanwt	P(I)	-0.06	0.02	-0.10	-0.01		
Crwvl:NLB	E(I)	0.08	0.04	-0.01	0.17		
Crwvl:NLB	G(Ia)	0.10	0.04	0.02	0.19		
Crwvl:NLB	P(I)	0.08	0.02	0.04	0.12		
Crwvl:NLW	E(I)	0.11	0.04	0.02	0.19		
Crwvl:NLW	G(Ia)	0.11	0.04	0.03	0.19		
Crwvl:NLW	P(I)	0.10	0.02	0.06	0.14		
Crwvl:Fnpua	E(I)	-0.12	0.06	-0.24	0.01		
Crwvl:Fnpua	G(Ia)	0.18	0.04	0.10	0.27		
Crwvl:Fnpua	P(I)	0.03	0.02	-0.02	0.07		
Crwvl:Fnsua	E(I)	-0.37	0.06	-0.50	-0.25		
Crwvl:Fnsua	G(Ia)	0.40	0.05	0.31	0.50		
Crwvl:Fnsua	P(I)	-0.01	0.02	-0.06	0.03		
Crwvl:Fnpt	E(I)	-0.23	0.06	-0.36	-0.11		
Crwvl:Fnpt	G(Ia)	0.31	0.04	0.22	0.39		
Crwvl:Fnpt	P(I)	0.03	0.02	-0.02	0.07		
Crwvl:Fnst	E(I)	-0.47	0.07	-0.60	-0.34		
Crwvl:Fnst	G(Ia)	0.48	0.04	0.39	0.57		
Crwvl:Fnst	P(I)	-0.00	0.02	-0.05	0.04		
Crst:Stal	E(I)	0.95	0.06	0.84	1.07		
Crst:Stal	G(Ia)	-0.22	0.04	-0.29	-0.15		
Crst:Stal	P(I)	0.31	0.02	0.28	0.35		
Crst:Diam	E(I)	0.18	0.06	0.06	0.29		
Crst:Diam	G(Ia)	-0.33	0.04	-0.39	-0.26		
Crst:Diam	P(I)	-0.08	0.02	-0.12	-0.04		
Crst:Bwt	E(I)	0.50	0.06	0.38	0.61		
Crst:Bwt	G(Ia)	-0.22	0.04	-0.29	-0.15		
Crst:Bwt	P(I)	0.12	0.02	0.08	0.16		
Crst:WrN	E(I)	-0.15	0.06	-0.26	-0.04		
Crst:WrN	G(Ia)	0.32	0.04	0.24	0.39		
Crst:WrN	P(I)	0.06	0.02	0.02	0.10		
Crst:WrB	E(I)	-0.30	0.06	-0.42	-0.19		
Crst:WrB	G(Ia)	0.51	0.04	0.43	0.58		
Crst:WrB	P(I)	0.09	0.02	0.05	0.14		
Crst:WrT	E(I)	-0.27	0.06	-0.39	-0.15		
Crst:WrT	G(Ia)	0.44	0.04	0.37	0.51		
Crst:WrT	P(I)	0.09	0.02	0.05	0.13		
Crst:Face	E(I)	-0.51	0.08	-0.66	-0.35		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Crst:Face	G(Ia)	0.31	0.02	0.26	0.36
Crst:Face	P(I)	0.04	0.02	0.00	0.08
Crst:Gfw	E(I)	0.54	0.05	0.43	0.64
Crst:Gfw	G(Ia)	-0.39	0.03	-0.46	-0.33
Crst:Gfw	P(I)	0.06	0.02	0.03	0.10
Crst:Yld	E(I)	0.15	0.06	0.03	0.26
Crst:Yld	G(Ia)	-0.38	0.04	-0.45	-0.31
Crst:Yld	P(I)	-0.11	0.02	-0.15	-0.07
Crst:Cww	E(I)	0.59	0.06	0.48	0.70
Crst:Cww	G(Ia)	-0.50	0.03	-0.56	-0.43
Crst:Cww	P(I)	0.02	0.02	-0.01	0.06
Crst:Staladj	E(I)	0.89	0.06	0.78	1.00
Crst:Staladj	G(Ia)	-0.17	0.04	-0.24	-0.09
Crst:Staladj	P(I)	0.32	0.02	0.28	0.36
Crst:Gfwadj	E(I)	0.45	0.05	0.35	0.55
Crst:Gfwadj	G(Ia)	-0.39	0.03	-0.46	-0.32
Crst:Gfwadj	P(I)	0.04	0.02	0.00	0.07
Crst:Cwwadj	E(I)	0.54	0.06	0.43	0.66
Crst:Cwwadj	G(Ia)	-0.50	0.03	-0.56	-0.43
Crst:Cwwadj	P(I)	-0.00	0.02	-0.04	0.04
Crst:Crimp	E(I)	0.50	0.12	0.26	0.74
Crst:Crimp	G(Ia)	0.92	0.01	0.90	0.94
Crst:Crimp	P(I)	0.79	0.01	0.77	0.81
Crst:Crwvl	E(I)	-0.41	0.05	-0.50	-0.32
Crst:Crwvl	G(Ia)	-0.92	0.01	-0.95	-0.90
Crst:Crwvl	P(I)	-0.72	0.01	-0.75	-0.70
Crst:Crst	E(I)	1.00	0.00	1.00	1.00
Crst:Crst	G(Ia)	1.00	0.00	1.00	1.00
Crst:Crst	P(I)	1.00	0.00	1.00	1.00
Crst:Crstadj	E(I)	0.97	0.01	0.95	0.99
Crst:Crstadj	G(Ia)	1.00	0.00	0.99	1.00
Crst:Crstadj	P(I)	0.99	0.00	0.98	0.99
Crst:Crwvt	E(I)	-0.83	0.02	-0.87	-0.79
Crst:Crwvt	G(Ia)	-0.99	0.01	-1.01	-0.98
Crst:Crwvt	P(I)	-0.91	0.01	-0.92	-0.90
Crst:Dp	E(I)	0.18	0.15	-0.11	0.47
Crst:Dp	G(Ia)	-0.63	0.11	-0.84	-0.42
Crst:Dp	P(I)	-0.22	0.04	-0.30	-0.13
Crst:Ds	E(I)	-0.04	0.11	-0.27	0.18
Crst:Ds	G(Ia)	0.10	0.13	-0.16	0.36
Crst:Ds	P(I)	0.02	0.05	-0.07	0.11
Crst:Dps	E(I)	-0.03	0.11	-0.25	0.20
Crst:Dps	G(Ia)	0.04	0.13	-0.22	0.30

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crst:Dps	P(I)	0.00	0.05	-0.09	0.09		
Crst:DpovDs	E(I)	0.28	0.19	-0.09	0.64		
Crst:DpovDs	G(Ia)	-0.65	0.10	-0.83	-0.46		
Crst:DpovDs	P(I)	-0.24	0.04	-0.32	-0.16		
Crst:CVDp	E(I)	0.21	0.11	-0.01	0.43		
Crst:CVDp	G(Ia)	-0.60	0.15	-0.89	-0.31		
Crst:CVDp	P(I)	-0.09	0.05	-0.18	-0.00		
Crst:CVDs	E(I)	0.02	0.11	-0.21	0.24		
Crst:CVDs	G(Ia)	-0.78	0.16	-1.10	-0.46		
Crst:CVDs	P(I)	-0.24	0.04	-0.32	-0.15		
Crst:MaxDp	E(I)	0.22	0.14	-0.05	0.49		
Crst:MaxDp	G(Ia)	-0.65	0.12	-0.88	-0.42		
Crst:MaxDp	P(I)	-0.19	0.04	-0.27	-0.10		
Crst:MinDp	E(I)	0.06	0.09	-0.11	0.24		
Crst:MinDp	G(Ia)	-0.62	0.34	-1.29	0.05		
Crst:MinDp	P(I)	-0.06	0.04	-0.15	0.02		
Crst:MaxDs	E(I)	-0.11	0.10	-0.31	0.10		
Crst:MaxDs	G(Ia)	-0.34	0.14	-0.61	-0.06		
Crst:MaxDs	P(I)	-0.19	0.04	-0.28	-0.10		
Crst:MinDs	E(I)	-0.03	0.09	-0.20	0.14		
Crst:MinDs	G(Ia)	0.06	0.35	-0.62	0.74		
Crst:MinDs	P(I)	-0.01	0.04	-0.10	0.07		
Crst:SDDp	E(I)	0.24	0.13	-0.01	0.50		
Crst:SDDp	G(Ia)	-0.66	0.12	-0.90	-0.42		
Crst:SDDp	P(I)	-0.16	0.04	-0.25	-0.07		
Crst:SDDs	E(I)	-0.01	0.08	-0.16	0.15		
Crst:SDDs	G(Ia)	-0.50	0.12	-0.74	-0.25		
Crst:SDDs	P(I)	-0.21	0.04	-0.29	-0.12		
Crst:SDD	E(I)	0.04	0.13	-0.21	0.29		
Crst:SDD	G(Ia)	-0.56	0.12	-0.80	-0.33		
Crst:SDD	P(I)	-0.22	0.04	-0.30	-0.13		
Crst:CVD	E(I)	0.05	0.11	-0.16	0.26		
Crst:CVD	G(Ia)	-0.80	0.15	-1.09	-0.50		
Crst:CVD	P(I)	-0.24	0.04	-0.33	-0.16		
Crst:Gt30Dp	E(I)	0.12	0.13	-0.14	0.38		
Crst:Gt30Dp	G(Ia)	-0.62	0.12	-0.85	-0.40		
Crst:Gt30Dp	P(I)	-0.22	0.04	-0.31	-0.13		
Crst:Gt30Ds	E(I)	-0.01	0.09	-0.18	0.17		
Crst:Gt30Ds	G(Ia)	-0.29	0.16	-0.60	0.03		
Crst:Gt30Ds	P(I)	-0.10	0.05	-0.19	-0.01		
Crst:Gt30D	E(I)	0.02	0.12	-0.21	0.24		
Crst:Gt30D	G(Ia)	-0.42	0.15	-0.71	-0.13		
Crst:Gt30D	P(I)	-0.14	0.05	-0.23	-0.05		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crst:Fnua	E(I)	0.20	0.07	0.07	0.34		
Crst:Fnua	G(Ia)	-0.56	0.04	-0.65	-0.48		
Crst:Fnua	P(I)	-0.15	0.02	-0.20	-0.11		
Crst:Fr	E(I)	0.05	0.07	-0.08	0.18		
Crst:Fr	G(Ia)	-0.23	0.05	-0.32	-0.14		
Crst:Fr	P(I)	-0.07	0.02	-0.12	-0.02		
Crst:Fnt	E(I)	0.45	0.07	0.30	0.59		
Crst:Fnt	G(Ia)	-0.63	0.04	-0.71	-0.54		
Crst:Fnt	P(I)	-0.09	0.02	-0.14	-0.05		
Crst:Sarea	E(I)	0.55	0.07	0.41	0.69		
Crst:Sarea	G(Ia)	-0.21	0.04	-0.28	-0.13		
Crst:Sarea	P(I)	0.12	0.02	0.08	0.17		
Crst:Fd	E(I)	0.27	0.07	0.13	0.40		
Crst:Fd	G(Ia)	-0.49	0.05	-0.59	-0.38		
Crst:Fd	P(I)	-0.05	0.03	-0.10	-0.01		
Crst:Fc	E(I)	-0.69	0.11	-0.90	-0.48		
Crst:Fc	G(Ia)	0.89	0.03	0.84	0.94		
Crst:Fc	P(I)	0.30	0.02	0.26	0.34		
Crst:Fu	E(I)	-0.23	0.08	-0.39	-0.07		
Crst:Fu	G(Ia)	0.44	0.04	0.36	0.53		
Crst:Fu	P(I)	0.11	0.03	0.06	0.17		
Crst:Colour	E(I)	-0.02	0.05	-0.13	0.09		
Crst:Colour	G(Ia)	-0.33	0.08	-0.49	-0.17		
Crst:Colour	P(I)	-0.09	0.02	-0.13	-0.04		
Crst:Fly	E(I)	-0.15	0.06	-0.26	-0.04		
Crst:Fly	G(Ia)	0.51	0.07	0.37	0.66		
Crst:Fly	P(I)	0.07	0.02	0.03	0.12		
Crst:Flcrot	E(I)	0.05	0.05	-0.06	0.15		
Crst:Flcrot	G(Ia)	-0.67	0.24	-1.13	-0.20		
Crst:Flcrot	P(I)	-0.07	0.02	-0.11	-0.02		
Crst:Bactst	E(I)	-0.12	0.07	-0.25	0.01		
Crst:Bactst	G(Ia)	-0.56	0.24	-1.03	-0.08		
Crst:Bactst	P(I)	-0.18	0.03	-0.25	-0.11		
Crst:MycD	E(I)	-0.06	0.07	-0.19	0.08		
Crst:MycD	G(Ia)	-0.34	0.19	-0.72	0.04		
Crst:MycD	P(I)	-0.11	0.03	-0.18	-0.04		
Crst:Bcts	E(I)	0.07	0.09	-0.11	0.25		
Crst:Bcts	G(Ia)	-0.21	0.04	-0.30	-0.13		
Crst:Bcts	P(I)	-0.10	0.02	-0.15	-0.05		
Crst:Bctb	E(I)	0.10	0.08	-0.05	0.26		
Crst:Bctb	G(Ia)	-0.27	0.04	-0.35	-0.18		
Crst:Bctb	P(I)	-0.10	0.02	-0.15	-0.06		
Crst:Weanwt	E(I)	0.15	0.05	0.05	0.25		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crst:Weanwt	G(Ia)	0.04	0.08	-0.12	0.19		
Crst:Weanwt	P(I)	0.11	0.02	0.06	0.15		
Crst:NLB	E(I)	-0.09	0.05	-0.19	0.02		
Crst:NLB	G(Ia)	-0.01	0.04	-0.09	0.07		
Crst:NLB	P(I)	-0.05	0.02	-0.09	-0.01		
Crst:NLW	E(I)	-0.02	0.05	-0.12	0.09		
Crst:NLW	G(Ia)	-0.08	0.04	-0.16	0.00		
Crst:NLW	P(I)	-0.04	0.02	-0.08	0.00		
Crst:Fnpua	E(I)	0.14	0.07	0.01	0.28		
Crst:Fnpua	G(Ia)	-0.35	0.04	-0.43	-0.27		
Crst:Fnpua	P(I)	-0.10	0.02	-0.14	-0.05		
Crst:Fnsua	E(I)	0.20	0.07	0.07	0.34		
Crst:Fnsua	G(Ia)	-0.56	0.04	-0.65	-0.47		
Crst:Fnsua	P(I)	-0.15	0.02	-0.20	-0.10		
Crst:Fnpt	E(I)	0.43	0.07	0.29	0.57		
Crst:Fnpt	G(Ia)	-0.47	0.04	-0.56	-0.39		
Crst:Fnpt	P(I)	-0.03	0.02	-0.07	0.02		
Crst:Fnst	E(I)	0.44	0.07	0.29	0.58		
Crst:Fnst	G(Ia)	-0.62	0.04	-0.71	-0.54		
Crst:Fnst	P(I)	-0.09	0.02	-0.14	-0.05		
Crstadj:Stal	E(I)	0.89	0.05	0.78	0.99		
Crstadj:Stal	G(Ia)	-0.21	0.04	-0.28	-0.14		
Crstadj:Stal	P(I)	0.31	0.02	0.27	0.35		
Crstadj:Diam	E(I)	0.20	0.06	0.09	0.31		
Crstadj:Diam	G(Ia)	-0.34	0.04	-0.41	-0.27		
Crstadj:Diam	P(I)	-0.07	0.02	-0.11	-0.02		
Crstadj:Bwt	E(I)	0.44	0.06	0.33	0.55		
Crstadj:Bwt	G(Ia)	-0.19	0.04	-0.27	-0.12		
Crstadj:Bwt	P(I)	0.12	0.02	0.08	0.16		
Crstadj:WrN	E(I)	-0.12	0.05	-0.23	-0.02		
Crstadj:WrN	G(Ia)	0.29	0.04	0.21	0.37		
Crstadj:WrN	P(I)	0.06	0.02	0.02	0.10		
Crstadj:WrB	E(I)	-0.28	0.05	-0.38	-0.17		
Crstadj:WrB	G(Ia)	0.49	0.04	0.41	0.57		
Crstadj:WrB	P(I)	0.08	0.02	0.04	0.13		
Crstadj:WrT	E(I)	-0.24	0.06	-0.35	-0.13		
Crstadj:WrT	G(Ia)	0.42	0.04	0.35	0.50		
Crstadj:WrT	P(I)	0.08	0.02	0.04	0.12		
Crstadj:Face	E(I)	-0.48	0.07	-0.63	-0.34		
Crstadj:Face	G(Ia)	0.29	0.02	0.24	0.34		
Crstadj:Face	P(I)	0.02	0.02	-0.02	0.06		
Crstadj:Gfw	E(I)	0.49	0.05	0.40	0.59		
Crstadj:Gfw	G(Ia)	-0.40	0.03	-0.46	-0.33		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crstadj:Gfw	P(I)	0.06	0.02	0.03	0.10		
Crstadj:Yld	E(I)	0.14	0.05	0.03	0.24		
Crstadj:Yld	G(Ia)	-0.39	0.04	-0.46	-0.31		
Crstadj:Yld	P(I)	-0.11	0.02	-0.15	-0.07		
Crstadj:Cww	E(I)	0.54	0.05	0.44	0.64		
Crstadj:Cww	G(Ia)	-0.50	0.03	-0.57	-0.44		
Crstadj:Cww	P(I)	0.02	0.02	-0.01	0.06		
Crstadj:Staladj	E(I)	0.84	0.05	0.74	0.94		
Crstadj:Staladj	G(Ia)	-0.16	0.04	-0.23	-0.08		
Crstadj:Staladj	P(I)	0.33	0.02	0.30	0.37		
Crstadj:Gfwadj	E(I)	0.45	0.05	0.36	0.54		
Crstadj:Gfwadj	G(Ia)	-0.39	0.04	-0.46	-0.32		
Crstadj:Gfwadj	P(I)	0.05	0.02	0.02	0.09		
Crstadj:Cwwadj	E(I)	0.52	0.05	0.42	0.63		
Crstadj:Cwwadj	G(Ia)	-0.50	0.03	-0.57	-0.44		
Crstadj:Cwwadj	P(I)	0.01	0.02	-0.02	0.05		
Crstadj:Crimp	E(I)	0.69	0.13	0.44	0.94		
Crstadj:Crimp	G(Ia)	0.92	0.01	0.90	0.94		
Crstadj:Crimp	P(I)	0.79	0.01	0.77	0.81		
Crstadj:Crwvl	E(I)	-0.47	0.04	-0.55	-0.39		
Crstadj:Crwvl	G(Ia)	-0.93	0.01	-0.95	-0.90		
Crstadj:Crwvl	P(I)	-0.74	0.01	-0.76	-0.72		
Crstadj:Crst	E(I)	0.97	0.01	0.95	0.99		
Crstadj:Crst	G(Ia)	1.00	0.00	0.99	1.00		
Crstadj:Crst	P(I)	0.99	0.00	0.98	0.99		
Crstadj:Crstadj	E(I)	1.00	0.00	1.00	1.00		
Crstadj:Crstadj	G(Ia)	1.00	0.00	1.00	1.00		
Crstadj:Crstadj	P(I)	1.00	0.00	1.00	1.00		
Crstadj:Crwvt	E(I)	-0.85	0.02	-0.89	-0.82		
Crstadj:Crwvt	G(Ia)	-1.00	0.01	-1.01	-0.98		
Crstadj:Crwvt	P(I)	-0.92	0.01	-0.93	-0.91		
Crstadj:Dp	E(I)	0.19	0.15	-0.09	0.48		
Crstadj:Dp	G(Ia)	-0.65	0.11	-0.86	-0.43		
Crstadj:Dp	P(I)	-0.22	0.04	-0.30	-0.13		
Crstadj:Ds	E(I)	-0.03	0.12	-0.26	0.19		
Crstadj:Ds	G(Ia)	0.10	0.13	-0.16	0.35		
Crstadj:Ds	P(I)	0.02	0.05	-0.07	0.11		
Crstadj:Dps	E(I)	-0.02	0.11	-0.24	0.20		
Crstadj:Dps	G(Ia)	0.04	0.13	-0.22	0.30		
Crstadj:Dps	P(I)	0.00	0.05	-0.09	0.09		
Crstadj:DpovDs	E(I)	0.29	0.19	-0.08	0.66		
Crstadj:DpovDs	G(Ia)	-0.66	0.10	-0.84	-0.47		
Crstadj:DpovDs	P(I)	-0.24	0.04	-0.32	-0.16		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crstadj:CVDp	E(I)	0.22	0.11	0.00	0.44		
Crstadj:CVDp	G(Ia)	-0.60	0.15	-0.90	-0.31		
Crstadj:CVDp	P(I)	-0.09	0.05	-0.18	-0.00		
Crstadj:CVDs	E(I)	0.02	0.11	-0.20	0.24		
Crstadj:CVDs	G(Ia)	-0.78	0.16	-1.10	-0.46		
Crstadj:CVDs	P(I)	-0.24	0.04	-0.32	-0.15		
Crstadj:MaxDp	E(I)	0.23	0.14	-0.04	0.50		
Crstadj:MaxDp	G(Ia)	-0.65	0.12	-0.88	-0.43		
Crstadj:MaxDp	P(I)	-0.19	0.04	-0.27	-0.10		
Crstadj:MinDp	E(I)	0.06	0.09	-0.11	0.24		
Crstadj:MinDp	G(Ia)	-0.63	0.34	-1.30	0.04		
Crstadj:MinDp	P(I)	-0.07	0.04	-0.15	0.02		
Crstadj:MaxDs	E(I)	-0.10	0.10	-0.30	0.10		
Crstadj:MaxDs	G(Ia)	-0.34	0.14	-0.61	-0.06		
Crstadj:MaxDs	P(I)	-0.19	0.04	-0.27	-0.10		
Crstadj:MinDs	E(I)	-0.03	0.09	-0.20	0.14		
Crstadj:MinDs	G(Ia)	0.04	0.35	-0.66	0.74		
Crstadj:MinDs	P(I)	-0.02	0.04	-0.10	0.07		
Crstadj:SDDp	E(I)	0.25	0.13	-0.00	0.51		
Crstadj:SDDp	G(Ia)	-0.67	0.12	-0.91	-0.42		
Crstadj:SDDp	P(I)	-0.16	0.04	-0.25	-0.07		
Crstadj:SDDs	E(I)	-0.00	0.01	-0.02	0.02		
Crstadj:SDDs	G(Ia)	-0.50	0.12	-0.74	-0.25		
Crstadj:SDDs	P(I)	-0.20	0.04	-0.29	-0.12		
Crstadj:SDD	E(I)	0.05	0.12	-0.20	0.29		
Crstadj:SDD	G(Ia)	-0.56	0.12	-0.80	-0.33		
Crstadj:SDD	P(I)	-0.21	0.04	-0.30	-0.13		
Crstadj:CVD	E(I)	0.05	0.11	-0.16	0.26		
Crstadj:CVD	G(Ia)	-0.80	0.15	-1.10	-0.51		
Crstadj:CVD	P(I)	-0.24	0.04	-0.33	-0.16		
Crstadj:Gt30Dp	E(I)	0.13	0.13	-0.13	0.40		
Crstadj:Gt30Dp	G(Ia)	-0.63	0.12	-0.86	-0.41		
Crstadj:Gt30Dp	P(I)	-0.22	0.04	-0.30	-0.13		
Crstadj:Gt30Ds	E(I)	-0.00	0.08	-0.15	0.15		
Crstadj:Gt30Ds	G(Ia)	-0.28	0.16	-0.60	0.03		
Crstadj:Gt30Ds	P(I)	-0.10	0.05	-0.19	-0.01		
Crstadj:Gt30D	E(I)	0.02	0.11	-0.20	0.24		
Crstadj:Gt30D	G(Ia)	-0.42	0.15	-0.71	-0.13		
Crstadj:Gt30D	P(I)	-0.14	0.05	-0.23	-0.05		
Crstadj:Fnua	E(I)	0.18	0.06	0.06	0.31		
Crstadj:Fnua	G(Ia)	-0.56	0.05	-0.65	-0.47		
Crstadj:Fnua	P(I)	-0.15	0.02	-0.19	-0.10		
Crstadj:Fr	E(I)	0.03	0.06	-0.09	0.15		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crstadj:Fr	G(Ia)	-0.22	0.05	-0.31	-0.13		
Crstadj:Fr	P(I)	-0.07	0.02	-0.12	-0.03		
Crstadj:Fnt	E(I)	0.39	0.07	0.25	0.52		
Crstadj:Fnt	G(Ia)	-0.61	0.04	-0.69	-0.52		
Crstadj:Fnt	P(I)	-0.09	0.02	-0.14	-0.04		
Crstadj:Sarea	E(I)	0.47	0.07	0.34	0.59		
Crstadj:Sarea	G(Ia)	-0.18	0.04	-0.25	-0.10		
Crstadj:Sarea	P(I)	0.12	0.02	0.08	0.17		
Crstadj:Fd	E(I)	0.26	0.07	0.13	0.39		
Crstadj:Fd	G(Ia)	-0.51	0.05	-0.62	-0.41		
Crstadj:Fd	P(I)	-0.06	0.03	-0.11	-0.01		
Crstadj:Fc	E(I)	-0.68	0.10	-0.88	-0.48		
Crstadj:Fc	G(Ia)	0.88	0.03	0.83	0.93		
Crstadj:Fc	P(I)	0.28	0.02	0.23	0.32		
Crstadj:Fu	E(I)	-0.25	0.08	-0.40	-0.09		
Crstadj:Fu	G(Ia)	0.45	0.04	0.37	0.54		
Crstadj:Fu	P(I)	0.10	0.03	0.05	0.16		
Crstadj:Colour	E(I)	-0.04	0.05	-0.14	0.06		
Crstadj:Colour	G(Ia)	-0.35	0.08	-0.52	-0.18		
Crstadj:Colour	P(I)	-0.10	0.02	-0.15	-0.06		
Crstadj:Fly	E(I)	-0.15	0.05	-0.26	-0.04		
Crstadj:Fly	G(Ia)	0.54	0.07	0.39	0.68		
Crstadj:Fly	P(I)	0.07	0.02	0.03	0.11		
Crstadj:Flcrot	E(I)	0.04	0.05	-0.06	0.14		
Crstadj:Flcrot	G(Ia)	-0.64	0.23	-1.10	-0.18		
Crstadj:Flcrot	P(I)	-0.06	0.02	-0.11	-0.02		
Crstadj:Bactst	E(I)	-0.12	0.07	-0.25	0.01		
Crstadj:Bactst	G(Ia)	-0.56	0.24	-1.03	-0.08		
Crstadj:Bactst	P(I)	-0.18	0.03	-0.25	-0.12		
Crstadj:MycD	E(I)	-0.06	0.07	-0.19	0.08		
Crstadj:MycD	G(Ia)	-0.35	0.19	-0.73	0.03		
Crstadj:MycD	P(I)	-0.11	0.03	-0.18	-0.04		
Crstadj:Bcts	E(I)	0.08	0.09	-0.10	0.26		
Crstadj:Bcts	G(Ia)	-0.23	0.04	-0.31	-0.14		
Crstadj:Bcts	P(I)	-0.10	0.02	-0.14	-0.05		
Crstadj:Bctb	E(I)	0.12	0.08	-0.03	0.28		
Crstadj:Bctb	G(Ia)	-0.28	0.05	-0.37	-0.19		
Crstadj:Bctb	P(I)	-0.10	0.02	-0.14	-0.05		
Crstadj:Weanwt	E(I)	0.11	0.05	0.01	0.20		
Crstadj:Weanwt	G(Ia)	0.07	0.08	-0.09	0.23		
Crstadj:Weanwt	P(I)	0.09	0.02	0.05	0.14		
Crstadj:NLB	E(I)	-0.07	0.05	-0.17	0.03		
Crstadj:NLB	G(Ia)	-0.03	0.04	-0.12	0.05		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crstadj:NLB	P(I)	-0.05	0.02	-0.09	-0.01		
Crstadj:NLW	E(I)	-0.01	0.05	-0.11	0.09		
Crstadj:NLW	G(Ia)	-0.10	0.04	-0.19	-0.02		
Crstadj:NLW	P(I)	-0.05	0.02	-0.09	-0.00		
Crstadj:Fnpua	E(I)	0.15	0.06	0.02	0.27		
Crstadj:Fnpua	G(Ia)	-0.35	0.04	-0.44	-0.27		
Crstadj:Fnpua	P(I)	-0.09	0.02	-0.13	-0.04		
Crstadj:Fnsua	E(I)	0.18	0.06	0.06	0.31		
Crstadj:Fnsua	G(Ia)	-0.56	0.05	-0.65	-0.47		
Crstadj:Fnsua	P(I)	-0.14	0.02	-0.19	-0.10		
Crstadj:Fnpt	E(I)	0.39	0.07	0.26	0.52		
Crstadj:Fnpt	G(Ia)	-0.45	0.04	-0.54	-0.37		
Crstadj:Fnpt	P(I)	-0.02	0.02	-0.06	0.03		
Crstadj:Fnst	E(I)	0.38	0.07	0.24	0.51		
Crstadj:Fnst	G(Ia)	-0.60	0.04	-0.69	-0.52		
Crstadj:Fnst	P(I)	-0.09	0.02	-0.14	-0.05		
Crwvt:Stal	E(I)	-0.66	0.04	-0.74	-0.58		
Crwvt:Stal	G(Ia)	0.16	0.04	0.08	0.24		
Crwvt:Stal	P(I)	-0.30	0.02	-0.34	-0.27		
Crwvt:Diam	E(I)	-0.16	0.05	-0.25	-0.07		
Crwvt:Diam	G(Ia)	0.35	0.04	0.27	0.43		
Crwvt:Diam	P(I)	0.05	0.02	0.01	0.09		
Crwvt:Bwt	E(I)	-0.37	0.04	-0.46	-0.29		
Crwvt:Bwt	G(Ia)	0.23	0.04	0.15	0.31		
Crwvt:Bwt	P(I)	-0.12	0.02	-0.16	-0.08		
Crwvt:WrN	E(I)	0.06	0.04	-0.02	0.15		
Crwvt:WrN	G(Ia)	-0.32	0.05	-0.41	-0.23		
Crwvt:WrN	P(I)	-0.08	0.02	-0.12	-0.04		
Crwvt:WrB	E(I)	0.25	0.05	0.16	0.34		
Crwvt:WrB	G(Ia)	-0.51	0.04	-0.59	-0.43		
Crwvt:WrB	P(I)	-0.06	0.02	-0.10	-0.02		
Crwvt:WrT	E(I)	0.20	0.05	0.10	0.29		
Crwvt:WrT	G(Ia)	-0.45	0.04	-0.53	-0.37		
Crwvt:WrT	P(I)	-0.07	0.02	-0.11	-0.03		
Crwvt:Face	E(I)	0.47	0.06	0.35	0.60		
Crwvt:Face	G(Ia)	-0.27	0.03	-0.32	-0.21		
Crwvt:Face	P(I)	0.04	0.02	0.00	0.08		
Crwvt:Gfw	E(I)	-0.51	0.04	-0.59	-0.43		
Crwvt:Gfw	G(Ia)	0.35	0.04	0.27	0.43		
Crwvt:Gfw	P(I)	-0.15	0.02	-0.19	-0.12		
Crwvt:Yld	E(I)	-0.07	0.05	-0.16	0.02		
Crwvt:Yld	G(Ia)	0.40	0.04	0.32	0.49		
Crwvt:Yld	P(I)	0.12	0.02	0.08	0.16		

Table 24 – Continued from previous page

Crwyt:Cww E(I) -0.53 -0.04 -0.61 -0.44 -0.67 -0.72 -0.56 Crwyt:Staladj E(I) -0.64 -0.04 -0.02 -0.14 -0.07 Crwyt:Staladj E(I) -0.64 -0.04 -0.72 -0.56 Crwyt:Staladj E(I) -0.64 -0.04 -0.72 -0.56 Crwyt:Staladj P(I) -0.32 -0.02 -0.36 -0.28 Crwyt:Gfwadj E(I) -0.51 -0.04 -0.59 -0.44 Crwyt:Gfwadj E(I) -0.51 -0.04 -0.59 -0.44 Crwyt:Gfwadj E(I) -0.17 -0.02 -0.20 -0.14 Crwyt:Gfwadj P(I) -0.17 -0.02 -0.20 -0.14 Crwyt:Gfwadj E(I) -0.54 -0.04 -0.62 -0.45 Crwyt:Cwwadj E(I) -0.54 -0.04 -0.62 -0.45 Crwyt:Cwwadj E(I) -0.54 -0.04 -0.62 -0.45 Crwyt:Crimp E(I) -0.66 -0.14 -0.93 -0.40 Crwyt:Crimp E(I) -0.69 -0.01 -0.71 -0.67 Crwyt:Crwyl E(I) -0.75 -0.03 0.70 0.80 Crwyt:Crwyl E(I) -0.75 -0.03 0.70 0.80 Crwyt:Crwyl E(I) -0.75 -0.03 0.70 0.80 Crwyt:Crst E(I) -0.83 -0.01 0.81 0.85 Crwyt:Crst E(I) -0.83 -0.02 -0.87 -0.79 Crwyt:Crst E(I) -0.83 -0.02 -0.87 -0.79 Crwyt:Crst E(I) -0.99 -0.01 -1.01 -0.98 -0.82 Crwyt:Crstadj E(I) -0.85 -0.02 -0.89 -0.82 Crwyt:Crstadj E(I) -0.95 -0.00	Traitpair		Estimate	StdErr	CI95lo	CI95hi
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Crwvt:Staladj E(I)						
Crwvt:Staladj G(Ia) 0.10 0.04 0.02 0.19 Crwvt:Staladj P(I) -0.32 0.02 -0.36 -0.28 Crwvt:Gfwadj E(I) -0.51 0.04 -0.59 -0.44 Crwvt:Gfwadj G(Ia) 0.35 0.04 0.27 0.43 Crwvt:Gfwadj P(I) -0.17 0.02 -0.20 -0.14 Crwvt:Gfwadj P(I) -0.17 0.02 -0.20 -0.14 Crwvt:Cwwadj E(I) -0.54 0.04 -0.62 -0.45 Crwvt:Cwwadj G(Ia) 0.47 0.04 0.40 0.55 Crwvt:Cwwadj P(I) -0.11 0.02 -0.15 -0.07 Crwvt:Crimp E(I) -0.66 0.14 -0.93 -0.40 Crwvt:Crimp G(Ia) -0.89 0.01 -0.92 -0.87 Crwvt:Crimp F(I) -0.69 0.01 -0.71 -0.67 Crwvt:Crwvl G(Ia) 0.91 0.01 0.88 0.93 Crwvt:Crwvl G(Ia) 0.91 0.01 0.88 0.93 Crwvt:Crst E(I) -0.83 0.02 -0.87 -0.79 Crwvt:Crst G(Ia) -0.99 0.01 -1.01 -0.98 Crwvt:Crst E(I) -0.85 0.02 -0.87 -0.79 Crwvt:Crstadj E(I) -0.85 0.02 -0.89 -0.82 Crwvt:Crstadj G(Ia) -1.00 0.01 -1.01 -0.98 Crwvt:Crwvt E(I) -0.92 0.01 -0.93 -0.91 Crwvt:Crwvt G(Ia) 1.00 0.00 1.00 1.00 Crwvt:Crwvt G(Ia) 1.00 0.00 1.00 1.00 Crwvt:Crwvt E(I) 1.00 0.00 1.00 1.00 1.00 Crwvt:Crwvt G(Ia) 1.00 0.00 1.00 1.00 Crwvt:Crwvt G(Ia) 1.00 0.00 1.00 1.00 Crwvt:Crwvt E(I) 1.00 0.00 1.00 1.00 Crwvt:Dp E(I) -0.19 0.14 -0.46 0.09 0.23 Crwvt:Ds E(I) -0.00 0.12 -0.24 0.23 Crwvt:Dp E(I) -0.00 0.12 -0.24 0.23 Crwvt:Dp E(I) -0.00 0.12 -0.24 0.23 Crwvt:Dp E(I) -0.25 0.18 -0.60 0.11 Crwvt:DpovDs E(I) -0.25 0.18 -0.60 0.11 Crwvt:CVDp E(I) -0.20 0.11 -0.41 0.01 Crwvt:CVDp E(I) -0.20 0.11 -0.44 0.02 0		' '				
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						
$ \begin{array}{ c c c c c c c c c } \hline Crwvt:Crst & P(I) & -0.91 & 0.01 & -0.92 & -0.90 \\ \hline Crwvt:Crstadj & E(I) & -0.85 & 0.02 & -0.89 & -0.82 \\ \hline Crwvt:Crstadj & G(Ia) & -1.00 & 0.01 & -1.01 & -0.98 \\ \hline Crwvt:Crstadj & P(I) & -0.92 & 0.01 & -0.93 & -0.91 \\ \hline Crwvt:Crwvt & E(I) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt:Crwvt & G(Ia) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt:Crwvt & P(I) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt:Dp & E(I) & -0.19 & 0.14 & -0.46 & 0.09 \\ \hline Crwvt:Dp & G(Ia) & 0.68 & 0.11 & 0.46 & 0.89 \\ \hline Crwvt:Dp & P(I) & 0.23 & 0.04 & 0.14 & 0.31 \\ \hline Crwvt:Ds & E(I) & 0.01 & 0.11 & -0.20 & 0.23 \\ \hline Crwvt:Ds & G(Ia) & -0.03 & 0.13 & -0.29 & 0.23 \\ \hline Crwvt:Dp & P(I) & -0.00 & 0.04 & -0.09 & 0.08 \\ \hline Crwvt:Dps & E(I) & -0.00 & 0.12 & -0.24 & 0.23 \\ \hline Crwvt:Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt:Dps & E(I) & -0.01 & 0.01 & 0.04 & -0.07 & 0.10 \\ \hline Crwvt:Dps & P(I) & 0.01 & 0.04 & -0.07 & 0.10 \\ \hline Crwvt:Dps & E(I) & -0.25 & 0.18 & -0.60 & 0.11 \\ \hline Crwvt:DpovDs & E(I) & -0.25 & 0.18 & -0.60 & 0.11 \\ \hline Crwvt:DpovDs & P(I) & 0.24 & 0.04 & 0.16 & 0.32 \\ \hline Crwvt:CVDp & E(I) & -0.20 & 0.11 & -0.41 & 0.01 \\ \hline Crwvt:CVDp & G(Ia) & 0.63 & 0.15 & 0.33 & 0.93 \\ \hline Crwvt:CVDp & P(I) & 0.10 & 0.04 & 0.02 & 0.19 \\ \hline \end{array}$					1	
$ \begin{array}{ c c c c c c c c } \hline Crwvt: Crstadj & E(I) & -0.85 & 0.02 & -0.89 & -0.82 \\ \hline Crwvt: Crstadj & G(Ia) & -1.00 & 0.01 & -1.01 & -0.98 \\ \hline Crwvt: Crstadj & P(I) & -0.92 & 0.01 & -0.93 & -0.91 \\ \hline Crwvt: Crwvt & E(I) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt: Crwvt & G(Ia) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt: Crwvt & P(I) & 1.00 & 0.00 & 1.00 & 1.00 \\ \hline Crwvt: Dp & E(I) & -0.19 & 0.14 & -0.46 & 0.09 \\ \hline Crwvt: Dp & G(Ia) & 0.68 & 0.11 & 0.46 & 0.89 \\ \hline Crwvt: Dp & P(I) & 0.23 & 0.04 & 0.14 & 0.31 \\ \hline Crwvt: Ds & E(I) & -0.03 & 0.13 & -0.29 & 0.23 \\ \hline Crwvt: Ds & G(Ia) & -0.03 & 0.13 & -0.29 & 0.23 \\ \hline Crwvt: Dp & E(I) & -0.00 & 0.04 & -0.09 & 0.08 \\ \hline Crwvt: Dps & E(I) & -0.00 & 0.12 & -0.24 & 0.23 \\ \hline Crwvt: Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt: Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt: Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt: Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt: Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt: Dps & G(Ia) & 0.01 & 0.04 & -0.07 & 0.10 \\ \hline Crwvt: DpovDs & E(I) & -0.25 & 0.18 & -0.60 & 0.11 \\ \hline Crwvt: DpovDs & G(Ia) & 0.65 & 0.10 & 0.46 & 0.84 \\ \hline Crwvt: CVDp & E(I) & -0.20 & 0.11 & -0.41 & 0.01 \\ \hline Crwvt: CVDp & G(Ia) & 0.63 & 0.15 & 0.33 & 0.93 \\ \hline Crwvt: CVDp & G(Ia) & 0.63 & 0.15 & 0.33 & 0.93 \\ \hline Crwvt: CVDp & P(I) & 0.10 & 0.04 & 0.02 & 0.19 \\ \hline \end{array}$	1			0.01		
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crwvt:Crstadj	G(Ia)	-1.00	0.01	-1.01	-0.98
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Crwvt:Crstadj	\ /	-0.92	0.01	-0.93	-0.91
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Crwvt:Crwvt		1.00	0.00	1.00	1.00
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$\begin{array}{ c c c c c c c c c } \hline Crwvt:Dp & E(I) & -0.19 & 0.14 & -0.46 & 0.09 \\ \hline Crwvt:Dp & G(Ia) & 0.68 & 0.11 & 0.46 & 0.89 \\ \hline Crwvt:Dp & P(I) & 0.23 & 0.04 & 0.14 & 0.31 \\ \hline Crwvt:Ds & E(I) & 0.01 & 0.11 & -0.20 & 0.23 \\ \hline Crwvt:Ds & G(Ia) & -0.03 & 0.13 & -0.29 & 0.23 \\ \hline Crwvt:Ds & P(I) & -0.00 & 0.04 & -0.09 & 0.08 \\ \hline Crwvt:Dps & E(I) & -0.00 & 0.12 & -0.24 & 0.23 \\ \hline Crwvt:Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt:Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt:Dps & P(I) & 0.01 & 0.04 & -0.07 & 0.10 \\ \hline Crwvt:DpovDs & E(I) & -0.25 & 0.18 & -0.60 & 0.11 \\ \hline Crwvt:DpovDs & G(Ia) & 0.65 & 0.10 & 0.46 & 0.84 \\ \hline Crwvt:DpovDs & P(I) & 0.24 & 0.04 & 0.16 & 0.32 \\ \hline Crwvt:CVDp & E(I) & -0.20 & 0.11 & -0.41 & 0.01 \\ \hline Crwvt:CVDp & G(Ia) & 0.63 & 0.15 & 0.33 & 0.93 \\ \hline Crwvt:CVDp & P(I) & 0.10 & 0.04 & 0.02 & 0.19 \\ \hline \end{array}$	Crwvt:Crwvt	P(I)	1.00	0.00	1.00	1.00
$\begin{array}{ c c c c c c c c } \hline Crwvt:Dp & P(I) & 0.23 & 0.04 & 0.14 & 0.31 \\ \hline Crwvt:Ds & E(I) & 0.01 & 0.11 & -0.20 & 0.23 \\ \hline Crwvt:Ds & G(Ia) & -0.03 & 0.13 & -0.29 & 0.23 \\ \hline Crwvt:Ds & P(I) & -0.00 & 0.04 & -0.09 & 0.08 \\ \hline Crwvt:Dps & E(I) & -0.00 & 0.12 & -0.24 & 0.23 \\ \hline Crwvt:Dps & G(Ia) & 0.03 & 0.13 & -0.23 & 0.30 \\ \hline Crwvt:Dps & P(I) & 0.01 & 0.04 & -0.07 & 0.10 \\ \hline Crwvt:DpovDs & E(I) & -0.25 & 0.18 & -0.60 & 0.11 \\ \hline Crwvt:DpovDs & G(Ia) & 0.65 & 0.10 & 0.46 & 0.84 \\ \hline Crwvt:DpovDs & P(I) & 0.24 & 0.04 & 0.16 & 0.32 \\ \hline Crwvt:CVDp & E(I) & -0.20 & 0.11 & -0.41 & 0.01 \\ \hline Crwvt:CVDp & G(Ia) & 0.63 & 0.15 & 0.33 & 0.93 \\ \hline Crwvt:CVDp & P(I) & 0.10 & 0.04 & 0.02 & 0.19 \\ \hline \end{array}$	Crwvt:Dp		-0.19	0.14	-0.46	0.09
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Dp	G(Ia)	0.68	0.11	0.46	0.89
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Ds	E(I)	0.01	0.11	-0.20	0.23
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Ds	G(Ia)	-0.03	0.13	-0.29	0.23
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Ds	P(I)	-0.00	0.04	-0.09	0.08
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Dps	E(I)	-0.00	0.12	-0.24	0.23
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Dps	G(Ia)	0.03	0.13	-0.23	0.30
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Crwvt:Dps	P(I)	0.01	0.04	-0.07	0.10
Crwvt:DpovDs P(I) 0.24 0.04 0.16 0.32 Crwvt:CVDp E(I) -0.20 0.11 -0.41 0.01 Crwvt:CVDp G(Ia) 0.63 0.15 0.33 0.93 Crwvt:CVDp P(I) 0.10 0.04 0.02 0.19			-0.25	0.18	-0.60	0.11
Crwvt:DpovDs P(I) 0.24 0.04 0.16 0.32 Crwvt:CVDp E(I) -0.20 0.11 -0.41 0.01 Crwvt:CVDp G(Ia) 0.63 0.15 0.33 0.93 Crwvt:CVDp P(I) 0.10 0.04 0.02 0.19	Crwvt:DpovDs	G(Ia)	0.65	0.10	0.46	0.84
			0.24	0.04	0.16	0.32
Crwvt:CVDp P(I) 0.10 0.04 0.02 0.19	Crwvt:CVDp	E(I)	-0.20	0.11	-0.41	0.01
	Crwvt:CVDp	G(Ia)	0.63	0.15	0.33	0.93
Crwvt:CVDs	Crwvt:CVDp	P(I)	0.10	0.04	0.02	0.19
	Crwvt:CVDs	E(I)	-0.03	0.10	-0.23	0.17

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Crwvt:CVDs	G(Ia)	0.79	0.17	0.45	1.12		
Crwvt:CVDs	P(I)	0.22	0.04	0.14	0.31		
Crwvt:MaxDp	E(I)	-0.20	0.13	-0.45	0.06		
Crwvt:MaxDp	G(Ia)	0.67	0.12	0.44	0.90		
Crwvt:MaxDp	P(I)	0.20	0.04	0.11	0.28		
Crwvt:MinDp	E(I)	-0.06	0.09	-0.22	0.11		
Crwvt:MinDp	G(Ia)	0.65	0.35	-0.04	1.33		
Crwvt:MinDp	P(I)	0.07	0.04	-0.02	0.15		
Crwvt:MaxDs	E(I)	0.04	0.10	-0.15	0.23		
Crwvt:MaxDs	G(Ia)	0.38	0.15	0.09	0.66		
Crwvt:MaxDs	P(I)	0.16	0.04	0.07	0.24		
Crwvt:MinDs	E(I)	0.02	0.08	-0.14	0.19		
Crwvt:MinDs	G(Ia)	0.09	0.33	-0.55	0.73		
Crwvt:MinDs	P(I)	0.03	0.04	-0.05	0.12		
Crwvt:SDDp	E(I)	-0.23	0.13	-0.48	0.02		
Crwvt:SDDp	G(Ia)	0.69	0.12	0.44	0.93		
Crwvt:SDDp	P(I)	0.17	0.04	0.08	0.25		
Crwvt:SDDs	E(I)	-0.02	0.12	-0.26	0.21		
Crwvt:SDDs	G(Ia)	0.55	0.13	0.29	0.80		
Crwvt:SDDs	P(I)	0.20	0.04	0.12	0.29		
Crwvt:SDD	E(I)	-0.07	0.12	-0.30	0.17		
Crwvt:SDD	G(Ia)	0.61	0.12	0.37	0.86		
Crwvt:SDD	P(I)	0.21	0.04	0.13	0.30		
Crwvt:CVD	E(I)	-0.06	0.10	-0.26	0.15		
Crwvt:CVD	G(Ia)	0.81	0.16	0.50	1.11		
Crwvt:CVD	P(I)	0.23	0.04	0.15	0.32		
Crwvt:Gt30Dp	E(I)	-0.13	0.13	-0.38	0.13		
Crwvt:Gt30Dp	G(Ia)	0.66	0.12	0.43	0.89		
Crwvt:Gt30Dp	P(I)	0.22	0.04	0.14	0.31		
Crwvt:Gt30Ds	E(I)	0.00	0.08	-0.15	0.15		
Crwvt:Gt30Ds	G(Ia)	0.29	0.16	-0.03	0.61		
Crwvt:Gt30Ds	P(I)	0.09	0.04	0.01	0.18		
Crwvt:Gt30D	E(I)	-0.02	0.11	-0.24	0.19		
Crwvt:Gt30D	G(Ia)	0.43	0.15	0.13	0.72		
Crwvt:Gt30D	P(I)	0.13	0.04	0.05	0.22		
Crwvt:Fnua	E(I)	-0.16	0.05	-0.26	-0.06		
Crwvt:Fnua	G(Ia)	0.58	0.05	0.48	0.68		
Crwvt:Fnua	P(I)	0.12	0.02	0.07	0.16		
Crwvt:Fr	E(I)	-0.07	0.05	-0.16	0.03		
Crwvt:Fr	G(Ia)	0.25	0.05	0.14	0.35		
Crwvt:Fr	P(I)	0.05	0.02	0.00	0.09		
Crwvt:Fnt	E(I)	-0.33	0.05	-0.43	-0.22		
Crwvt:Fnt	G(Ia)	0.64	0.05	0.54	0.74		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Crwvt:Fnt	P(I)	0.07	0.02	0.02	0.11	
Crwvt:Sarea	E(I)	-0.41	0.05	-0.51	-0.31	
Crwvt:Sarea	G(Ia)	0.21	0.04	0.13	0.29	
Crwvt:Sarea	P(I)	-0.13	0.02	-0.18	-0.09	
Crwvt:Fd	E(I)	-0.23	0.05	-0.33	-0.12	
Crwvt:Fd	G(Ia)	0.43	0.06	0.32	0.54	
Crwvt:Fd	P(I)	0.01	0.02	-0.04	0.06	
Crwvt:Fc	E(I)	0.62	0.08	0.47	0.78	
Crwvt:Fc	G(Ia)	-0.87	0.03	-0.93	-0.82	
Crwvt:Fc	P(I)	-0.20	0.02	-0.24	-0.16	
Crwvt:Fu	E(I)	0.22	0.06	0.10	0.35	
Crwvt:Fu	G(Ia)	-0.46	0.05	-0.55	-0.36	
Crwvt:Fu	P(I)	-0.08	0.03	-0.13	-0.02	
Crwvt:Colour	E(I)	0.04	0.04	-0.03	0.12	
Crwvt:Colour	G(Ia)	0.29	0.09	0.10	0.47	
Crwvt:Colour	P(I)	0.09	0.02	0.04	0.13	
Crwvt:Fly	E(I)	0.09	0.04	0.01	0.17	
Crwvt:Fly	G(Ia)	-0.46	0.08	-0.62	-0.31	
Crwvt:Fly	P(I)	-0.05	0.02	-0.09	-0.00	
Crwvt:Flcrot	E(I)	-0.03	0.04	-0.10	0.05	
Crwvt:Flcrot	G(Ia)	0.61	0.24	0.14	1.08	
Crwvt:Flcrot	P(I)	0.05	0.02	0.01	0.09	
Crwvt:Bactst	E(I)	0.17	0.06	0.04	0.29	
Crwvt:Bactst	G(Ia)	0.59	0.25	0.10	1.08	
Crwvt:Bactst	P(I)	0.22	0.03	0.16	0.29	
Crwvt:MycD	E(I)	0.03	0.07	-0.10	0.16	
Crwvt:MycD	G(Ia)	0.38	0.21	-0.02	0.79	
Crwvt:MycD	P(I)	0.10	0.03	0.03	0.16	
Crwvt:Bcts	E(I)	-0.06	0.09	-0.23	0.12	
Crwvt:Bcts	G(Ia)	0.27	0.05	0.18	0.36	
Crwvt:Bcts	P(I)	0.12	0.02	0.08	0.17	
Crwvt:Bctb	E(I)	-0.08	0.07	-0.22	0.07	
Crwvt:Bctb	G(Ia)	0.31	0.05	0.21	0.40	
Crwvt:Bctb	P(I)	0.12	0.02	0.07	0.17	
Crwvt:Weanwt	E(I)	-0.11	0.05	-0.21	-0.02	
Crwvt:Weanwt	G(Ia)	-0.01	0.08	-0.17	0.15	
Crwvt:Weanwt	P(I)	-0.08	0.02	-0.13	-0.03	
Crwvt:NLB	E(I)	0.08	0.04	0.00	0.17	
Crwvt:NLB	G(Ia)	-0.00	0.06	-0.12	0.12	
Crwvt:NLB	P(I)	0.05	0.02	0.01	0.09	
Crwvt:NLW	E(I)	0.04	0.04	-0.04	0.13	
Crwvt:NLW	G(Ia)	0.08	0.05	-0.01	0.18	
Crwvt:NLW	P(I)	0.06	0.02	0.02	0.10	

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
Crwvt:Fnpua	E(I)	-0.10	0.05	-0.20	0.00
Crwvt:Fnpua	G(Ia)	0.35	0.05	0.26	0.44
Crwvt:Fnpua	P(I)	0.08	0.03	0.04	0.11
Crwvt:Fnsua	E(I)	-0.16	0.05	-0.26	-0.06
Crwvt:Fnsua	G(Ia)	0.58	0.05	0.48	0.68
Crwvt:Fnsua	P(I)	0.12	0.03	0.07	0.16
Crwvt:Fnpt	E(I)	-0.30	0.05	-0.40	-0.20
Crwvt:Fnpt	G(Ia)	0.47	0.05	0.37	0.57
Crwvt:Fnpt	P(I)	0.01	0.02	-0.03	0.06
Crwvt:Fnst	E(I)	-0.32	0.05	-0.42	-0.21
Crwvt:Fnst	G(Ia)	0.64	0.05	0.54	0.73
Crwvt:Fnst	P(I)	0.07	0.02	0.02	0.11
Dp:Stal	E(I)	0.09	0.09	-0.08	0.26
Dp:Stal	G(Ia)	-0.19	0.05	-0.30	-0.08
Dp:Stal	P(I)	-0.05	0.03	-0.12	0.01
Dp:Diam	E(I)	0.63	0.08	0.48	0.78
Dp:Diam	G(Ia)	0.14	0.05	0.05	0.24
Dp:Diam	P(I)	0.37	0.03	0.31	0.42
Dp:Bwt	E(I)	0.13	0.07	-0.02	0.27
Dp:Bwt	G(Ia)	-0.26	0.07	-0.40	-0.12
Dp:Bwt	P(I)	-0.03	0.03	-0.09	0.04
Dp:WrN	E(I)	0.37	0.08	0.21	0.53
Dp:WrN	G(Ia)	-0.21	0.05	-0.31	-0.10
Dp:WrN	P(I)	0.07	0.03	0.01	0.13
Dp:WrB	E(I)	0.28	0.08	0.13	0.42
Dp:WrB	G(Ia)	-0.05	0.06	-0.17	0.07
Dp:WrB	P(I)	0.12	0.03	0.06	0.18
Dp:WrT	E(I)	0.37	0.08	0.21	0.53
Dp:WrT	G(Ia)	-0.14	0.05	-0.25	-0.03
Dp:WrT	P(I)	0.11	0.03	0.04	0.17
Dp:Face	E(I)	-0.62	0.09	-0.80	-0.45
Dp:Face	G(Ia)	0.53	0.04	0.45	0.60
Dp:Face	P(I)	0.07	0.03	0.01	0.12
Dp:Gfw	E(I)	0.20	0.08	0.05	0.35
Dp:Gfw	G(Ia)	0.03	0.06	-0.08	0.13
Dp:Gfw	P(I)	0.12	0.03	0.05	0.18
Dp:Yld	E(I)	0.03	0.08	-0.12	0.19
Dp:Yld	G(Ia)	-0.19	0.06	-0.31	-0.07
Dp:Yld	P(I)	-0.07	0.03	-0.13	-0.00
Dp:Cww	E(I)	0.18	0.08	0.03	0.34
Dp:Cww	G(Ia)	-0.01	0.06	-0.12	0.10
Dp:Cww	P(I)	0.09	0.03	0.03	0.15
Dp:Staladj	E(I)	0.09	Continued of	-0.08	0.26

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Dp:Staladj	G(Ia)	-0.19	0.05	-0.30	-0.09		
Dp:Staladj	P(I)	-0.05	0.03	-0.12	0.01		
Dp:Gfwadj	E(I)	0.20	0.08	0.05	0.34		
Dp:Gfwadj	G(Ia)	0.02	0.06	-0.10	0.13		
Dp:Gfwadj	P(I)	0.11	0.03	0.05	0.18		
Dp:Cwwadj	$\mid E(I) \mid$	0.19	0.08	0.04	0.34		
Dp:Cwwadj	G(Ia)	-0.04	0.06	-0.16	0.08		
Dp:Cwwadj	P(I)	0.08	0.03	0.02	0.15		
Dp:Crimp	$\mid E(I) \mid$	0.12	0.16	-0.19	0.44		
Dp:Crimp	G(Ia)	-0.49	0.09	-0.67	-0.31		
Dp:Crimp	P(I)	-0.21	0.04	-0.30	-0.13		
Dp:Crwvl	E(I)	-0.11	0.15	-0.41	0.19		
Dp:Crwvl	G(Ia)	0.51	0.09	0.33	0.70		
Dp:Crwvl	P(I)	0.22	0.04	0.14	0.30		
Dp:Crst	E(I)	0.18	0.15	-0.11	0.47		
Dp:Crst	G(Ia)	-0.63	0.11	-0.84	-0.42		
Dp:Crst	P(I)	-0.22	0.04	-0.30	-0.13		
Dp:Crstadj	E(I)	0.19	0.15	-0.09	0.48		
Dp:Crstadj	G(Ia)	-0.65	0.11	-0.86	-0.43		
Dp:Crstadj	P(I)	-0.22	0.04	-0.30	-0.13		
Dp:Crwvt	E(I)	-0.19	0.14	-0.46	0.09		
Dp:Crwvt	G(Ia)	0.68	0.11	0.46	0.89		
Dp:Crwvt	P(I)	0.23	0.04	0.14	0.31		
Dp:Dp	E(I)	1.00	0.00	1.00	1.00		
Dp:Dp	G(Ia)	1.00	0.00	1.00	1.00		
Dp:Dp	P(I)	1.00	0.00	1.00	1.00		
Dp:Ds	E(I)	0.78	0.07	0.65	0.91		
Dp:Ds	G(Ia)	-0.09	0.06	-0.22	0.03		
Dp:Ds	P(I)	0.38	0.03	0.32	0.43		
Dp:Dps	E(I)	0.81	0.06	0.69	0.93		
Dp:Dps	G(Ia)	-0.00	0.15	-0.30	0.29		
Dp:Dps	P(I)	0.44	0.03	0.39	0.50		
Dp:DpovDs	E(I)	0.65	0.08	0.49	0.80		
Dp:DpovDs	G(Ia)	0.87	0.02	0.82	0.91		
Dp:DpovDs	P(I)	0.76	0.02	0.72	0.79		
Dp:CVDp	$\mid E(I) \mid$	-0.02	0.08	-0.17	0.14		
Dp:CVDp	G(Ia)	0.55	0.06	0.43	0.68		
Dp:CVDp	P(I)	0.22	0.03	0.16	0.28		
Dp:CVDs	E(I)	-0.04	0.07	-0.18	0.11		
Dp:CVDs	G(Ia)	0.52	0.07	0.37	0.66		
Dp:CVDs	P(I)	0.17	0.03	0.11	0.24		
Dp:MaxDp	E(I)	0.72	0.04	0.64	0.80		
Dp:MaxDp	G(Ia)	0.95	0.02	0.91	1.00		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Dp:MaxDp	P(I)	0.84	0.01	0.81	0.87	
Dp:MinDp	E(I)	0.50	0.05	0.39	0.60	
Dp:MinDp	G(Ia)	0.63	0.17	0.30	0.95	
Dp:MinDp	P(I)	0.44	0.03	0.38	0.50	
Dp:MaxDs	E(I)	0.45	0.06	0.34	0.57	
Dp:MaxDs	G(Ia)	0.36	0.08	0.21	0.51	
Dp:MaxDs	P(I)	0.40	0.03	0.34	0.46	
Dp:MinDs	E(I)	0.16	0.06	0.04	0.28	
Dp:MinDs	G(Ia)	-0.19	0.18	-0.55	0.16	
Dp:MinDs	P(I)	0.08	0.03	0.01	0.14	
Dp:SDDp	E(I)	0.46	0.06	0.34	0.58	
Dp:SDDp	G(Ia)	0.85	0.03	0.78	0.92	
Dp:SDDp	P(I)	0.66	0.02	0.61	0.70	
Dp:SDDs	E(I)	0.45	0.07	0.32	0.59	
Dp:SDDs	G(Ia)	0.34	0.05	0.24	0.45	
Dp:SDDs	P(I)	0.40	0.03	0.34	0.46	
Dp:SDD	E(I)	0.50	0.06	0.38	0.63	
Dp:SDD	G(Ia)	0.47	0.05	0.38	0.57	
Dp:SDD	P(I)	0.49	0.03	0.43	0.54	
Dp:CVD	E(I)	-0.02	0.08	-0.17	0.13	
Dp:CVD	G(Ia)	0.60	0.07	0.46	0.73	
Dp:CVD	P(I)	0.23	0.03	0.16	0.29	
Dp:Gt30Dp	E(I)	0.79	0.03	0.73	0.86	
Dp:Gt30Dp	G(Ia)	0.95	0.02	0.91	0.99	
Dp:Gt30Dp	P(I)	0.87	0.01	0.85	0.90	
Dp:Gt30Ds	E(I)	0.47	0.06	0.35	0.59	
Dp:Gt30Ds	G(Ia)	0.24	0.07	0.11	0.37	
Dp:Gt30Ds	P(I)	0.37	0.03	0.31	0.43	
Dp:Gt30D	E(I)	0.60	0.05	0.50	0.71	
Dp:Gt30D	G(Ia)	0.50	0.05	0.39	0.61	
Dp:Gt30D	P(I)	0.55	0.03	0.50	0.60	
Dp:Fnua	E(I)	-0.42	0.07	-0.56	-0.28	
Dp:Fnua	G(Ia)	0.00	1.34	-2.63	2.63	
Dp:Fnua	P(I)	-0.24	0.03	-0.30	-0.17	
Dp:Fr	E(I)	-0.11	0.07	-0.25	0.04	
Dp:Fr	G(Ia)	-0.13	0.07	-0.27	0.01	
Dp:Fr	P(I)	-0.11	0.03	-0.18	-0.05	
Dp:Fnt	E(I)	-0.33	0.07	-0.47	-0.20	
Dp:Fnt	G(Ia)	-0.11	0.07	-0.25	0.03	
Dp:Fnt	P(I)	-0.24	0.03	-0.30	-0.17	
Dp:Sarea	E(I)	0.13	0.07	-0.01	0.27	
Dp:Sarea	G(Ia)	-0.26	0.07	-0.40	-0.11	
Dp:Sarea	P(I)	-0.03	0.03	-0.09	0.04	

Table 24 – Continued from previous page

Table 24 – Continued from previous page					
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Dp:Fd	E(I)	0.27	0.09	0.08	0.45
Dp:Fd	G(Ia)	0.15	0.13	-0.11	0.41
Dp:Fd	P(I)	0.21	0.04	0.13	0.30
Dp:Fc	E(I)	0.25	0.11	0.04	0.46
Dp:Fc	G(Ia)	-0.32	0.09	-0.51	-0.14
Dp:Fc	P(I)	-0.02	0.04	-0.10	0.06
Dp:Fu	E(I)	0.30	0.11	0.08	0.51
Dp:Fu	G(Ia)	-0.37	0.09	-0.55	-0.18
Dp:Fu	P(I)	-0.02	0.04	-0.10	0.06
Dp:Colour	E(I)	-0.14	0.07	-0.28	-0.00
Dp:Colour	G(Ia)	0.56	0.07	0.42	0.70
Dp:Colour	P(I)	0.13	0.03	0.07	0.19
Dp:Fly	E(I)	-0.22	0.06	-0.35	-0.10
Dp:Fly	G(Ia)	0.29	0.11	0.07	0.51
Dp:Fly	P(I)	-0.07	0.03	-0.13	-0.01
Dp:Flcrot	E(I)	-0.09	0.07	-0.22	0.04
Dp:Flcrot	G(Ia)	0.05	0.08	-0.10	0.21
Dp:Flcrot	P(I)	-0.04	0.03	-0.10	0.03
Dp:Bactst	E(I)	0.00	0.06	-0.11	0.11
Dp:Bactst	G(Ia)	0.34	0.12	0.10	0.57
Dp:Bactst	P(I)	0.08	0.03	0.02	0.15
Dp:MycD	E(I)	-0.03	0.06	-0.15	0.09
Dp:MycD	G(Ia)	0.05	0.18	-0.30	0.39
Dp:MycD	P(I)	-0.01	0.03	-0.07	0.05
Dp:Bcts	E(I)	-0.32	0.18	-0.67	0.02
Dp:Bcts	G(Ia)	0.77	0.03	0.72	0.83
Dp:Bcts	P(I)	0.44	0.02	0.39	0.48
Dp:Bctb	E(I)	-0.18	0.15	-0.48	0.11
Dp:Bctb	G(Ia)	0.70	0.03	0.65	0.76
Dp:Bctb	P(I)	0.42	0.02	0.37	0.47
Dp:Weanwt	E(I)	-0.00	0.06	-0.12	0.11
Dp:Weanwt	G(Ia)	-0.33	0.07	-0.48	-0.19
Dp:Weanwt	P(I)	-0.13	0.03	-0.19	-0.06
Dp:NLB	E(I)	0.04	0.07	-0.09	0.18
Dp:NLB	G(Ia)	0.41	0.08	0.26	0.55
Dp:NLB	P(I)	0.17	0.03	0.11	0.24
Dp:NLW	E(I)	0.02	0.07	-0.11	0.16
Dp:NLW	G(Ia)	0.42	0.07	0.28	0.57
Dp:NLW	P(I)	0.17	0.03	0.11	0.24
Dp:Fnpua	E(I)	-0.21	0.07	-0.34	-0.08
Dp:Fnpua	G(Ia)	-0.03	0.08	-0.18	0.13
Dp:Fnpua	P(I)	-0.14	0.03	-0.20	-0.07
Dp:Fnsua	E(I)	-0.41	0.07	-0.55	-0.28

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Dp:Fnsua	G(Ia)	0.00	0.18	-0.35	0.35		
Dp:Fnsua	P(I)	-0.23	0.03	-0.30	-0.17		
Dp:Fnpt	E(I)	-0.15	0.07	-0.28	-0.02		
Dp:Fnpt	G(Ia)	-0.12	0.07	-0.26	0.02		
Dp:Fnpt	P(I)	-0.13	0.03	-0.20	-0.07		
Dp:Fnst	E(I)	-0.33	0.07	-0.46	-0.20		
Dp:Fnst	G(Ia)	-0.11	0.07	-0.25	0.04		
Dp:Fnst	P(I)	-0.23	0.03	-0.30	-0.17		
Ds:Stal	E(I)	-0.06	0.08	-0.21	0.09		
Ds:Stal	G(Ia)	0.36	0.06	0.24	0.49		
Ds:Stal	P(I)	0.13	0.03	0.06	0.19		
Ds:Diam	E(I)	0.35	0.06	0.22	0.48		
Ds:Diam	G(Ia)	0.91	0.04	0.83	0.99		
Ds:Diam	P(I)	0.61	0.02	0.57	0.66		
Ds:Bwt	E(I)	0.11	0.06	-0.02	0.23		
Ds:Bwt	G(Ia)	0.35	0.08	0.20	0.51		
Ds:Bwt	P(I)	0.19	0.03	0.13	0.25		
Ds:WrN	E(I)	-0.07	0.08	-0.22	0.08		
Ds:WrN	G(Ia)	0.47	0.06	0.36	0.59		
Ds:WrN	P(I)	0.17	0.03	0.11	0.23		
Ds:WrB	E(I)	0.06	0.07	-0.07	0.20		
Ds:WrB	G(Ia)	0.43	0.07	0.30	0.55		
Ds:WrB	P(I)	0.21	0.03	0.15	0.27		
Ds:WrT	E(I)	-0.00	0.20	-0.39	0.39		
Ds:WrT	G(Ia)	0.47	0.06	0.36	0.59		
Ds:WrT	P(I)	0.21	0.03	0.15	0.27		
Ds:Face	E(I)	-0.19	0.07	-0.33	-0.05		
Ds:Face	G(Ia)	-0.15	0.04	-0.23	-0.07		
Ds:Face	P(I)	-0.16	0.03	-0.22	-0.11		
Ds:Gfw	E(I)	-0.07	0.07	-0.21	0.07		
Ds:Gfw	G(Ia)	0.69	0.06	0.56	0.81		
Ds:Gfw	P(I)	0.24	0.03	0.18	0.30		
Ds:Yld	E(I)	-0.07	0.07	-0.21	0.06		
Ds:Yld	G(Ia)	0.02	0.07	-0.12	0.16		
Ds:Yld	P(I)	-0.04	0.03	-0.10	0.03		
Ds:Cww	E(I)	-0.11	0.07	-0.25	0.04		
Ds:Cww	G(Ia)	0.63	0.06	0.50	0.75		
Ds:Cww	P(I)	0.20	0.03	0.14	0.27		
Ds:Staladj	E(I)	-0.05	0.08	-0.21	0.10		
Ds:Staladj	G(Ia)	0.36	0.06	0.23	0.48		
Ds:Staladj	P(I)	0.13	0.03	0.06	0.19		
Ds:Gfwadj	E(I)	-0.07	0.07	-0.21	0.07		
Ds:Gfwadj	G(Ia)	0.71	0.06	0.58	0.83		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Ds:Gfwadj	P(I)	0.24	0.03	0.18	0.30		
Ds:Cwwadj	E(I)	-0.11	0.07	-0.26	0.03		
Ds:Cwwadj	G(Ia)	0.69	0.07	0.56	0.82		
Ds:Cwwadj	P(I)	0.21	0.03	0.15	0.28		
Ds:Crimp	E(I)	0.08	0.13	-0.18	0.33		
Ds:Crimp	G(Ia)	-0.41	0.11	-0.63	-0.19		
Ds:Crimp	P(I)	-0.15	0.04	-0.24	-0.06		
Ds:Crwvl	E(I)	-0.06	0.12	-0.31	0.18		
Ds:Crwvl	G(Ia)	0.43	0.12	0.20	0.65		
Ds:Crwvl	P(I)	0.16	0.04	0.07	0.24		
Ds:Crst	E(I)	-0.04	0.11	-0.27	0.18		
Ds:Crst	G(Ia)	0.10	0.13	-0.16	0.36		
Ds:Crst	P(I)	0.02	0.05	-0.07	0.11		
Ds:Crstadj	E(I)	-0.03	0.12	-0.26	0.19		
Ds:Crstadj	G(Ia)	0.10	0.13	-0.16	0.35		
Ds:Crstadj	P(I)	0.02	0.05	-0.07	0.11		
Ds:Crwvt	E(I)	0.01	0.11	-0.20	0.23		
Ds:Crwvt	G(Ia)	-0.03	0.13	-0.29	0.23		
Ds:Crwvt	P(I)	-0.00	0.04	-0.09	0.08		
Ds:Dp	E(I)	0.78	0.07	0.65	0.91		
Ds:Dp	G(Ia)	-0.09	0.06	-0.22	0.03		
Ds:Dp	P(I)	0.38	0.03	0.32	0.43		
Ds:Ds	E(I)	1.00	0.00	1.00	1.00		
Ds:Ds	G(Ia)	1.00	0.00	1.00	1.00		
Ds:Ds	P(I)	1.00	0.00	1.00	1.00		
Ds:Dps	E(I)	1.00	0.00	0.99	1.01		
Ds:Dps	G(Ia)	1.00	0.00	0.99	1.00		
Ds:Dps	P(I)	1.00	0.00	0.99	1.00		
Ds:DpovDs	E(I)	0.06	0.14	-0.21	0.33		
Ds:DpovDs	G(Ia)	-0.58	0.04	-0.66	-0.49		
Ds:DpovDs	P(I)	-0.31	0.03	-0.37	-0.25		
Ds:CVDp	E(I)	-0.07	0.07	-0.20	0.07		
Ds:CVDp	G(Ia)	0.07	0.08	-0.08	0.22		
Ds:CVDp	P(I)	-0.02	0.03	-0.08	0.05		
Ds:CVDs	E(I)	-0.39	0.06	-0.51	-0.27		
Ds:CVDs	G(Ia)	0.03	0.09	-0.15	0.20		
Ds:CVDs	P(I)	-0.25	0.03	-0.31	-0.19		
Ds:MaxDp	E(I)	0.54	0.07	0.41	0.68		
Ds:MaxDp	G(Ia)	-0.09	0.06	-0.22	0.03		
Ds:MaxDp	P(I)	0.26	0.03	0.20	0.32		
Ds:MinDp	E(I)	0.33	0.05	0.23	0.44		
Ds:MinDp	G(Ia)	0.02	0.13	-0.22	0.27		
Ds:MinDp	P(I)	0.25	0.03	0.19	0.32		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Ds:MaxDs	E(I)	0.41	0.05	0.31	0.51		
Ds:MaxDs	G(Ia)	0.74	0.08	0.59	0.89		
Ds:MaxDs	P(I)	0.49	0.03	0.44	0.55		
Ds:MinDs	E(I)	0.24	0.06	0.13	0.35		
Ds:MinDs	G(Ia)	-0.02	0.42	-0.85	0.81		
Ds:MinDs	P(I)	0.17	0.03	0.11	0.24		
Ds:SDDp	E(I)	0.33	0.07	0.18	0.47		
Ds:SDDp	G(Ia)	-0.06	0.06	-0.18	0.07		
Ds:SDDp	P(I)	0.15	0.03	0.09	0.22		
Ds:SDDs	E(I)	0.22	0.07	0.09	0.34		
Ds:SDDs	G(Ia)	0.60	0.06	0.48	0.71		
Ds:SDDs	P(I)	0.37	0.03	0.31	0.43		
Ds:SDD	E(I)	0.25	0.07	0.12	0.38		
Ds:SDD	G(Ia)	0.54	0.06	0.42	0.65		
Ds:SDD	P(I)	0.37	0.03	0.31	0.43		
Ds:CVD	E(I)	-0.38	0.06	-0.50	-0.26		
Ds:CVD	G(Ia)	-0.01	0.07	-0.14	0.12		
Ds:CVD	P(I)	-0.25	0.03	-0.31	-0.18		
Ds:Gt30Dp	E(I)	0.44	0.07	0.30	0.58		
Ds:Gt30Dp	G(Ia)	-0.07	0.07	-0.19	0.06		
Ds:Gt30Dp	P(I)	0.22	0.03	0.15	0.28		
Ds:Gt30Ds	E(I)	0.58	0.05	0.49	0.67		
Ds:Gt30Ds	G(Ia)	0.77	0.05	0.66	0.87		
Ds:Gt30Ds	P(I)	0.64	0.02	0.60	0.69		
Ds:Gt30D	E(I)	0.62	0.05	0.53	0.71		
Ds:Gt30D	G(Ia)	0.65	0.06	0.54	0.75		
Ds:Gt30D	P(I)	0.63	0.02	0.58	0.67		
Ds:Fnua	E(I)	-0.40	0.06	-0.51	-0.29		
Ds:Fnua	G(Ia)	-0.73	0.06	-0.85	-0.61		
Ds:Fnua	P(I)	-0.52	0.03	-0.57	-0.46		
Ds:Fr	E(I)	-0.23	0.06	-0.36	-0.11		
Ds:Fr	G(Ia)	-0.12	0.08	-0.28	0.03		
Ds:Fr	P(I)	-0.19	0.03	-0.26	-0.13		
Ds:Fnt	E(I)	-0.31	0.06	-0.42	-0.20		
Ds:Fnt	G(Ia)	-0.69	0.07	-0.83	-0.55		
Ds:Fnt	P(I)	-0.43	0.03	-0.49	-0.38		
Ds:Sarea	E(I)	0.12	0.06	-0.01	0.24		
Ds:Sarea	G(Ia)	0.34	0.08	0.18	0.49		
Ds:Sarea	P(I)	0.19	0.03	0.13	0.26		
Ds:Fd	E(I)	0.28	0.09	0.11	0.45		
Ds:Fd	G(Ia)	0.01	0.10	-0.19	0.22		
Ds:Fd	P(I)	0.19	0.04	0.10	0.27		
Ds:Fc	E(I)	0.03	0.09	-0.15	0.21		

Table 24 – Continued from previous page

	$\frac{\text{le } 24 - Contin}{\text{Component}}$	ued from prev Estimate	StdErr	CI95lo	CI95hi
Traitpair Ds:Fc	_	0.72	0.09	0.54	0.89
	G(Ia)			0.54	
Ds:Fc	P(I)	0.33	0.04		0.41
Ds:Fu	E(I)	0.07	0.10	-0.12	0.26
Ds:Fu	G(Ia)	0.67	0.09	0.50	0.84
Ds:Fu	P(I)	0.34	0.04	0.26	0.41
Ds:Colour	E(I)	0.08	0.06	-0.04	0.21
Ds:Colour	G(Ia)	-0.17	0.08	-0.33	-0.02
Ds:Colour	P(I)	-0.00	0.03	-0.07	0.06
Ds:Fly	E(I)	-0.15	0.06	-0.26	-0.04
Ds:Fly	G(Ia)	0.11	0.12	-0.13	0.35
Ds:Fly	P(I)	-0.08	0.03	-0.14	-0.02
Ds:Flcrot	E(I)	-0.09	0.06	-0.21	0.03
Ds:Flcrot	G(Ia)	-0.17	0.09	-0.34	0.01
Ds:Flcrot	P(I)	-0.11	0.03	-0.17	-0.05
Ds:Bactst	E(I)	-0.02	0.06	-0.13	0.10
Ds:Bactst	G(Ia)	-0.06	0.13	-0.31	0.19
Ds:Bactst	P(I)	-0.02	0.03	-0.09	0.04
Ds:MycD	E(I)	-0.03	0.06	-0.14	0.07
Ds:MycD	G(Ia)	0.11	0.20	-0.28	0.49
Ds:MycD	P(I)	-0.01	0.03	-0.07	0.05
Ds:Bcts	E(I)	0.06	0.13	-0.19	0.32
Ds:Bcts	G(Ia)	-0.15	0.04	-0.23	-0.07
Ds:Bcts	P(I)	-0.07	0.03	-0.13	-0.02
Ds:Bctb	E(I)	0.12	0.12	-0.12	0.35
Ds:Bctb	G(Ia)	-0.14	0.04	-0.22	-0.07
Ds:Bctb	P(I)	-0.05	0.03	-0.10	0.00
Ds:Weanwt	E(I)	-0.01	0.06	-0.14	0.11
Ds:Weanwt	G(Ia)	0.04	0.08	-0.12	0.20
Ds:Weanwt	P(I)	0.00	0.03	-0.06	0.07
Ds:NLB	E(I)	0.17	0.06	0.05	0.30
Ds:NLB	G(Ia)	-0.16	0.09	-0.33	0.02
Ds:NLB	P(I)	0.07	0.03	0.00	0.13
Ds:NLW	E(I)	0.18	0.06	0.06	0.31
Ds:NLW	G(Ia)	-0.23	0.09	-0.40	-0.06
Ds:NLW	P(I)	0.04	0.03	-0.02	0.11
Ds:Fnpua	E(I)	-0.15	0.06	-0.26	-0.03
Ds:Fnpua	G(Ia)	-0.46	0.09	-0.63	-0.28
Ds:Fnpua	P(I)	-0.24	0.03	-0.30	-0.18
Ds:Fnsua	E(I)	-0.40	0.06	-0.51	-0.29
Ds:Fnsua	G(Ia)	-0.72	0.06	-0.84	-0.60
Ds:Fnsua	P(I)	-0.51	0.03	-0.57	-0.46
Ds:Fnpt	E(I)	-0.11	0.06	-0.23	0.01
Ds:Fnpt	G(Ia)	-0.31	0.08	-0.47	-0.15

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Ds:Fnpt	P(I)	-0.17	0.03	-0.24	-0.11
Ds:Fnst	E(I)	-0.31	0.06	-0.42	-0.20
Ds:Fnst	G(Ia)	-0.69	0.07	-0.83	-0.55
Ds:Fnst	P(I)	-0.43	0.03	-0.49	-0.38
Dps:Stal	E(I)	-0.05	0.08	-0.20	0.09
Dps:Stal	G(Ia)	0.35	0.06	0.23	0.48
Dps:Stal	P(I)	0.12	0.03	0.06	0.19
Dps:Diam	E(I)	0.38	0.06	0.26	0.50
Dps:Diam	G(Ia)	0.93	0.04	0.85	1.01
Dps:Diam	P(I)	0.63	0.02	0.58	0.67
Dps:Bwt	E(I)	0.11	0.06	-0.01	0.23
Dps:Bwt	G(Ia)	0.33	0.08	0.17	0.49
Dps:Bwt	P(I)	0.18	0.03	0.12	0.25
Dps:WrN	E(I)	-0.04	0.07	-0.19	0.10
Dps:WrN	G(Ia)	0.45	0.06	0.33	0.57
Dps:WrN	P(I)	0.17	0.03	0.11	0.23
Dps:WrB	E(I)	0.08	0.07	-0.06	0.21
Dps:WrB	G(Ia)	0.42	0.07	0.29	0.55
Dps:WrB	P(I)	0.21	0.03	0.15	0.27
Dps:WrT	E(I)	0.02	0.07	-0.12	0.16
Dps:WrT	G(Ia)	0.46	0.06	0.34	0.58
Dps:WrT	P(I)	0.21	0.03	0.15	0.27
Dps:Face	E(I)	-0.23	0.07	-0.37	-0.09
Dps:Face	G(Ia)	-0.10	0.04	-0.19	-0.02
Dps:Face	P(I)	-0.16	0.03	-0.21	-0.11
Dps:Gfw	E(I)	-0.06	0.07	-0.19	0.08
Dps:Gfw	G(Ia)	0.69	0.07	0.56	0.82
Dps:Gfw	P(I)	0.24	0.03	0.18	0.30
Dps:Yld	E(I)	-0.07	0.07	-0.20	0.07
Dps:Yld	G(Ia)	-0.00	0.07	-0.14	0.13
Dps:Yld	P(I)	-0.04	0.03	-0.11	0.02
Dps:Cww	E(I)	-0.09	0.07	-0.23	0.05
Dps:Cww	G(Ia)	0.63	0.06	0.50	0.75
Dps:Cww	P(I)	0.20	0.03	0.14	0.26
Dps:Staladj	E(I)	-0.05	0.08	-0.20	0.10
Dps:Staladj	G(Ia)	0.35	0.06	0.22	0.47
Dps:Staladj	P(I)	0.12	0.03	0.06	0.19
Dps:Gfwadj	E(I)	-0.06	0.07	-0.20	0.08
Dps:Gfwadj	G(Ia)	0.71	0.07	0.58	0.85
Dps:Gfwadj	P(I)	0.24	0.03	0.18	0.31
Dps:Cwwadj	E(I)	-0.10	0.07	-0.24	0.05
Dps:Cwwadj	G(Ia)	0.69	0.07	0.55	0.82
Dps:Cwwadj	P(I)	0.21	0.03	0.15	0.28

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Dps:Crimp	E(I)	0.08	0.13	-0.17	0.33
Dps:Crimp	G(Ia)	-0.45	0.11	-0.67	-0.22
Dps:Crimp	P(I)	-0.16	0.04	-0.25	-0.07
Dps:Crwvl	$\mathrm{E}(\mathrm{I})$	-0.07	0.12	-0.31	0.18
Dps:Crwvl	G(Ia)	0.46	0.12	0.24	0.69
Dps:Crwvl	P(I)	0.17	0.04	0.08	0.25
Dps:Crst	E(I)	-0.03	0.11	-0.25	0.20
Dps:Crst	G(Ia)	0.04	0.13	-0.22	0.30
Dps:Crst	P(I)	0.00	0.05	-0.09	0.09
Dps:Crstadj	E(I)	-0.02	0.11	-0.24	0.20
Dps:Crstadj	G(Ia)	0.04	0.13	-0.22	0.30
Dps:Crstadj	P(I)	0.00	0.05	-0.09	0.09
Dps:Crwvt	E(I)	-0.00	0.12	-0.24	0.23
Dps:Crwvt	G(Ia)	0.03	0.13	-0.23	0.30
Dps:Crwvt	P(I)	0.01	0.04	-0.07	0.10
Dps:Dp	E(I)	0.81	0.06	0.69	0.93
Dps:Dp	G(Ia)	-0.00	0.15	-0.30	0.29
Dps:Dp	P(I)	0.44	0.03	0.39	0.50
Dps:Ds	E(I)	1.00	0.00	0.99	1.01
Dps:Ds	G(Ia)	1.00	0.00	0.99	1.00
Dps:Ds	P(I)	1.00	0.00	0.99	1.00
Dps:Dps	E(I)	1.00	0.00	1.00	1.00
Dps:Dps	G(Ia)	1.00	0.00	1.00	1.00
Dps:Dps	P(I)	1.00	0.00	1.00	1.00
Dps:DpovDs	E(I)	0.11	0.13	-0.15	0.36
Dps:DpovDs	G(Ia)	-0.50	0.05	-0.59	-0.41
Dps:DpovDs	P(I)	-0.24	0.03	-0.31	-0.18
Dps:CVDp	E(I)	-0.06	0.07	-0.19	0.06
Dps:CVDp	G(Ia)	0.12	0.08	-0.03	0.28
Dps:CVDp	P(I)	0.00	0.03	-0.06	0.07
Dps:CVDs	E(I)	-0.38	0.06	-0.50	-0.26
Dps:CVDs	G(Ia)	0.08	0.09	-0.10	0.25
Dps:CVDs	P(I)	-0.23	0.03	-0.29	-0.16
Dps:MaxDp	E(I)	0.57	0.07	0.44	0.70
Dps:MaxDp	G(Ia)	-0.01	0.08	-0.16	0.15
Dps:MaxDp	P(I)	0.32	0.03	0.26	0.38
Dps:MinDp	E(I)	0.35	0.05	0.25	0.45
Dps:MinDp	G(Ia)	0.07	0.16	-0.24	0.39
Dps:MinDp	P(I)	0.28	0.03	0.22	0.34
Dps:MaxDs	E(I)	0.42	0.05	0.32	0.51
Dps:MaxDs	G(Ia)	0.78	0.08	0.62	0.93
Dps:MaxDs	P(I)	0.51	0.03	0.46	0.56
Dps:MinDs	E(I)	0.24	0.05	0.13	0.34

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Dps:MinDs	G(Ia)	-0.04	0.26	-0.56	0.48		
Dps:MinDs	P(I)	0.18	0.03	0.11	0.24		
Dps:SDDp	E(I)	0.34	0.07	0.20	0.48		
Dps:SDDp	G(Ia)	0.02	0.06	-0.10	0.14		
Dps:SDDp	P(I)	0.20	0.03	0.14	0.26		
Dps:SDDs	E(I)	0.23	0.06	0.11	0.36		
Dps:SDDs	G(Ia)	0.63	0.06	0.51	0.75		
Dps:SDDs	P(I)	0.39	0.03	0.33	0.45		
Dps:SDD	E(I)	0.27	0.06	0.15	0.40		
Dps:SDD	G(Ia)	0.59	0.06	0.47	0.70		
Dps:SDD	P(I)	0.40	0.03	0.34	0.46		
Dps:CVD	E(I)	-0.36	0.06	-0.48	-0.24		
Dps:CVD	G(Ia)	0.05	0.09	-0.12	0.21		
Dps:CVD	P(I)	-0.22	0.03	-0.28	-0.16		
Dps:Gt30Dp	E(I)	0.48	0.07	0.34	0.61		
Dps:Gt30Dp	G(Ia)	0.02	0.06	-0.10	0.14		
Dps:Gt30Dp	P(I)	0.28	0.03	0.22	0.34		
Dps:Gt30Ds	E(I)	0.58	0.04	0.50	0.67		
Dps:Gt30Ds	G(Ia)	0.79	0.06	0.68	0.90		
Dps:Gt30Ds	P(I)	0.65	0.02	0.60	0.69		
Dps:Gt30D	E(I)	0.63	0.04	0.55	0.72		
Dps:Gt30D	G(Ia)	0.69	0.05	0.59	0.80		
Dps:Gt30D	P(I)	0.65	0.02	0.61	0.69		
Dps:Fnua	E(I)	-0.41	0.05	-0.52	-0.31		
Dps:Fnua	G(Ia)	-0.74	0.06	-0.86	-0.62		
Dps:Fnua	P(I)	-0.52	0.03	-0.58	-0.47		
Dps:Fr	E(I)	-0.24	0.06	-0.36	-0.12		
Dps:Fr	G(Ia)	-0.15	0.08	-0.31	0.01		
Dps:Fr	P(I)	-0.21	0.03	-0.27	-0.15		
Dps:Fnt	E(I)	-0.32	0.06	-0.43	-0.21		
Dps:Fnt	G(Ia)	-0.71	0.07	-0.85	-0.57		
Dps:Fnt	P(I)	-0.44	0.03	-0.50	-0.39		
Dps:Sarea	E(I)	0.12	0.06	-0.00	0.24		
Dps:Sarea	G(Ia)	0.32	0.08	0.16	0.48		
Dps:Sarea	P(I)	0.18	0.03	0.12	0.25		
Dps:Fd	E(I)	0.27	0.08	0.11	0.44		
Dps:Fd	G(Ia)	0.03	0.13	-0.22	0.29		
Dps:Fd	P(I)	0.20	0.04	0.11	0.28		
Dps:Fc	E(I)	0.05	0.09	-0.13	0.23		
Dps:Fc	G(Ia)	0.71	0.09	0.52	0.89		
Dps:Fc	P(I)	0.33	0.04	0.25	0.40		
Dps:Fu	E(I)	0.08	0.10	-0.10	0.27		
Dps:Fu	G(Ia)	0.65	0.09	0.47	0.83		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Dps:Fu	P(I)	0.33	0.04	0.25	0.41		
Dps:Colour	E(I)	0.07	0.06	-0.05	0.19		
Dps:Colour	G(Ia)	-0.13	0.08	-0.29	0.04		
Dps:Colour	P(I)	0.01	0.03	-0.06	0.07		
Dps:Fly	E(I)	-0.15	0.06	-0.26	-0.05		
Dps:Fly	G(Ia)	0.13	0.13	-0.11	0.38		
Dps:Fly	P(I)	-0.08	0.03	-0.15	-0.02		
Dps:Flcrot	E(I)	-0.09	0.06	-0.20	0.03		
Dps:Flcrot	G(Ia)	-0.17	0.09	-0.35	0.01		
Dps:Flcrot	P(I)	-0.11	0.03	-0.17	-0.04		
Dps:Bactst	E(I)	-0.01	0.06	-0.12	0.10		
Dps:Bactst	G(Ia)	-0.04	0.13	-0.30	0.22		
Dps:Bactst	P(I)	-0.02	0.03	-0.08	0.05		
Dps:MycD	E(I)	-0.03	0.05	-0.14	0.07		
Dps:MycD	G(Ia)	0.10	0.21	-0.30	0.50		
Dps:MycD	P(I)	-0.01	0.03	-0.08	0.05		
Dps:Bcts	E(I)	0.04	0.13	-0.21	0.28		
Dps:Bcts	G(Ia)	-0.08	0.04	-0.16	-0.00		
Dps:Bcts	P(I)	-0.04	0.03	-0.09	0.02		
Dps:Bctb	E(I)	0.09	0.12	-0.13	0.32		
Dps:Bctb	G(Ia)	-0.08	0.04	-0.16	-0.00		
Dps:Bctb	P(I)	-0.02	0.03	-0.07	0.03		
Dps:Weanwt	E(I)	-0.02	0.06	-0.14	0.11		
Dps:Weanwt	G(Ia)	0.01	0.09	-0.16	0.18		
Dps:Weanwt	P(I)	-0.01	0.03	-0.07	0.06		
Dps:NLB	E(I)	0.17	0.06	0.05	0.29		
Dps:NLB	G(Ia)	-0.12	0.09	-0.30	0.06		
Dps:NLB	P(I)	0.08	0.03	0.01	0.14		
Dps:NLW	E(I)	0.18	0.06	0.05	0.30		
Dps:NLW	G(Ia)	-0.19	0.09	-0.36	-0.02		
Dps:NLW	P(I)	0.06	0.03	-0.01	0.12		
Dps:Fnpua	E(I)	-0.15	0.06	-0.26	-0.03		
Dps:Fnpua	G(Ia)	-0.45	0.09	-0.63	-0.28		
Dps:Fnpua	P(I)	-0.23	0.03	-0.29	-0.17		
Dps:Fnsua	E(I)	-0.41	0.05	-0.52	-0.31		
Dps:Fnsua	G(Ia)	-0.73	0.06	-0.85	-0.61		
Dps:Fnsua	P(I)	-0.52	0.03	-0.57	-0.47		
Dps:Fnpt	E(I)	-0.11	0.06	-0.22	0.01		
Dps:Fnpt	G(Ia)	-0.32	0.08	-0.48	-0.15		
Dps:Fnpt	P(I)	-0.17	0.03	-0.23	-0.11		
Dps:Fnst	E(I)	-0.32	0.06	-0.43	-0.22		
Dps:Fnst	G(Ia)	-0.71	0.07	-0.85	-0.56		
Dps:Fnst	P(I)	-0.44	0.03	-0.50	-0.39		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
DpovDs:Stal	E(I)	0.19	0.14	-0.08	0.46		
DpovDs:Stal	G(Ia)	-0.34	0.04	-0.42	-0.25		
DpovDs:Stal	P(I)	-0.15	0.03	-0.21	-0.09		
DpovDs:Diam	E(I)	0.58	0.15	0.28	0.88		
DpovDs:Diam	G(Ia)	-0.33	0.04	-0.41	-0.24		
DpovDs:Diam	P(I)	-0.05	0.03	-0.11	0.02		
DpovDs:Bwt	E(I)	0.06	0.12	-0.17	0.29		
DpovDs:Bwt	G(Ia)	-0.39	0.06	-0.50	-0.28		
DpovDs:Bwt	P(I)	-0.17	0.03	-0.23	-0.10		
DpovDs:WrN	E(I)	0.60	0.13	0.34	0.86		
DpovDs:WrN	G(Ia)	-0.38	0.04	-0.46	-0.29		
DpovDs:WrN	P(I)	-0.04	0.03	-0.10	0.02		
DpovDs:WrB	E(I)	0.33	0.12	0.10	0.55		
DpovDs:WrB	G(Ia)	-0.23	0.05	-0.32	-0.13		
DpovDs:WrB	P(I)	-0.01	0.03	-0.08	0.05		
DpovDs:WrT	E(I)	0.53	0.13	0.27	0.78		
DpovDs:WrT	G(Ia)	-0.32	0.04	-0.41	-0.24		
DpovDs:WrT	P(I)	-0.03	0.03	-0.09	0.03		
DpovDs:Face	E(I)	-0.69	0.14	-0.98	-0.41		
DpovDs:Face	G(Ia)	0.52	0.03	0.46	0.57		
DpovDs:Face	P(I)	0.19	0.03	0.14	0.24		
DpovDs:Gfw	E(I)	0.40	0.13	0.15	0.65		
DpovDs:Gfw	G(Ia)	-0.31	0.05	-0.40	-0.22		
DpovDs:Gfw	P(I)	-0.05	0.03	-0.11	0.02		
DpovDs:Yld	E(I)	0.13	0.12	-0.11	0.37		
DpovDs:Yld	G(Ia)	-0.17	0.05	-0.27	-0.07		
DpovDs:Yld	P(I)	-0.05	0.03	-0.11	0.01		
DpovDs:Cww	E(I)	0.40	0.13	0.14	0.66		
DpovDs:Cww	G(Ia)	-0.31	0.04	-0.40	-0.22		
DpovDs:Cww	P(I)	-0.06	0.03	-0.12	0.00		
DpovDs:Staladj	E(I)	0.18	0.14	-0.10	0.45		
DpovDs:Staladj	G(Ia)	-0.33	0.04	-0.42	-0.25		
DpovDs:Staladj	P(I)	-0.15	0.03	-0.22	-0.09		
DpovDs:Gfwadj	E(I)	0.39	0.13	0.14	0.64		
DpovDs:Gfwadj	G(Ia)	-0.32	0.05	-0.42	-0.23		
DpovDs:Gfwadj	P(I)	-0.05	0.03	-0.11	0.01		
DpovDs:Cwwadj	E(I)	0.42	0.13	0.15	0.68		
DpovDs:Cwwadj	G(Ia)	-0.36	0.05	-0.46	-0.27		
DpovDs:Cwwadj	P(I)	-0.07	0.03	-0.13	-0.00		
DpovDs:Crimp	E(I)	0.11	0.19	-0.27	0.49		
DpovDs:Crimp	G(Ia)	-0.25	0.08	-0.41	-0.08		
DpovDs:Crimp	P(I)	-0.11	0.04	-0.20	-0.03		
DpovDs:Crwvl	E(I)	-0.10	0.18	-0.46	0.26		

Table 24 – Continued from previous page

Traitpair DpovDs:Crwvl DpovDs:Crwvl DpovDs:Crst DpovDs:Crst	Component G(Ia) P(I) E(I) G(Ia)	Estimate 0.27 0.12	0.09	CI95lo 0.10	CI95hi 0.44
DpovDs:Crwvl DpovDs:Crst	P(I) E(I)	0.12			0.11
DpovDs:Crst	$\mathrm{E}(\mathrm{I})$		0.04	0.04	0.20
1 -		0.28	0.19	-0.09	0.64
1 D DOV D B. CIBU		-0.65	0.10	-0.83	-0.46
DpovDs:Crst	P(I)	-0.24	0.04	-0.32	-0.16
DpovDs:Crstadj	E(I)	0.29	0.19	-0.08	0.66
DpovDs:Crstadj	G(Ia)	-0.66	0.10	-0.84	-0.47
DpovDs:Crstadj	P(I)	-0.24	0.04	-0.32	-0.16
DpovDs:Crwvt	E(I)	-0.25	0.18	-0.60	0.11
DpovDs:Crwvt	G(Ia)	0.65	0.10	0.46	0.84
DpovDs:Crwvt	P(I)	0.24	0.04	0.16	0.32
DpovDs:Dp	E(I)	0.65	0.08	0.49	0.80
DpovDs:Dp	G(Ia)	0.87	0.02	0.82	0.91
DpovDs:Dp	P(I)	0.76	0.02	0.72	0.79
DpovDs:Ds	E(I)	0.06	0.02	-0.21	0.33
DpovDs:Ds	G(Ia)	-0.58	0.04	-0.66	-0.49
DpovDs:Ds	P(I)	-0.31	0.03	-0.37	-0.25
DpovDs:Dps	E(I)	0.11	0.13	-0.15	0.36
DpovDs:Dps	G(Ia)	-0.50	0.05	-0.59	-0.41
DpovDs:Dps	P(I)	-0.24	0.03	-0.31	-0.18
DpovDs:DpovDs	E(I)	1.00	0.00	1.00	1.00
DpovDs:DpovDs	G(Ia)	1.00	0.00	1.00	1.00
DpovDs:DpovDs	P(I)	1.00	0.00	1.00	1.00
DpovDs:CVDp	E(I)	0.02	0.10	-0.17	0.21
DpovDs:CVDp	G(Ia)	0.44	0.05	0.34	0.54
DpovDs:CVDp	P(I)	0.24	0.03	0.17	0.30
DpovDs:CVDs	E(I)	0.46	0.10	0.26	0.66
DpovDs:CVDs	G(Ia)	0.39	0.05	0.28	0.49
DpovDs:CVDs	P(I)	0.35	0.03	0.30	0.41
DpovDs:MaxDp	E(I)	0.48	0.09	0.30	0.66
DpovDs:MaxDp	$\dot{G}(Ia)$	0.83	0.03	0.78	0.89
DpovDs:MaxDp	P(I)	0.67	0.02	0.63	0.71
DpovDs:MinDp	$\dot{\mathrm{E}(\mathrm{I})}$	0.38	0.09	0.20	0.57
DpovDs:MinDp	G(Ia)	0.50	0.16	0.20	0.81
DpovDs:MinDp	P(I)	0.27	0.03	0.21	0.33
DpovDs:MaxDs	E(I)	0.26	0.11	0.05	0.48
DpovDs:MaxDs	G(Ia)	-0.08	0.07	-0.22	0.06
DpovDs:MaxDs	P(I)	0.07	0.03	0.01	0.13
DpovDs:MinDs	E(I)	-0.04	0.10	-0.23	0.15
DpovDs:MinDs	G(Ia)	-0.14	0.13	-0.40	0.12
DpovDs:MinDs	P(I)	-0.05	0.03	-0.11	0.02
DpovDs:SDDp	E(I)	0.31	0.11	0.10	0.52
DpovDs:SDDp	G(Ia)	0.74	0.03	0.68	0.80

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
DpovDs:SDDp	P(I)	0.56	0.02	0.51	0.61	
DpovDs:SDDs	E(I)	0.51	0.13	0.27	0.76	
DpovDs:SDDs	G(Ia)	-0.04	0.05	-0.13	0.06	
DpovDs:SDDs	P(I)	0.15	0.03	0.09	0.21	
DpovDs:SDD	E(I)	0.54	0.12	0.30	0.78	
DpovDs:SDD	G(Ia)	0.10	0.05	0.01	0.19	
DpovDs:SDD	P(I)	0.24	0.03	0.17	0.30	
DpovDs:CVD	E(I)	0.47	0.10	0.28	0.66	
DpovDs:CVD	G(Ia)	0.48	0.05	0.38	0.57	
DpovDs:CVD	P(I)	0.41	0.03	0.35	0.46	
DpovDs:Gt30Dp	E(I)	0.68	0.08	0.52	0.83	
DpovDs:Gt30Dp	G(Ia)	0.82	0.03	0.77	0.87	
DpovDs:Gt30Dp	P(I)	0.72	0.02	0.68	0.76	
DpovDs:Gt30Ds	E(I)	0.11	0.12	-0.12	0.33	
DpovDs:Gt30Ds	G(Ia)	-0.20	0.06	-0.32	-0.09	
DpovDs:Gt30Ds	P(I)	-0.06	0.03	-0.12	0.01	
DpovDs:Gt30D	E(I)	0.25	0.11	0.03	0.47	
DpovDs:Gt30D	G(Ia)	0.07	0.05	-0.03	0.18	
DpovDs:Gt30D	P(I)	0.13	0.03	0.06	0.19	
DpovDs:Fnua	E(I)	-0.20	0.12	-0.45	0.04	
DpovDs:Fnua	G(Ia)	0.36	0.06	0.26	0.47	
DpovDs:Fnua	P(I)	0.11	0.03	0.05	0.18	
DpovDs:Fr	E(I)	0.11	0.12	-0.12	0.34	
DpovDs:Fr	G(Ia)	-0.03	0.06	-0.15	0.08	
DpovDs:Fr	P(I)	0.02	0.03	-0.04	0.09	
DpovDs:Fnt	E(I)	-0.18	0.12	-0.41	0.05	
DpovDs:Fnt	G(Ia)	0.25	0.06	0.13	0.37	
DpovDs:Fnt	P(I)	0.05	0.03	-0.01	0.12	
DpovDs:Sarea	E(I)	0.06	0.12	-0.18	0.30	
DpovDs:Sarea	G(Ia)	-0.40	0.06	-0.51	-0.29	
DpovDs:Sarea	P(I)	-0.17	0.03	-0.23	-0.11	
DpovDs:Fd	E(I)	0.11	0.19	-0.27	0.50	
DpovDs:Fd	G(Ia)	0.11	0.10	-0.08	0.31	
DpovDs:Fd	P(I)	0.08	0.04	-0.00	0.16	
DpovDs:Fc	E(I)	0.47	0.26	-0.04	0.97	
DpovDs:Fc	G(Ia)	-0.55	0.07	-0.67	-0.42	
DpovDs:Fc	P(I)	-0.22	0.04	-0.29	-0.14	
DpovDs:Fu	E(I)	0.53	0.27	-0.01	1.06	
DpovDs:Fu	G(Ia)	-0.57	0.07	-0.70	-0.44	
DpovDs:Fu	P(I)	-0.23	0.04	-0.30	-0.15	
DpovDs:Colour	E(I)	-0.36	0.12	-0.60	-0.11	
DpovDs:Colour	G(Ia)	0.53	0.06	0.42	0.65	
DpovDs:Colour	P(I)	0.13	0.03	0.06	0.19	

Table 24 – Continued from previous page

	le 24 – Contin	ued from prev Estimate	StdErr	CI95lo	CI95hi
Traitpair DpovDs:Fly	Component			-0.36	
DpovDs:Fly DpovDs:Fly	E(I)	-0.17 0.18	0.10 0.09	0.01	0.03 0.34
1 -	G(Ia)	I .	0.09	-0.07	
DpovDs:Fly	P(I)	-0.01			0.05 0.19
DpovDs:Florot	E(I)	-0.03 0.11	0.11 0.06	-0.24	
DpovDs:Flerot	G(Ia)	0.11	0.00	-0.01	0.24
DpovDs:Flcrot	P(I)			-0.03	0.10
DpovDs:Bactst	E(I)	0.03	0.10	-0.16	0.22
DpovDs:Bactst	G(Ia)	0.31	0.09	0.12	0.49
DpovDs:Bactst	P(I)	0.11	0.03	0.04	0.17
DpovDs:MycD	E(I)	0.00	0.11	-0.21	0.21
DpovDs:MycD	G(Ia)	-0.01	0.14	-0.27	0.26
DpovDs:MycD	P(I)	-0.00	0.03	-0.06	0.06
DpovDs:Bcts	E(I)	-0.53	0.29	-1.11	0.05
DpovDs:Bcts	G(Ia)	0.71	0.02	0.66	0.75
DpovDs:Bcts	P(I)	0.51	0.02	0.46	0.55
DpovDs:Bctb	E(I)	-0.38	0.25	-0.86	0.11
DpovDs:Bctb	G(Ia)	0.65	0.02	0.61	0.69
DpovDs:Bctb	P(I)	0.48	0.02	0.43	0.52
DpovDs:Weanwt	E(I)	0.04	0.11	-0.18	0.26
DpovDs:Weanwt	G(Ia)	-0.32	0.06	-0.44	-0.21
DpovDs:Weanwt	P(I)	-0.14	0.03	-0.20	-0.07
DpovDs:NLB	E(I)	-0.15	0.12	-0.37	0.08
DpovDs:NLB	G(Ia)	0.42	0.06	0.30	0.54
DpovDs:NLB	P(I)	0.14	0.03	0.07	0.20
DpovDs:NLW	E(I)	-0.20	0.12	-0.43	0.04
DpovDs:NLW	G(Ia)	0.47	0.06	0.36	0.59
DpovDs:NLW	P(I)	0.15	0.03	0.09	0.21
DpovDs:Fnpua	E(I)	-0.16	0.11	-0.37	0.06
DpovDs:Fnpua	G(Ia)	0.19	0.07	0.06	0.32
DpovDs:Fnpua	P(I)	0.02	0.03	-0.05	0.08
DpovDs:Fnsua	E(I)	-0.20	0.12	-0.44	0.04
DpovDs:Fnsua	G(Ia)	0.36	0.05	0.25	0.47
DpovDs:Fnsua	P(I)	0.11	0.03	0.05	0.18
DpovDs:Fnpt	E(I)	-0.11	0.11	-0.33	0.10
DpovDs:Fnpt	G(Ia)	0.04	0.06	-0.08	0.15
DpovDs:Fnpt	P(I)	-0.02	0.03	-0.09	0.04
DpovDs:Fnst	E(I)	-0.17	0.12	-0.40	0.06
DpovDs:Fnst	G(Ia)	0.25	0.06	0.13	0.37
DpovDs:Fnst	P(I)	0.05	0.03	-0.01	0.12
CVDp:Stal	E(I)	-0.15	0.07	-0.29	-0.01
CVDp:Stal	G(Ia)	0.05	0.07	-0.09	0.19
CVDp:Stal	P(I)	-0.07	0.03	-0.13	-0.00
CVDp:Diam	E(I)	-0.07	0.08	-0.22	0.09

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
CVDp:Diam	G(Ia)	0.30	0.06	0.18	0.43		
CVDp:Diam	P(I)	0.09	0.03	0.03	0.16		
CVDp:Bwt	E(I)	-0.04	0.06	-0.16	0.08		
CVDp:Bwt	G(Ia)	0.04	0.09	-0.14	0.23		
CVDp:Bwt	P(I)	-0.02	0.03	-0.08	0.05		
CVDp:WrN	E(I)	0.22	0.07	0.09	0.36		
CVDp:WrN	G(Ia)	-0.01	0.07	-0.15	0.13		
CVDp:WrN	P(I)	0.12	0.03	0.06	0.19		
CVDp:WrB	E(I)	0.25	0.06	0.13	0.38		
CVDp:WrB	G(Ia)	-0.06	0.08	-0.21	0.09		
CVDp:WrB	P(I)	0.14	0.03	0.07	0.20		
CVDp:WrT	E(I)	0.27	0.07	0.14	0.41		
CVDp:WrT	G(Ia)	-0.04	0.07	-0.17	0.10		
CVDp:WrT	P(I)	0.14	0.03	0.08	0.21		
CVDp:Face	E(I)	-0.44	0.08	-0.58	-0.29		
CVDp:Face	G(Ia)	0.56	0.05	0.46	0.67		
CVDp:Face	P(I)	0.06	0.03	0.01	0.11		
CVDp:Gfw	E(I)	-0.01	0.07	-0.14	0.12		
CVDp:Gfw	G(Ia)	0.15	0.07	0.01	0.30		
CVDp:Gfw	P(I)	0.05	0.03	-0.01	0.11		
CVDp:Yld	E(I)	-0.08	0.06	-0.20	0.05		
CVDp:Yld	G(Ia)	-0.26	0.08	-0.41	-0.11		
CVDp:Yld	P(I)	-0.14	0.03	-0.21	-0.08		
CVDp:Cww	E(I)	-0.03	0.07	-0.17	0.10		
CVDp:Cww	G(Ia)	0.03	0.07	-0.11	0.17		
CVDp:Cww	P(I)	-0.01	0.03	-0.07	0.05		
CVDp:Staladj	E(I)	-0.14	0.07	-0.29	-0.00		
CVDp:Staladj	G(Ia)	0.05	0.07	-0.09	0.19		
CVDp:Staladj	P(I)	-0.07	0.03	-0.13	0.00		
CVDp:Gfwadj	E(I)	0.00	0.06	-0.11	0.12		
CVDp:Gfwadj	G(Ia)	0.15	0.08	0.00	0.30		
CVDp:Gfwadj	P(I)	0.06	0.03	-0.01	0.12		
CVDp:Cwwadj	E(I)	-0.02	0.07	-0.16	0.11		
CVDp:Cwwadj	G(Ia)	0.03	0.08	-0.13	0.18		
CVDp:Cwwadj	P(I)	-0.01	0.03	-0.07	0.06		
CVDp:Crimp	E(I)	0.19	0.12	-0.05	0.42		
CVDp:Crimp	G(Ia)	-0.33	0.13	-0.59	-0.08		
CVDp:Crimp	P(I)	-0.04	0.05	-0.13	0.05		
CVDp:Crwvl	E(I)	-0.16	0.11	-0.39	0.06		
CVDp:Crwvl	G(Ia)	0.29	0.13	0.03	0.54		
CVDp:Crwvl	P(I)	0.02	0.04	-0.06	0.11		
CVDp:Crst	E(I)	0.21	0.11	-0.01	0.43		
CVDp:Crst	G(Ia)	-0.60	0.15	-0.89	-0.31		

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
CVDp:Crst	P(I)	-0.09	0.05	-0.18	-0.00
CVDp:Crstadj	E(I)	0.22	0.03	0.00	0.44
CVDp:Crstadj CVDp:Crstadj	G(Ia)	-0.60	0.11	-0.90	-0.31
CVDp:Crstadj	P(I)	-0.09	0.05	-0.18	-0.00
CVDp:Crwvt	E(I)	-0.20	0.11	-0.41	0.01
CVDp:Crwvt	G(Ia)	0.63	0.15	0.33	0.93
CVDp:Crwvt	P(I)	0.10	0.04	0.02	0.19
CVDp:Dp	E(I)	-0.02	0.08	-0.17	0.14
CVDp:Dp	G(Ia)	0.55	0.06	0.43	0.68
CVDp:Dp	P(I)	0.22	0.03	0.16	0.28
CVDp:Ds	E(I)	-0.07	0.07	-0.20	0.07
CVDp:Ds	G(Ia)	0.07	0.08	-0.08	0.22
CVDp:Ds	P(I)	-0.02	0.03	-0.08	0.05
CVDp:Dps	E(I)	-0.06	0.07	-0.19	0.06
CVDp:Dps	G(Ia)	0.12	0.08	-0.03	0.28
CVDp:Dps	P(I)	0.00	0.03	-0.06	0.07
CVDp:DpovDs	E(I)	0.02	0.10	-0.17	0.21
CVDp:DpovDs	G(Ia)	0.44	0.05	0.34	0.54
CVDp:DpovDs	P(I)	0.24	0.03	0.17	0.30
CVDp:CVDp	E(I)	1.00	0.00	1.00	1.00
CVDp:CVDp	G(Ia)	1.00	0.00	1.00	1.00
CVDp:CVDp	P(I)	1.00	0.00	1.00	1.00
CVDp:CVDs	E(I)	0.19	0.06	0.08	0.31
CVDp:CVDs	G(Ia)	0.43	0.09	0.27	0.60
CVDp:CVDs	P(I)	0.27	0.03	0.21	0.33
CVDp:MaxDp	E(I)	0.41	0.06	0.30	0.53
CVDp:MaxDp	G(Ia)	0.74	0.05	0.63	0.84
CVDp:MaxDp	P(I)	0.54	0.03	0.49	0.59
CVDp:MinDp	E(I)	-0.50	0.05	-0.59	-0.41
CVDp:MinDp	G(Ia)	-0.03	0.13	-0.28	0.21
CVDp:MinDp	P(I)	-0.40	0.03	-0.46	-0.34
CVDp:MaxDs	E(I)	0.05	0.06	-0.06	0.16
CVDp:MaxDs	G(Ia)	0.51	0.11	0.30	0.73
CVDp:MaxDs	P(I)	0.17	0.03	0.11	0.24
CVDp:MinDs	E(I)	0.06	0.05	-0.05	0.16
CVDp:MinDs	G(Ia)	-0.49	0.24	-0.95	-0.02
CVDp:MinDs	P(I)	-0.02	0.03	-0.09	0.04
CVDp:SDDp	E(I)	0.85	0.03	0.80	0.91
CVDp:SDDp	G(Ia)	0.88	0.03	0.83	0.94
CVDp:SDDp	P(I)	0.86	0.01	0.83	0.88
CVDp:SDDs	E(I)	0.17	0.06	0.04	0.29
CVDp:SDDs	G(Ia)	0.34	0.07	0.20	0.48
CVDp:SDDs	P(I)	0.23	Continued of	0.17	0.29

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
CVDp:SDD	E(I)	0.28	0.06	0.16	0.40		
CVDp:SDD	G(Ia)	0.46	0.07	0.33	0.59		
CVDp:SDD	P(I)	0.35	0.03	0.29	0.41		
CVDp:CVD	E(I)	0.31	0.06	0.20	0.42		
CVDp:CVD	G(Ia)	0.54	0.08	0.39	0.69		
CVDp:CVD	P(I)	0.38	0.03	0.32	0.44		
CVDp:Gt30Dp	E(I)	0.20	0.07	0.07	0.32		
CVDp:Gt30Dp	G(Ia)	0.69	0.06	0.57	0.81		
CVDp:Gt30Dp	P(I)	0.39	0.03	0.33	0.45		
CVDp:Gt30Ds	E(I)	0.06	0.06	-0.06	0.18		
CVDp:Gt30Ds	G(Ia)	0.24	0.09	0.07	0.42		
CVDp:Gt30Ds	P(I)	0.12	0.03	0.05	0.18		
CVDp:Gt30D	E(I)	0.09	0.06	-0.03	0.21		
CVDp:Gt30D	G(Ia)	0.43	0.09	0.27	0.60		
CVDp:Gt30D	P(I)	0.20	0.03	0.14	0.26		
CVDp:Fnua	E(I)	-0.02	0.06	-0.15	0.10		
CVDp:Fnua	G(Ia)	-0.16	0.09	-0.33	0.01		
CVDp:Fnua	P(I)	-0.07	0.03	-0.13	-0.00		
CVDp:Fr	E(I)	0.00	0.06	-0.12	0.13		
CVDp:Fr	G(Ia)	-0.17	0.09	-0.35	0.01		
CVDp:Fr	P(I)	-0.05	0.03	-0.12	0.02		
CVDp:Fnt	E(I)	-0.02	0.06	-0.13	0.10		
CVDp:Fnt	G(Ia)	-0.21	0.10	-0.40	-0.02		
CVDp:Fnt	P(I)	-0.07	0.03	-0.14	-0.01		
CVDp:Sarea	E(I)	-0.04	0.06	-0.16	0.08		
CVDp:Sarea	G(Ia)	0.03	0.09	-0.15	0.21		
CVDp:Sarea	P(I)	-0.02	0.03	-0.08	0.05		
CVDp:Fd	E(I)	0.05	0.08	-0.11	0.20		
CVDp:Fd	G(Ia)	0.01	0.18	-0.34	0.36		
CVDp:Fd	P(I)	0.04	0.05	-0.05	0.13		
CVDp:Fc	E(I)	0.21	0.08	0.05	0.38		
CVDp:Fc	G(Ia)	0.11	0.14	-0.17	0.39		
CVDp:Fc	P(I)	0.18	0.04	0.09	0.26		
CVDp:Fu	E(I)	0.07	0.09	-0.10	0.24		
CVDp:Fu	G(Ia)	0.30	0.15	0.01	0.60		
CVDp:Fu	P(I)	0.14	0.04	0.05	0.22		
CVDp:Colour	E(I)	-0.08	0.06	-0.20	0.03		
CVDp:Colour	G(Ia)	0.25	0.09	0.07	0.42		
CVDp:Colour	P(I)	0.02	0.03	-0.05	0.08		
CVDp:Fly	E(I)	-0.02	0.05	-0.13	0.08		
CVDp:Fly	G(Ia)	0.25	0.13	-0.01	0.51		
CVDp:Fly	P(I)	0.03	0.03	-0.03	0.10		
CVDp:Flcrot	E(I)	0.11	0.06	-0.01	0.22		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
CVDp:Flcrot	G(Ia)	-0.04	0.10	-0.24	0.16
CVDp:Flcrot	P(I)	0.06	0.03	-0.00	0.13
CVDp:Bactst	E(I)	-0.06	0.05	-0.16	0.05
CVDp:Bactst	G(Ia)	0.07	0.15	-0.22	0.36
CVDp:Bactst	P(I)	-0.03	0.03	-0.10	0.03
CVDp:MycD	E(I)	0.02	0.05	-0.08	0.13
CVDp:MycD	G(Ia)	-0.23	0.22	-0.66	0.21
CVDp:MycD	P(I)	-0.01	0.03	-0.08	0.05
CVDp:Bcts	E(I)	-0.35	0.15	-0.64	-0.06
CVDp:Bcts	G(Ia)	0.70	0.04	0.61	0.78
CVDp:Bcts	P(I)	0.28	0.03	0.23	0.33
CVDp:Bctb	E(I)	-0.50	0.14	-0.78	-0.22
CVDp:Bctb	G(Ia)	0.75	0.04	0.66	0.84
CVDp:Bctb	P(I)	0.25	0.03	0.20	0.30
CVDp:Weanwt	E(I)	0.08	0.06	-0.04	0.20
CVDp:Weanwt	G(Ia)	-0.43	0.09	-0.61	-0.24
CVDp:Weanwt	P(I)	-0.07	0.03	-0.14	-0.01
CVDp:NLB	E(I)	-0.12	0.06	-0.24	-0.00
CVDp:NLB	G(Ia)	0.27	0.10	0.08	0.46
CVDp:NLB	P(I)	-0.01	0.03	-0.07	0.06
CVDp:NLW	E(I)	-0.15	0.06	-0.27	-0.03
CVDp:NLW	G(Ia)	0.29	0.10	0.11	0.48
CVDp:NLW	P(I)	-0.02	0.03	-0.08	0.05
CVDp:Fnpua	E(I)	0.10	0.06	-0.02	0.21
CVDp:Fnpua	G(Ia)	-0.10	0.11	-0.31	0.11
CVDp:Fnpua	P(I)	0.04	0.03	-0.02	0.11
CVDp:Fnsua	E(I)	-0.03	0.06	-0.15	0.09
CVDp:Fnsua	G(Ia)	-0.16	0.09	-0.33	0.01
CVDp:Fnsua	P(I)	-0.07	0.03	-0.14	-0.01
CVDp:Fnpt	E(I)	0.10	0.06	-0.01	0.22
CVDp:Fnpt	G(Ia)	-0.10	0.10	-0.29	0.09
CVDp:Fnpt	P(I)	0.04	0.03	-0.02	0.11
CVDp:Fnst	E(I)	-0.02	0.06	-0.14	0.09
CVDp:Fnst	G(Ia)	-0.21	0.10	-0.40	-0.02
CVDp:Fnst	P(I)	-0.08	0.03	-0.14	-0.01
CVDs:Stal	E(I)	-0.17	0.07	-0.31	-0.04
CVDs:Stal	G(Ia)	-0.09	0.08	-0.23	0.06
CVDs:Stal	P(I)	-0.14	0.03	-0.20	-0.07
CVDs:Diam	E(I)	-0.06	0.07	-0.21	0.08
CVDs:Diam	G(Ia)	0.14	0.07	0.00	0.28
CVDs:Diam	P(I)	0.02	0.03	-0.04	0.09
CVDs:Bwt	E(I)	-0.18	0.06	-0.29	-0.06
CVDs:Bwt	G(Ia)	-0.00	0.08	-0.16	0.15

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
CVDs:Bwt	P(I)	-0.13	0.03	-0.19	-0.06
CVDs:WrN	E(I)	0.21	0.03	0.08	0.35
CVDs:WrN	G(Ia)	-0.24	0.07	-0.38	-0.09
CVDs:WrN	P(I)	0.04	0.03	-0.03	0.10
CVDs:WrB	E(I)	0.04	0.06	0.12	0.10
CVDs:WrB	G(Ia)	-0.38	0.00	-0.55	-0.21
CVDs:WrB	P(I)	0.03	0.03	-0.03	0.10
CVDs:WrT	E(I)	0.26	0.03	0.13	0.40
CVDs:WrT	G(Ia)	-0.32	0.08	-0.47	-0.17
CVDs:WrT	P(I)	0.04	0.03	-0.03	0.10
CVDs:Will CVDs:Face	E(I)	-0.26	0.03	-0.40	-0.12
CVDs:Face	G(Ia)	0.50	0.05	0.39	0.61
CVDs:Face	P(I)	0.09	0.03	0.04	0.01
CVDs:Face CVDs:Gfw	E(I)	-0.02	0.06	-0.15	0.14
CVDs:Gfw	G(Ia)	0.05	0.08	-0.10	0.10
CVDs:Gfw	P(I)	0.00	0.03	-0.16	0.21
CVDs:Yld	E(I)	-0.07	0.06	-0.19	0.05
CVDs:Yld	G(Ia)	-0.30	0.00	-0.13	-0.13
CVDs:Yld	P(I)	-0.14	0.03	-0.21	-0.08
CVDs: Tid CVDs: Cww	E(I)	-0.06	0.06	-0.19	0.07
CVDs:Cww	G(Ia)	-0.04	0.08	-0.19	0.11
CVDs:Cww	P(I)	-0.05	0.03	-0.12	0.11
CVDs:Staladj	E(I)	-0.18	0.07	-0.32	-0.05
CVDs:Staladj	G(Ia)	-0.08	0.07	-0.23	0.07
CVDs:Staladj	P(I)	-0.14	0.03	-0.21	-0.08
CVDs:Staradj CVDs:Gfwadj	E(I)	-0.02	0.06	-0.14	0.10
CVDs:Gfwadj	G(Ia)	0.04	0.08	-0.12	0.20
CVDs:Gfwadj	P(I)	-0.00	0.03	-0.07	0.06
CVDs:Cwwadj	E(I)	-0.05	0.07	-0.18	0.08
CVDs:Cwwadj	G(Ia)	-0.07	0.08	-0.23	0.10
CVDs:Cwwadj	P(I)	-0.06	0.03	-0.12	0.01
CVDs:Crimp	E(I)	0.12	0.11	-0.10	0.34
CVDs:Crimp	G(Ia)	-0.68	0.15	-0.97	-0.39
CVDs:Crimp	P(I)	-0.17	0.04	-0.26	-0.09
CVDs:Crwvl	E(I)	-0.10	0.11	-0.31	0.11
CVDs:Crwvl	G(Ia)	0.67	0.15	0.36	0.97
CVDs:Crwvl	P(I)	0.17	0.04	0.08	0.25
CVDs:Crst	E(I)	0.02	0.11	-0.21	0.24
CVDs:Crst	G(Ia)	-0.78	0.16	-1.10	-0.46
CVDs:Crst	P(I)	-0.24	0.04	-0.32	-0.15
CVDs:Crstadj	E(I)	0.02	0.11	-0.20	0.24
CVDs:Crstadj	G(Ia)	-0.78	0.16	-1.10	-0.46
CVDs:Crstadj	P(I)	-0.24	0.04	-0.32	-0.15
- ·	(-)		Continued		20

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
CVDs:Crwvt	E(I)	-0.03	0.10	-0.23	0.17	
CVDs:Crwvt	G(Ia)	0.79	0.17	0.45	1.12	
CVDs:Crwvt	P(I)	0.22	0.04	0.14	0.31	
CVDs:Dp	E(I)	-0.04	0.07	-0.18	0.11	
CVDs:Dp	G(Ia)	0.52	0.07	0.37	0.66	
CVDs:Dp	P(I)	0.17	0.03	0.11	0.24	
CVDs:Ds	E(I)	-0.39	0.06	-0.51	-0.27	
CVDs:Ds	G(Ia)	0.03	0.09	-0.15	0.20	
CVDs:Ds	P(I)	-0.25	0.03	-0.31	-0.19	
CVDs:Dps	E(I)	-0.38	0.06	-0.50	-0.26	
CVDs:Dps	G(Ia)	0.08	0.09	-0.10	0.25	
CVDs:Dps	P(I)	-0.23	0.03	-0.29	-0.16	
CVDs:DpovDs	E(I)	0.46	0.10	0.26	0.66	
CVDs:DpovDs	G(Ia)	0.39	0.05	0.28	0.49	
CVDs:DpovDs	P(I)	0.35	0.03	0.30	0.41	
CVDs:CVDp	E(I)	0.19	0.06	0.08	0.31	
CVDs:CVDp	G(Ia)	0.43	0.09	0.27	0.60	
CVDs:CVDp	P(I)	0.27	0.03	0.21	0.33	
CVDs:CVDs	E(I)	1.00	0.00	1.00	1.00	
CVDs:CVDs	G(Ia)	1.00	0.00	1.00	1.00	
CVDs:CVDs	P(I)	1.00	0.00	1.00	1.00	
CVDs:MaxDp	E(I)	0.01	0.06	-0.11	0.13	
CVDs:MaxDp	G(Ia)	0.52	0.07	0.38	0.67	
CVDs:MaxDp	P(I)	0.20	0.03	0.13	0.26	
CVDs:MinDp	E(I)	-0.04	0.05	-0.15	0.06	
CVDs:MinDp	G(Ia)	0.19	0.25	-0.29	0.67	
CVDs:MinDp	P(I)	-0.01	0.03	-0.08	0.05	
CVDs:MaxDs	E(I)	0.28	0.05	0.18	0.38	
CVDs:MaxDs	G(Ia)	0.64	0.10	0.43	0.84	
CVDs:MaxDs	P(I)	0.36	0.03	0.30	0.42	
CVDs:MinDs	E(I)	-0.15	0.05	-0.25	-0.06	
CVDs:MinDs	G(Ia)	-0.56	0.23	-1.01	-0.11	
CVDs:MinDs	P(I)	-0.20	0.03	-0.26	-0.13	
CVDs:SDDp	E(I)	0.10	0.07	-0.03	0.23	
CVDs:SDDp	G(Ia)	0.55	0.07	0.41	0.69	
CVDs:SDDp	P(I)	0.26	0.03	0.20	0.32	
CVDs:SDDs	E(I)	0.80	0.03	0.73	0.86	
CVDs:SDDs	G(Ia)	0.81	0.04	0.74	0.89	
CVDs:SDDs	P(I)	0.80	0.02	0.76	0.83	
CVDs:SDD	E(I)	0.76	0.03	0.70	0.83	
CVDs:SDD	G(Ia)	0.85	0.04	0.77	0.93	
CVDs:SDD	P(I)	0.78	0.02	0.75	0.82	
CVDs:CVD	E(I)	0.99	0.01	0.98	1.00	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
CVDs:CVD	G(Ia)	0.99	0.01	0.97	1.01		
CVDs:CVD	P(I)	0.99	0.00	0.98	1.00		
CVDs:Gt30Dp	E(I)	-0.02	0.07	-0.16	0.13		
CVDs:Gt30Dp	G(Ia)	0.60	0.08	0.46	0.75		
CVDs:Gt30Dp	P(I)	0.21	0.03	0.15	0.27		
CVDs:Gt30Ds	E(I)	0.15	0.06	0.04	0.26		
CVDs:Gt30Ds	G(Ia)	0.62	0.09	0.44	0.80		
CVDs:Gt30Ds	P(I)	0.28	0.03	0.22	0.34		
CVDs:Gt30D	E(I)	0.12	0.06	0.00	0.23		
CVDs:Gt30D	G(Ia)	0.73	0.09	0.55	0.91		
CVDs:Gt30D	P(I)	0.30	0.03	0.23	0.36		
CVDs:Fnua	E(I)	0.12	0.06	-0.00	0.24		
CVDs:Fnua	G(Ia)	0.04	0.09	-0.14	0.23		
CVDs:Fnua	P(I)	0.10	0.03	0.03	0.16		
CVDs:Fr	E(I)	0.16	0.06	0.05	0.28		
CVDs:Fr	G(Ia)	-0.29	0.10	-0.49	-0.09		
CVDs:Fr	P(I)	0.03	0.03	-0.03	0.10		
CVDs:Fnt	E(I)	0.04	0.06	-0.07	0.16		
CVDs:Fnt	G(Ia)	0.04	0.10	-0.17	0.24		
CVDs:Fnt	P(I)	0.04	0.03	-0.02	0.11		
CVDs:Sarea	E(I)	-0.17	0.06	-0.28	-0.05		
CVDs:Sarea	G(Ia)	-0.02	0.09	-0.20	0.16		
CVDs:Sarea	P(I)	-0.13	0.03	-0.19	-0.06		
CVDs:Fd	E(I)	-0.20	0.08	-0.36	-0.03		
CVDs:Fd	G(Ia)	0.33	0.20	-0.06	0.71		
CVDs:Fd	P(I)	-0.06	0.05	-0.15	0.03		
CVDs:Fc	E(I)	0.41	0.09	0.23	0.60		
CVDs:Fc	G(Ia)	-0.47	0.13	-0.72	-0.22		
CVDs:Fc	P(I)	0.08	0.04	-0.01	0.16		
CVDs:Fu	E(I)	0.33	0.10	0.15	0.52		
CVDs:Fu	G(Ia)	-0.41	0.12	-0.65	-0.17		
CVDs:Fu	P(I)	0.05	0.04	-0.04	0.13		
CVDs:Colour	E(I)	-0.10	0.06	-0.22	0.01		
CVDs:Colour	G(Ia)	0.73	0.10	0.54	0.93		
CVDs:Colour	P(I)	0.14	0.03	0.07	0.20		
CVDs:Fly	E(I)	0.05	0.05	-0.05	0.15		
CVDs:Fly	G(Ia)	0.50	0.14	0.21	0.78		
CVDs:Fly	P(I)	0.13	0.03	0.07	0.20		
CVDs:Flcrot	E(I)	0.08	0.06	-0.03	0.19		
CVDs:Flcrot	G(Ia)	0.16	0.11	-0.05	0.37		
CVDs:Flcrot	P(I)	0.10	0.03	0.04	0.17		
CVDs:Bactst	E(I)	0.06	0.05	-0.04	0.16		
CVDs:Bactst	G(Ia)	-0.19	0.16	-0.51	0.13		

Table 24 – Continued from previous page

	$\frac{1}{C}$			CIOTI-	CIOTI:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
CVDs:Bactst	P(I)	0.01	0.03	-0.05	0.08
CVDs:MycD	E(I)	0.05	0.05	-0.05	0.15
CVDs:MycD	G(Ia)	-0.16	0.24	-0.64	0.32
CVDs:MycD	P(I)	0.02	0.03	-0.04	0.09
CVDs:Bcts	E(I)	-0.29	0.13	-0.55	-0.03
CVDs:Bcts	G(Ia)	0.51	0.05	0.41	0.61
CVDs:Bcts	P(I)	0.17	0.03	0.11	0.22
CVDs:Bctb	E(I)	-0.36	0.12	-0.60	-0.12
CVDs:Bctb	G(Ia)	0.52	0.05	0.42	0.62
CVDs:Bctb	P(I)	0.14	0.03	0.09	0.19
CVDs:Weanwt	E(I)	-0.04	0.06	-0.16	0.07
CVDs:Weanwt	G(Ia)	-0.10	0.10	-0.30	0.10
CVDs:Weanwt	P(I)	-0.06	0.03	-0.13	0.01
CVDs:NLB	E(I)	-0.04	0.06	-0.15	0.07
CVDs:NLB	G(Ia)	0.22	0.11	0.01	0.43
CVDs:NLB	P(I)	0.03	0.03	-0.04	0.10
CVDs:NLW	E(I)	-0.07	0.06	-0.19	0.04
CVDs:NLW	G(Ia)	0.47	0.10	0.27	0.67
CVDs:NLW	P(I)	0.08	0.03	0.01	0.14
CVDs:Fnpua	E(I)	-0.01	0.06	-0.13	0.10
CVDs:Fnpua	G(Ia)	0.34	0.11	0.11	0.56
CVDs:Fnpua	P(I)	0.07	0.03	0.01	0.14
CVDs:Fnsua	E(I)	0.12	0.06	0.00	0.24
CVDs:Fnsua	G(Ia)	0.03	0.09	-0.15	0.21
CVDs:Fnsua	P(I)	0.09	0.03	0.03	0.16
CVDs:Fnpt	E(I)	-0.05	0.06	-0.17	0.06
CVDs:Fnpt	G(Ia)	0.29	0.10	0.09	0.49
CVDs:Fnpt	P(I)	0.04	0.03	-0.02	0.10
CVDs:Fnst	E(I)	0.05	0.06	-0.07	0.16
CVDs:Fnst	G(Ia)	0.02	0.10	-0.18	0.22
CVDs:Fnst	P(I)	0.04	0.03	-0.03	0.11
MaxDp:Stal	E(I)	0.07	0.08	-0.09	0.24
MaxDp:Stal	G(Ia)	-0.17	0.06	-0.28	-0.06
MaxDp:Stal	P(I)	-0.05	0.03	-0.11	0.02
MaxDp:Diam	E(I)	0.44	0.08	0.29	0.60
MaxDp:Diam	G(Ia)	0.16	0.05	0.07	0.26
MaxDp:Diam	P(I)	0.29	0.03	0.23	0.35
MaxDp:Bwt	E(I)	0.04	0.07	-0.10	0.18
MaxDp:Bwt	G(Ia)	-0.15	0.07	-0.30	-0.00
MaxDp:Bwt	P(I)	-0.03	0.03	-0.10	0.03
MaxDp:WrN	E(I)	0.37	0.08	0.21	0.53
MaxDp:WrN	G(Ia)	-0.15	0.06	-0.26	-0.04
MaxDp:WrN	P(I)	0.11	0.03	0.05	0.17

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MaxDp:WrB	E(I)	0.32	0.07	0.17	0.46		
MaxDp:WrB	G(Ia)	-0.06	0.06	-0.18	0.06		
MaxDp:WrB	P(I)	0.15	0.03	0.08	0.21		
MaxDp:WrT	E(I)	0.39	0.08	0.24	0.55		
MaxDp:WrT	G(Ia)	-0.11	0.06	-0.22	-0.00		
MaxDp:WrT	P(I)	0.14	0.03	0.08	0.20		
MaxDp:Face	E(I)	-0.70	0.09	-0.88	-0.53		
MaxDp:Face	G(Ia)	0.58	0.04	0.49	0.66		
MaxDp:Face	P(I)	0.04	0.03	-0.01	0.10		
MaxDp:Gfw	E(I)	0.11	0.07	-0.03	0.26		
MaxDp:Gfw	G(Ia)	0.03	0.06	-0.08	0.14		
MaxDp:Gfw	P(I)	0.08	0.03	0.01	0.14		
MaxDp:Yld	E(I)	-0.01	0.07	-0.15	0.13		
MaxDp:Yld	G(Ia)	-0.19	0.06	-0.32	-0.07		
MaxDp:Yld	P(I)	-0.09	0.03	-0.15	-0.02		
MaxDp:Cww	E(I)	0.09	0.08	-0.06	0.24		
MaxDp:Cww	G(Ia)	-0.02	0.06	-0.14	0.09		
MaxDp:Cww	P(I)	0.04	0.03	-0.03	0.10		
MaxDp:Staladj	E(I)	0.10	0.08	-0.07	0.26		
MaxDp:Staladj	G(Ia)	-0.19	0.06	-0.30	-0.08		
MaxDp:Staladj	P(I)	-0.04	0.03	-0.11	0.02		
MaxDp:Gfwadj	E(I)	0.13	0.07	-0.02	0.27		
MaxDp:Gfwadj	G(Ia)	0.03	0.06	-0.09	0.15		
MaxDp:Gfwadj	P(I)	0.08	0.03	0.02	0.15		
MaxDp:Cwwadj	E(I)	0.11	0.08	-0.04	0.26		
MaxDp:Cwwadj	G(Ia)	-0.03	0.06	-0.15	0.09		
MaxDp:Cwwadj	P(I)	0.05	0.03	-0.02	0.11		
MaxDp:Crimp	E(I)	0.18	0.15	-0.11	0.47		
MaxDp:Crimp	G(Ia)	-0.49	0.10	-0.69	-0.30		
MaxDp:Crimp	P(I)	-0.17	0.04	-0.26	-0.09		
MaxDp:Crwvl	E(I)	-0.14	0.14	-0.42	0.14		
MaxDp:Crwvl	G(Ia)	0.46	0.10	0.26	0.66		
MaxDp:Crwvl	P(I)	0.16	0.04	0.08	0.25		
MaxDp:Crst	E(I)	0.22	0.14	-0.05	0.49		
MaxDp:Crst	G(Ia)	-0.65	0.12	-0.88	-0.42		
MaxDp:Crst	P(I)	-0.19	0.04	-0.27	-0.10		
MaxDp:Crstadj	E(I)	0.23	0.14	-0.04	0.50		
MaxDp:Crstadj	G(Ia)	-0.65	0.12	-0.88	-0.43		
MaxDp:Crstadj	P(I)	-0.19	0.04	-0.27	-0.10		
MaxDp:Crwvt	E(I)	-0.20	0.13	-0.45	0.06		
MaxDp:Crwvt	G(Ia)	0.67	0.12	0.44	0.90		
MaxDp:Crwvt	P(I)	0.20	0.04	0.11	0.28		
MaxDp:Dp	E(I)	0.72	0.04	0.64	0.80		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
MaxDp:Dp	G(Ia)	0.95	0.02	0.91	1.00	
MaxDp:Dp	P(I)	0.84	0.01	0.81	0.87	
MaxDp:Ds	E(I)	0.54	0.07	0.41	0.68	
MaxDp:Ds	G(Ia)	-0.09	0.06	-0.22	0.03	
MaxDp:Ds	P(I)	0.26	0.03	0.20	0.32	
MaxDp:Dps	E(I)	0.57	0.07	0.44	0.70	
MaxDp:Dps	G(Ia)	-0.01	0.08	-0.16	0.15	
MaxDp:Dps	P(I)	0.32	0.03	0.26	0.38	
MaxDp:DpovDs	E(I)	0.48	0.09	0.30	0.66	
MaxDp:DpovDs	G(Ia)	0.83	0.03	0.78	0.89	
MaxDp:DpovDs	P(I)	0.67	0.02	0.63	0.71	
MaxDp:CVDp	E(I)	0.41	0.06	0.30	0.53	
MaxDp:CVDp	G(Ia)	0.74	0.05	0.63	0.84	
MaxDp:CVDp	P(I)	0.54	0.03	0.49	0.59	
MaxDp:CVDs	E(I)	0.01	0.06	-0.11	0.13	
MaxDp:CVDs	G(Ia)	0.52	0.07	0.38	0.67	
MaxDp:CVDs	P(I)	0.20	0.03	0.13	0.26	
MaxDp:MaxDp	E(I)	1.00	0.00	1.00	1.00	
MaxDp:MaxDp	G(Ia)	1.00	0.00	1.00	1.00	
MaxDp:MaxDp	P(I)	1.00	0.00	1.00	1.00	
MaxDp:MinDp	E(I)	0.29	0.06	0.18	0.40	
MaxDp:MinDp	G(Ia)	0.49	0.18	0.14	0.84	
MaxDp:MinDp	P(I)	0.28	0.03	0.22	0.34	
MaxDp:MaxDs	E(I)	0.37	0.06	0.25	0.49	
MaxDp:MaxDs	G(Ia)	0.40	0.08	0.25	0.56	
MaxDp:MaxDs	P(I)	0.36	0.03	0.30	0.42	
MaxDp:MinDs	E(I)	0.15	0.06	0.03	0.27	
MaxDp:MinDs	G(Ia)	-0.38	0.20	-0.77	0.02	
MaxDp:MinDs	P(I)	0.04	0.03	-0.02	0.11	
MaxDp:SDDp	E(I)	0.72	0.04	0.64	0.80	
MaxDp:SDDp	G(Ia)	0.95	0.02	0.90	1.00	
MaxDp:SDDp	P(I)	0.83	0.01	0.80	0.86	
MaxDp:SDDs	E(I)	0.35	0.07	0.22	0.49	
MaxDp:SDDs	G(Ia)	0.34	0.06	0.23	0.45	
MaxDp:SDDs	P(I)	0.35	0.03	0.29	0.41	
MaxDp:SDD	E(I)	0.44	0.06	0.32	0.57	
MaxDp:SDD	G(Ia)	0.49	0.05	0.39	0.58	
MaxDp:SDD	P(I)	0.46	0.03	0.41	0.52	
MaxDp:CVD	E(I)	0.07	0.07	-0.06	0.21	
MaxDp:CVD	G(Ia)	0.62	0.07	0.49	0.76	
MaxDp:CVD	P(I)	0.29	0.03	0.22	0.35	
MaxDp:Gt30Dp	E(I)	0.65	0.05	0.56	0.74	
MaxDp:Gt30Dp	G(Ia)	0.94	0.03	0.88	0.99	

Table 24 – Continued from previous page

Tab	$\frac{\text{le } 24 - Contin}{\text{Component}}$	Estimate	StdErr	CI95lo	CI95hi
MaxDp:Gt30Dp	P(I)	0.79	0.02	0.75	0.82
MaxDp:Gt30Dp MaxDp:Gt30Ds	E(I)	0.79	0.02	0.73	0.82
MaxDp:Gt30Ds MaxDp:Gt30Ds	G(Ia)	0.30	0.00	0.23	0.48
MaxDp:Gt30Ds MaxDp:Gt30Ds	\ /	$0.23 \\ 0.30$	0.07	0.09	0.37
MaxDp:Gt30Ds MaxDp:Gt30D	P(I) E(I)	$0.30 \\ 0.47$	0.03	0.24	0.58
MaxDp:Gt30D MaxDp:Gt30D	G(Ia)	0.47	0.06	0.30	0.58
MaxDp:Gt30D MaxDp:Gt30D	P(I)	$0.49 \\ 0.47$	0.00	0.37	0.01
MaxDp:Gt30D MaxDp:Fnua	E(I)	-0.30	0.03	-0.44	-0.16
MaxDp:Fnua MaxDp:Fnua	G(Ia)	0.00	0.07	-0.44	0.20
MaxDp:Fnua MaxDp:Fnua	\ /	-0.18	0.10	-0.19	-0.11
MaxDp:Frua MaxDp:Fr	P(I)	-0.18	0.03	-0.24	-0.11
1 -	E(I)				
MaxDp:Fr	G(Ia)	-0.09	0.07	-0.23	0.06
MaxDp:Fr	P(I)	-0.12	0.03	-0.18	-0.05
MaxDp:Fnt	E(I)	-0.25	0.07	-0.38	-0.12
MaxDp:Fnt	G(Ia)	-0.07	0.08	-0.22	0.08
MaxDp:Fnt	P(I)	-0.18	0.03	-0.24	-0.11
MaxDp:Sarea	E(I)	0.04	0.07	-0.10	0.18
MaxDp:Sarea	G(Ia)	-0.14	0.07	-0.29	0.00
MaxDp:Sarea	P(I)	-0.03	0.03	-0.09	0.04
MaxDp:Fd	E(I)	0.16	0.09	-0.01	0.34
MaxDp:Fd	G(Ia)	0.07	0.16	-0.24	0.38
MaxDp:Fd	P(I)	0.14	0.05	0.05	0.22
MaxDp:Fc	E(I)	0.32	0.10	0.13	0.52
MaxDp:Fc	G(Ia)	-0.34	0.11	-0.57	-0.12
MaxDp:Fc	P(I)	0.05	0.04	-0.03	0.13
MaxDp:Fu	E(I)	0.29	0.10	0.10	0.49
MaxDp:Fu	G(Ia)	-0.30	0.11	-0.52	-0.08
MaxDp:Fu	P(I)	0.05	0.04	-0.04	0.13
MaxDp:Colour	E(I)	-0.19	0.07	-0.33	-0.05
MaxDp:Colour	G(Ia)	0.58	0.08	0.43	0.73
MaxDp:Colour	P(I)	0.10	0.03	0.04	0.17
MaxDp:Fly	E(I)	-0.19	0.06	-0.31	-0.07
MaxDp:Fly	G(Ia)	0.31	0.12	0.09	0.54
MaxDp:Fly	P(I)	-0.05	0.03	-0.11	0.01
MaxDp:Flcrot	E(I)	-0.03	0.07	-0.16	0.10
MaxDp:Flcrot	G(Ia)	0.10	0.08	-0.07	0.26
MaxDp:Flcrot	P(I)	0.01	0.03	-0.05	0.08
MaxDp:Bactst	E(I)	-0.03	0.06	-0.16	0.09
MaxDp:Bactst	G(Ia)	0.33	0.12	0.09	0.58
MaxDp:Bactst	P(I)	0.05	0.03	-0.01	0.12
MaxDp:MycD	E(I)	-0.02	0.06	-0.13	0.10
MaxDp:MycD	G(Ia)	0.01	0.19	-0.37	0.38
MaxDp:MycD	P(I)	-0.01	0.03	-0.07	0.05

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MaxDp:Bcts	E(I)	-0.45	0.19	-0.82	-0.09		
MaxDp:Bcts	G(Ia)	0.85	0.03	0.79	0.91		
MaxDp:Bcts	P(I)	0.44	0.02	0.39	0.48		
MaxDp:Bctb	E(I)	-0.41	0.16	-0.73	-0.09		
MaxDp:Bctb	G(Ia)	0.82	0.03	0.76	0.87		
MaxDp:Bctb	P(I)	0.42	0.02	0.37	0.46		
MaxDp:Weanwt	E(I)	0.02	0.07	-0.12	0.16		
MaxDp:Weanwt	G(Ia)	-0.39	0.08	-0.54	-0.24		
MaxDp:Weanwt	P(I)	-0.13	0.03	-0.20	-0.07		
MaxDp:NLB	E(I)	0.01	0.06	-0.11	0.13		
MaxDp:NLB	G(Ia)	0.43	0.08	0.27	0.58		
MaxDp:NLB	P(I)	0.16	0.03	0.09	0.22		
MaxDp:NLW	E(I)	-0.02	0.07	-0.15	0.12		
MaxDp:NLW	G(Ia)	0.43	0.08	0.28	0.58		
MaxDp:NLW	P(I)	0.15	0.03	0.08	0.21		
MaxDp:Fnpua	E(I)	-0.04	0.07	-0.17	0.09		
MaxDp:Fnpua	G(Ia)	-0.08	0.08	-0.24	0.09		
MaxDp:Fnpua	P(I)	-0.05	0.03	-0.11	0.01		
MaxDp:Fnsua	E(I)	-0.31	0.07	-0.44	-0.17		
MaxDp:Fnsua	G(Ia)	0.01	0.08	-0.15	0.17		
MaxDp:Fnsua	P(I)	-0.18	0.03	-0.24	-0.11		
MaxDp:Fnpt	E(I)	-0.00	0.06	-0.11	0.11		
MaxDp:Fnpt	G(Ia)	-0.14	0.08	-0.29	0.01		
MaxDp:Fnpt	P(I)	-0.05	0.03	-0.11	0.01		
MaxDp:Fnst	E(I)	-0.26	0.07	-0.39	-0.13		
MaxDp:Fnst	G(Ia)	-0.06	0.08	-0.21	0.09		
MaxDp:Fnst	P(I)	-0.18	0.03	-0.24	-0.12		
MinDp:Stal	E(I)	0.22	0.06	0.09	0.34		
MinDp:Stal	G(Ia)	-0.74	0.18	-1.09	-0.39		
MinDp:Stal	P(I)	-0.01	0.03	-0.07	0.06		
MinDp:Diam	E(I)	0.26	0.06	0.14	0.39		
MinDp:Diam	G(Ia)	0.03	0.11	-0.19	0.24		
MinDp:Diam	P(I)	0.17	0.03	0.11	0.24		
MinDp:Bwt	E(I)	0.08	0.05	-0.02	0.19		
MinDp:Bwt	G(Ia)	-0.49	0.19	-0.87	-0.11		
MinDp:Bwt	P(I)	-0.01	0.03	-0.08	0.05		
MinDp:WrN	E(I)	-0.01	0.06	-0.13	0.11		
MinDp:WrN	G(Ia)	0.41	0.16	0.10	0.72		
MinDp:WrN	P(I)	0.07	0.03	0.01	0.13		
MinDp:WrB	E(I)	0.04	0.06	-0.07	0.15		
MinDp:WrB	G(Ia)	0.55	0.18	0.19	0.90		
MinDp:WrB	P(I)	0.13	0.03	0.06	0.19		
MinDp:WrT	E(I)	0.02	0.06	-0.10	0.14		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDp:WrT	G(Ia)	0.50	0.17	0.18	0.83		
MinDp:WrT	P(I)	0.11	0.03	0.04	0.17		
MinDp:Face	E(I)	-0.08	0.06	-0.20	0.04		
MinDp:Face	G(Ia)	0.18	0.11	-0.03	0.40		
MinDp:Face	P(I)	-0.00	0.03	-0.05	0.05		
MinDp:Gfw	E(I)	0.11	0.05	0.00	0.22		
MinDp:Gfw	G(Ia)	0.04	0.15	-0.26	0.34		
MinDp:Gfw	P(I)	0.09	0.03	0.02	0.15		
MinDp:Yld	E(I)	0.08	0.06	-0.03	0.19		
MinDp:Yld	G(Ia)	-0.35	0.20	-0.73	0.04		
MinDp:Yld	P(I)	0.00	0.03	-0.06	0.07		
MinDp:Cww	E(I)	0.13	0.06	0.02	0.24		
MinDp:Cww	G(Ia)	-0.04	0.17	-0.38	0.30		
MinDp:Cww	P(I)	0.09	0.03	0.02	0.15		
MinDp:Staladj	E(I)	0.22	0.06	0.10	0.35		
MinDp:Staladj	G(Ia)	-0.74	0.18	-1.09	-0.39		
MinDp:Staladj	P(I)	-0.01	0.03	-0.07	0.06		
MinDp:Gfwadj	E(I)	0.10	0.06	-0.01	0.21		
MinDp:Gfwadj	G(Ia)	-0.06	0.15	-0.35	0.23		
MinDp:Gfwadj	P(I)	0.06	0.03	-0.00	0.13		
MinDp:Cwwadj	E(I)	0.13	0.06	0.01	0.24		
MinDp:Cwwadj	G(Ia)	-0.07	0.15	-0.37	0.23		
MinDp:Cwwadj	P(I)	0.08	0.03	0.01	0.14		
MinDp:Crimp	E(I)	-0.06	0.09	-0.25	0.12		
MinDp:Crimp	G(Ia)	-0.35	0.27	-0.88	0.17		
MinDp:Crimp	P(I)	-0.12	0.04	-0.20	-0.03		
MinDp:Crwvl	E(I)	0.05	0.09	-0.12	0.23		
MinDp:Crwvl	G(Ia)	0.34	0.27	-0.19	0.88		
MinDp:Crwvl	P(I)	0.10	0.04	0.02	0.19		
MinDp:Crst	E(I)	0.06	0.09	-0.11	0.24		
MinDp:Crst	G(Ia)	-0.62	0.34	-1.29	0.05		
MinDp:Crst	P(I)	-0.06	0.04	-0.15	0.02		
MinDp:Crstadj	E(I)	0.06	0.09	-0.11	0.24		
MinDp:Crstadj	G(Ia)	-0.63	0.34	-1.30	0.04		
MinDp:Crstadj	P(I)	-0.07	0.04	-0.15	0.02		
MinDp:Crwvt	E(I)	-0.06	0.09	-0.22	0.11		
MinDp:Crwvt	G(Ia)	0.65	0.35	-0.04	1.33		
MinDp:Crwvt	P(I)	0.07	0.04	-0.02	0.15		
MinDp:Dp	E(I)	0.50	0.05	0.39	0.60		
MinDp:Dp	G(Ia)	0.63	0.17	0.30	0.95		
MinDp:Dp	P(I)	0.44	0.03	0.38	0.50		
MinDp:Ds	E(I)	0.33	0.05	0.23	0.44		
MinDp:Ds	G(Ia)	0.02	0.13	-0.22	0.27		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDp:Ds	P(I)	0.25	0.03	0.19	0.32		
MinDp:Dps	E(I)	0.35	0.05	0.25	0.45		
MinDp:Dps	G(Ia)	0.07	0.16	-0.24	0.39		
MinDp:Dps	P(I)	0.28	0.03	0.22	0.34		
MinDp:DpovDs	E(I)	0.38	0.09	0.20	0.57		
MinDp:DpovDs	G(Ia)	0.50	0.16	0.20	0.81		
MinDp:DpovDs	P(I)	0.27	0.03	0.21	0.33		
MinDp:CVDp	E(I)	-0.50	0.05	-0.59	-0.41		
MinDp:CVDp	G(Ia)	-0.03	0.13	-0.28	0.21		
MinDp:CVDp	P(I)	-0.40	0.03	-0.46	-0.34		
MinDp:CVDs	E(I)	-0.04	0.05	-0.15	0.06		
MinDp:CVDs	G(Ia)	0.19	0.25	-0.29	0.67		
MinDp:CVDs	P(I)	-0.01	0.03	-0.08	0.05		
MinDp:MaxDp	E(I)	0.29	0.06	0.18	0.40		
MinDp:MaxDp	G(Ia)	0.49	0.18	0.14	0.84		
MinDp:MaxDp	P(I)	0.28	0.03	0.22	0.34		
MinDp:MinDp	E(I)	1.00	0.00	1.00	1.00		
MinDp:MinDp	G(Ia)	1.00	0.00	1.00	1.00		
MinDp:MinDp	P(I)	1.00	0.00	1.00	1.00		
MinDp:MaxDs	E(I)	0.19	0.05	0.09	0.28		
MinDp:MaxDs	G(Ia)	0.19	0.25	-0.30	0.69		
MinDp:MaxDs	P(I)	0.18	0.03	0.12	0.25		
MinDp:MinDs	E(I)	0.03	0.05	-0.06	0.11		
MinDp:MinDs	G(Ia)	0.38	0.53	-0.66	1.42		
MinDp:MinDs	P(I)	0.05	0.03	-0.02	0.11		
MinDp:SDDp	E(I)	-0.23	0.06	-0.35	-0.11		
MinDp:SDDp	G(Ia)	0.33	0.21	-0.08	0.74		
MinDp:SDDp	P(I)	-0.11	0.03	-0.17	-0.04		
MinDp:SDDs	E(I)	0.16	0.06	0.05	0.27		
MinDp:SDDs	G(Ia)	0.18	0.18	-0.18	0.54		
MinDp:SDDs	P(I)	0.15	0.03	0.08	0.21		
MinDp:SDD	E(I)	0.12	0.06	0.01	0.23		
MinDp:SDD	G(Ia)	0.24	0.19	-0.13	0.61		
MinDp:SDD	P(I)	0.12	0.03	0.06	0.19		
MinDp:CVD	E(I)	-0.10	0.05	-0.20	0.00		
MinDp:CVD	G(Ia)	0.22	0.24	-0.25	0.69		
MinDp:CVD	P(I)	-0.05	0.03	-0.12	0.01		
MinDp:Gt30Dp	E(I)	0.25	0.06	0.14	0.36		
MinDp:Gt30Dp	G(Ia)	0.55	0.19	0.18	0.93		
MinDp:Gt30Dp	P(I)	0.26	0.03	0.20	0.33		
MinDp:Gt30Ds	E(I)	0.17	0.05	0.07	0.27		
MinDp:Gt30Ds	G(Ia)	0.25	0.22	-0.19	0.68		
MinDp:Gt30Ds	P(I)	0.17	0.03	0.10	0.23		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDp:Gt30D	E(I)	0.21	0.05	0.11	0.31		
MinDp:Gt30D	G(Ia)	0.37	0.22	-0.05	0.80		
MinDp:Gt30D	P(I)	0.22	0.03	0.15	0.28		
MinDp:Fnua	E(I)	-0.16	0.05	-0.26	-0.06		
MinDp:Fnua	G(Ia)	0.04	0.21	-0.37	0.46		
MinDp:Fnua	P(I)	-0.12	0.03	-0.19	-0.05		
MinDp:Fr	E(I)	0.00	0.05	-0.10	0.10		
MinDp:Fr	G(Ia)	0.44	0.20	0.04	0.83		
MinDp:Fr	P(I)	0.07	0.03	0.00	0.14		
MinDp:Fnt	E(I)	-0.11	0.05	-0.22	-0.01		
MinDp:Fnt	G(Ia)	-0.15	0.19	-0.53	0.23		
MinDp:Fnt	P(I)	-0.12	0.03	-0.18	-0.05		
MinDp:Sarea	E(I)	0.08	0.05	-0.02	0.18		
MinDp:Sarea	G(Ia)	-0.53	0.22	-0.95	-0.10		
MinDp:Sarea	P(I)	-0.01	0.03	-0.08	0.05		
MinDp:Fd	E(I)	0.11	0.07	-0.03	0.25		
MinDp:Fd	G(Ia)	0.16	0.40	-0.62	0.95		
MinDp:Fd	P(I)	0.11	0.05	0.02	0.20		
MinDp:Fc	E(I)	0.01	0.08	-0.14	0.16		
MinDp:Fc	G(Ia)	0.38	0.31	-0.23	1.00		
MinDp:Fc	P(I)	0.07	0.04	-0.01	0.15		
MinDp:Fu	E(I)	0.09	0.08	-0.07	0.24		
MinDp:Fu	G(Ia)	0.14	0.27	-0.39	0.67		
MinDp:Fu	P(I)	0.09	0.04	0.00	0.17		
MinDp:Colour	E(I)	0.01	0.05	-0.08	0.11		
MinDp:Colour	G(Ia)	0.46	0.24	-0.02	0.94		
MinDp:Colour	P(I)	0.07	0.03	0.00	0.13		
MinDp:Fly	E(I)	-0.09	0.05	-0.18	-0.00		
MinDp:Fly	G(Ia)	-0.01	0.19	-0.38	0.35		
MinDp:Fly	P(I)	-0.08	0.03	-0.15	-0.02		
MinDp:Flcrot	E(I)	-0.01	0.05	-0.11	0.09		
MinDp:Flcrot	G(Ia)	-0.24	0.26	-0.75	0.26		
MinDp:Flcrot	P(I)	-0.04	0.03	-0.10	0.03		
MinDp:Bactst	E(I)	-0.02	0.05	-0.11	0.07		
MinDp:Bactst	G(Ia)	0.50	0.40	-0.27	1.28		
MinDp:Bactst	P(I)	0.02	0.03	-0.04	0.09		
MinDp:MycD	E(I)	-0.02	0.04	-0.11	0.07		
MinDp:MycD	G(Ia)	0.34	0.57	-0.78	1.46		
MinDp:MycD	P(I)	-0.00	0.03	-0.07	0.06		
MinDp:Bcts	E(I)	0.08	0.10	-0.12	0.28		
MinDp:Bcts	G(Ia)	0.36	0.13	0.12	0.61		
MinDp:Bcts	P(I)	0.11	0.03	0.05	0.16		
MinDp:Bctb	E(I)	0.11	0.09	-0.08	0.29		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDp:Bctb	G(Ia)	0.29	0.11	0.06	0.51		
MinDp:Bctb	P(I)	0.10	0.03	0.05	0.16		
MinDp:Weanwt	E(I)	-0.03	0.05	-0.13	0.07		
MinDp:Weanwt	G(Ia)	-0.57	0.25	-1.05	-0.08		
MinDp:Weanwt	P(I)	-0.09	0.03	-0.16	-0.03		
MinDp:NLB	E(I)	0.07	0.05	-0.03	0.17		
MinDp:NLB	G(Ia)	0.52	0.26	0.01	1.03		
MinDp:NLB	P(I)	0.12	0.03	0.06	0.19		
MinDp:NLW	E(I)	0.09	0.05	-0.01	0.19		
MinDp:NLW	G(Ia)	0.55	0.25	0.06	1.04		
MinDp:NLW	P(I)	0.14	0.03	0.08	0.21		
MinDp:Fnpua	E(I)	-0.16	0.05	-0.26	-0.07		
MinDp:Fnpua	G(Ia)	-0.33	0.22	-0.76	0.09		
MinDp:Fnpua	P(I)	-0.18	0.03	-0.25	-0.12		
MinDp:Fnsua	E(I)	-0.15	0.05	-0.26	-0.05		
MinDp:Fnsua	G(Ia)	0.07	0.21	-0.35	0.49		
MinDp:Fnsua	P(I)	-0.11	0.03	-0.18	-0.05		
MinDp:Fnpt	E(I)	-0.14	0.05	-0.23	-0.04		
MinDp:Fnpt	G(Ia)	-0.49	0.21	-0.90	-0.09		
MinDp:Fnpt	P(I)	-0.18	0.03	-0.24	-0.12		
MinDp:Fnst	E(I)	-0.11	0.05	-0.21	-0.01		
MinDp:Fnst	G(Ia)	-0.13	0.20	-0.53	0.27		
MinDp:Fnst	P(I)	-0.11	0.03	-0.17	-0.04		
MaxDs:Stal	E(I)	-0.21	0.07	-0.34	-0.09		
MaxDs:Stal	G(Ia)	0.20	0.09	0.01	0.39		
MaxDs:Stal	P(I)	-0.08	0.03	-0.14	-0.01		
MaxDs:Diam	E(I)	0.20	0.06	0.08	0.33		
MaxDs:Diam	G(Ia)	0.80	0.08	0.65	0.96		
MaxDs:Diam	P(I)	0.39	0.03	0.33	0.44		
MaxDs:Bwt	E(I)	-0.01	0.06	-0.12	0.10		
MaxDs:Bwt	G(Ia)	0.20	0.12	-0.04	0.43		
MaxDs:Bwt	P(I)	0.04	0.03	-0.03	0.11		
MaxDs:WrN	E(I)	0.11	0.06	-0.01	0.24		
MaxDs:WrN	G(Ia)	0.29	0.08	0.12	0.45		
MaxDs:WrN	P(I)	0.16	0.03	0.10	0.22		
MaxDs:WrB	E(I)	0.20	0.06	0.08	0.31		
MaxDs:WrB	G(Ia)	0.22	0.09	0.04	0.40		
MaxDs:WrB	P(I)	0.20	0.03	0.14	0.26		
MaxDs:WrT	E(I)	0.18	0.06	0.05	0.30		
MaxDs:WrT	G(Ia)	0.27	0.08	0.10	0.43		
MaxDs:WrT	P(I)	0.20	0.03	0.14	0.26		
MaxDs:Face	E(I)	-0.23	0.07	-0.36	-0.11		
MaxDs:Face	G(Ia)	0.29	0.07	0.16	0.42		

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
MaxDs:Face	P(I)	-0.02	0.03	-0.07	0.04
MaxDs:Gfw	E(I)	0.01	0.06	-0.10	0.12
MaxDs:Gfw	G(Ia)	0.61	0.09	0.42	0.79
MaxDs:Gfw	P(I)	0.18	0.03	0.12	0.25
MaxDs:Yld	E(I)	-0.11	0.06	-0.23	0.01
MaxDs:Yld	G(Ia)	-0.21	0.10	-0.41	-0.01
MaxDs:Yld	P(I)	-0.14	0.03	-0.20	-0.07
MaxDs:Cww	E(I)	-0.05	0.06	-0.17	0.07
MaxDs:Cww	G(Ia)	0.48	0.09	0.30	0.66
MaxDs:Cww	P(I)	0.11	0.03	0.05	0.17
MaxDs:Staladj	E(I)	-0.22	0.07	-0.35	-0.09
MaxDs:Staladj	G(Ia)	0.19	0.09	0.01	0.37
MaxDs:Staladj	P(I)	-0.08	0.03	-0.15	-0.02
MaxDs:Gfwadj	E(I)	0.01	0.06	-0.10	0.13
MaxDs:Gfwadj	G(Ia)	0.63	0.10	0.44	0.82
MaxDs:Gfwadj	P(I)	0.19	0.03	0.13	0.25
MaxDs:Cwwadj	E(I)	-0.04	0.06	-0.17	0.08
MaxDs:Cwwadj	G(Ia)	0.51	0.10	0.32	0.71
MaxDs:Cwwadj	P(I)	0.12	0.03	0.05	0.19
MaxDs:Crimp	E(I)	0.06	0.12	-0.18	0.30
MaxDs:Crimp	G(Ia)	-0.62	0.13	-0.86	-0.37
MaxDs:Crimp	P(I)	-0.22	0.04	-0.31	-0.14
MaxDs:Crwvl	E(I)	-0.06	0.12	-0.28	0.17
MaxDs:Crwvl	G(Ia)	0.58	0.13	0.33	0.83
MaxDs:Crwvl	P(I)	0.20	0.04	0.11	0.28
MaxDs:Crst	E(I)	-0.11	0.10	-0.31	0.10
MaxDs:Crst	G(Ia)	-0.34	0.14	-0.61	-0.06
MaxDs:Crst	P(I)	-0.19	0.04	-0.28	-0.10
MaxDs:Crstadj	E(I)	-0.10	0.10	-0.30	0.10
MaxDs:Crstadj	G(Ia)	-0.34	0.14	-0.61	-0.06
MaxDs:Crstadj	P(I)	-0.19	0.04	-0.27	-0.10
MaxDs:Crwvt	E(I)	0.04	0.10	-0.15	0.23
MaxDs:Crwvt	G(Ia)	0.38	0.15	0.09	0.66
MaxDs:Crwvt	P(I)	0.16	0.04	0.07	0.24
MaxDs:Dp	E(I)	0.45	0.06	0.34	0.57
MaxDs:Dp	G(Ia)	0.36	0.08	0.21	0.51
MaxDs:Dp	P(I)	0.40	0.03	0.34	0.46
MaxDs:Ds	E(I)	0.41	0.05	0.31	0.51
MaxDs:Ds	G(Ia)	0.74	0.08	0.59	0.89
MaxDs:Ds	P(I)	0.49	0.03	0.44	0.55
MaxDs:Dps	E(I)	0.42	0.05	0.32	0.51
MaxDs:Dps	G(Ia)	0.78	0.08	0.62	0.93
MaxDs:Dps	P(I)	0.51	Continued of	0.46	0.56

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
MaxDs:DpovDs	E(I)	0.26	0.11	0.05	0.48	
MaxDs:DpovDs	G(Ia)	-0.08	0.07	-0.22	0.06	
MaxDs:DpovDs	P(I)	0.07	0.03	0.01	0.13	
MaxDs:CVDp	E(I)	0.05	0.06	-0.06	0.16	
MaxDs:CVDp	G(Ia)	0.51	0.11	0.30	0.73	
MaxDs:CVDp	P(I)	0.17	0.03	0.11	0.24	
MaxDs:CVDs	E(I)	0.28	0.05	0.18	0.38	
MaxDs:CVDs	G(Ia)	0.64	0.10	0.43	0.84	
MaxDs:CVDs	P(I)	0.36	0.03	0.30	0.42	
MaxDs:MaxDp	E(I)	0.37	0.06	0.25	0.49	
MaxDs:MaxDp	G(Ia)	0.40	0.08	0.25	0.56	
MaxDs:MaxDp	P(I)	0.36	0.03	0.30	0.42	
MaxDs:MinDp	E(I)	0.19	0.05	0.09	0.28	
MaxDs:MinDp	G(Ia)	0.19	0.25	-0.30	0.69	
MaxDs:MinDp	P(I)	0.18	0.03	0.12	0.25	
MaxDs:MaxDs	E(I)	1.00	0.00	1.00	1.00	
MaxDs:MaxDs	G(Ia)	1.00	0.00	1.00	1.00	
MaxDs:MaxDs	P(I)	1.00	0.00	1.00	1.00	
MaxDs:MinDs	E(I)	0.09	0.05	-0.00	0.19	
MaxDs:MinDs	G(Ia)	-0.36	0.29	-0.93	0.22	
MaxDs:MinDs	P(I)	0.04	0.03	-0.02	0.11	
MaxDs:SDDp	E(I)	0.26	0.06	0.14	0.38	
MaxDs:SDDp	G(Ia)	0.46	0.08	0.30	0.62	
MaxDs:SDDp	P(I)	0.31	0.03	0.25	0.37	
MaxDs:SDDs	E(I)	0.56	0.04	0.47	0.64	
MaxDs:SDDs	G(Ia)	0.92	0.06	0.80	1.05	
MaxDs:SDDs	P(I)	0.65	0.02	0.60	0.69	
MaxDs:SDD	E(I)	0.56	0.04	0.48	0.65	
MaxDs:SDD	G(Ia)	0.93	0.06	0.81	1.05	
MaxDs:SDD	P(I)	0.65	0.02	0.61	0.70	
MaxDs:CVD	E(I)	0.28	0.05	0.18	0.38	
MaxDs:CVD	G(Ia)	0.63	0.10	0.44	0.83	
MaxDs:CVD	P(I)	0.37	0.03	0.31	0.43	
MaxDs:Gt30Dp	E(I)	0.27	0.06	0.16	0.39	
MaxDs:Gt30Dp	G(Ia)	0.45	0.08	0.29	0.61	
MaxDs:Gt30Dp	P(I)	0.32	0.03	0.26	0.38	
MaxDs:Gt30Ds	E(I)	0.43	0.04	0.34	0.52	
MaxDs:Gt30Ds	G(Ia)	0.95	0.09	0.78	1.12	
MaxDs:Gt30Ds	P(I)	0.55	0.03	0.50	0.60	
MaxDs:Gt30D	E(I)	0.44	0.04	0.35	0.53	
MaxDs:Gt30D	G(Ia)	0.96	0.08	0.80	1.13	
MaxDs:Gt30D	P(I)	0.57	0.03	0.52	0.62	
MaxDs:Fnua	E(I)	-0.17	0.06	-0.28	-0.06	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MaxDs:Fnua	G(Ia)	-0.48	0.11	-0.69	-0.27		
MaxDs:Fnua	P(I)	-0.25	0.03	-0.31	-0.18		
MaxDs:Fr	E(I)	-0.02	0.06	-0.13	0.09		
MaxDs:Fr	G(Ia)	-0.24	0.12	-0.47	-0.00		
MaxDs:Fr	P(I)	-0.07	0.03	-0.14	-0.00		
MaxDs:Fnt	E(I)	-0.15	0.05	-0.26	-0.05		
MaxDs:Fnt	G(Ia)	-0.50	0.12	-0.73	-0.26		
MaxDs:Fnt	P(I)	-0.23	0.03	-0.29	-0.17		
MaxDs:Sarea	E(I)	-0.00	0.06	-0.13	0.12		
MaxDs:Sarea	G(Ia)	0.17	0.12	-0.06	0.40		
MaxDs:Sarea	P(I)	0.04	0.03	-0.03	0.11		
MaxDs:Fd	E(I)	0.07	0.07	-0.08	0.21		
MaxDs:Fd	G(Ia)	0.26	0.28	-0.28	0.81		
MaxDs:Fd	P(I)	0.10	0.05	0.01	0.19		
MaxDs:Fc	E(I)	0.21	0.08	0.05	0.36		
MaxDs:Fc	G(Ia)	0.38	0.17	0.05	0.71		
MaxDs:Fc	P(I)	0.24	0.04	0.16	0.32		
MaxDs:Fu	E(I)	0.24	0.08	0.09	0.40		
MaxDs:Fu	G(Ia)	0.33	0.16	0.01	0.65		
MaxDs:Fu	P(I)	0.25	0.04	0.17	0.33		
MaxDs:Colour	E(I)	-0.02	0.06	-0.13	0.09		
MaxDs:Colour	G(Ia)	0.33	0.12	0.10	0.55		
MaxDs:Colour	P(I)	0.06	0.03	-0.00	0.13		
MaxDs:Fly	E(I)	-0.05	0.05	-0.15	0.05		
MaxDs:Fly	G(Ia)	0.37	0.18	0.02	0.71		
MaxDs:Fly	P(I)	0.02	0.03	-0.05	0.08		
MaxDs:Flcrot	E(I)	0.07	0.05	-0.04	0.17		
MaxDs:Flcrot	G(Ia)	-0.08	0.13	-0.33	0.18		
MaxDs:Flcrot	P(I)	0.04	0.03	-0.03	0.10		
MaxDs:Bactst	E(I)	-0.02	0.05	-0.11	0.08		
MaxDs:Bactst	G(Ia)	-0.06	0.19	-0.42	0.31		
MaxDs:Bactst	P(I)	-0.02	0.03	-0.09	0.04		
MaxDs:MycD	E(I)	0.02	0.05	-0.08	0.11		
MaxDs:MycD	G(Ia)	-0.08	0.29	-0.63	0.48		
MaxDs:MycD	P(I)	0.01	0.03	-0.06	0.07		
MaxDs:Bcts	E(I)	-0.10	0.12	-0.33	0.13		
MaxDs:Bcts	G(Ia)	0.32	0.06	0.21	0.44		
MaxDs:Bcts	P(I)	0.10	0.03	0.05	0.16		
MaxDs:Bctb	E(I)	-0.10	0.11	-0.31	0.11		
MaxDs:Bctb	G(Ia)	0.33	0.06	0.22	0.44		
MaxDs:Bctb	P(I)	0.11	0.03	0.05	0.16		
MaxDs:Weanwt	E(I)	-0.03	0.06	-0.14	0.08		
MaxDs:Weanwt	G(Ia)	-0.09	0.12	-0.32	0.15		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MaxDs:Weanwt	P(I)	-0.05	0.03	-0.11	0.02		
MaxDs:NLB	E(I)	0.00	0.05	-0.10	0.11		
MaxDs:NLB	G(Ia)	0.09	0.13	-0.16	0.33		
MaxDs:NLB	P(I)	0.02	0.03	-0.04	0.09		
MaxDs:NLW	E(I)	0.02	0.05	-0.08	0.13		
MaxDs:NLW	G(Ia)	0.18	0.12	-0.06	0.41		
MaxDs:NLW	P(I)	0.06	0.03	-0.01	0.12		
MaxDs:Fnpua	E(I)	-0.13	0.05	-0.23	-0.03		
MaxDs:Fnpua	G(Ia)	-0.18	0.13	-0.44	0.08		
MaxDs:Fnpua	P(I)	-0.14	0.03	-0.21	-0.08		
MaxDs:Fnsua	E(I)	-0.17	0.06	-0.28	-0.06		
MaxDs:Fnsua	G(Ia)	-0.49	0.11	-0.70	-0.28		
MaxDs:Fnsua	P(I)	-0.25	0.03	-0.31	-0.18		
MaxDs:Fnpt	E(I)	-0.12	0.05	-0.23	-0.02		
MaxDs:Fnpt	G(Ia)	-0.12	0.12	-0.36	0.11		
MaxDs:Fnpt	P(I)	-0.12	0.03	-0.19	-0.06		
MaxDs:Fnst	E(I)	-0.15	0.05	-0.25	-0.04		
MaxDs:Fnst	G(Ia)	-0.50	0.12	-0.74	-0.27		
MaxDs:Fnst	P(I)	-0.23	0.03	-0.29	-0.16		
MinDs:Stal	E(I)	-0.02	0.06	-0.14	0.10		
MinDs:Stal	G(Ia)	0.20	0.16	-0.12	0.52		
MinDs:Stal	P(I)	0.02	0.03	-0.04	0.09		
MinDs:Diam	E(I)	0.16	0.06	0.04	0.29		
MinDs:Diam	G(Ia)	0.02	0.12	-0.22	0.26		
MinDs:Diam	P(I)	0.11	0.03	0.04	0.17		
MinDs:Bwt	E(I)	0.12	0.05	0.02	0.22		
MinDs:Bwt	G(Ia)	-0.34	0.23	-0.78	0.11		
MinDs:Bwt	P(I)	0.05	0.03	-0.01	0.12		
MinDs:WrN	E(I)	0.07	0.06	-0.05	0.18		
MinDs:WrN	G(Ia)	0.27	0.17	-0.06	0.60		
MinDs:WrN	P(I)	0.09	0.03	0.03	0.16		
MinDs:WrB	E(I)	-0.09	0.06	-0.20	0.02		
MinDs:WrB	G(Ia)	0.60	0.23	0.15	1.05		
MinDs:WrB	P(I)	0.03	0.03	-0.04	0.09		
MinDs:WrT	E(I)	-0.01	0.06	-0.14	0.11		
MinDs:WrT	G(Ia)	0.45	0.19	0.07	0.82		
MinDs:WrT	P(I)	0.07	0.03	0.00	0.13		
MinDs:Face	E(I)	0.05	0.06	-0.07	0.17		
MinDs:Face	G(Ia)	-0.34	0.14	-0.61	-0.07		
MinDs:Face	P(I)	-0.04	0.03	-0.09	0.01		
MinDs:Gfw	E(I)	0.04	0.05	-0.07	0.15		
MinDs:Gfw	G(Ia)	0.21	0.17	-0.13	0.54		
MinDs:Gfw	P(I)	0.06	0.03	0.00	0.13		

Table 24 – Continued from previous page

	$\frac{1}{C}$			CIOTI-	CIOTI:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
MinDs:Yld	E(I)	0.02	0.06	-0.09	0.13
MinDs:Yld	G(Ia)	-0.14	0.19	-0.52	0.23
MinDs:Yld	P(I)	-0.01	0.03	-0.07	0.06
MinDs:Cww	E(I)	0.05	0.06	-0.06	0.16
MinDs:Cww	G(Ia)	0.16	0.16	-0.16	0.48
MinDs:Cww	P(I)	0.06	0.03	-0.00	0.12
MinDs:Staladj	E(I)	-0.02	0.06	-0.14	0.10
MinDs:Staladj	G(Ia)	0.19	0.16	-0.12	0.49
MinDs:Staladj	P(I)	0.02	0.03	-0.04	0.09
MinDs:Gfwadj	E(I)	0.04	0.05	-0.06	0.15
MinDs:Gfwadj	G(Ia)	0.34	0.17	0.01	0.67
MinDs:Gfwadj	P(I)	0.09	0.03	0.03	0.15
MinDs:Cwwadj	E(I)	0.05	0.06	-0.06	0.16
MinDs:Cwwadj	G(Ia)	0.29	0.17	-0.04	0.62
MinDs:Cwwadj	P(I)	0.09	0.03	0.02	0.16
MinDs:Crimp	E(I)	0.02	0.10	-0.17	0.21
MinDs:Crimp	G(Ia)	-0.17	0.29	-0.74	0.40
MinDs:Crimp	P(I)	-0.02	0.04	-0.11	0.07
MinDs:Crwvl	E(I)	-0.08	0.09	-0.26	0.10
MinDs:Crwvl	G(Ia)	0.33	0.31	-0.28	0.95
MinDs:Crwvl	P(I)	0.01	0.04	-0.08	0.09
MinDs:Crst	E(I)	-0.03	0.09	-0.20	0.14
MinDs:Crst	G(Ia)	0.06	0.35	-0.62	0.74
MinDs:Crst	P(I)	-0.01	0.04	-0.10	0.07
MinDs:Crstadj	E(I)	-0.03	0.09	-0.20	0.14
MinDs:Crstadj	G(Ia)	0.04	0.35	-0.66	0.74
MinDs:Crstadj	P(I)	-0.02	0.04	-0.10	0.07
MinDs:Crwvt	E(I)	0.02	0.08	-0.14	0.19
MinDs:Crwvt	G(Ia)	0.09	0.33	-0.55	0.73
MinDs:Crwvt	P(I)	0.03	0.04	-0.05	0.12
MinDs:Dp	E(I)	0.16	0.06	0.04	0.28
MinDs:Dp	G(Ia)	-0.19	0.18	-0.55	0.16
MinDs:Dp	P(I)	0.08	0.03	0.01	0.14
MinDs:Ds	E(I)	0.24	0.06	0.13	0.35
MinDs:Ds	G(Ia)	-0.02	0.42	-0.85	0.81
MinDs:Ds	P(I)	0.17	0.03	0.11	0.24
MinDs:Dps	E(I)	0.24	0.05	0.13	0.34
MinDs:Dps	G(Ia)	-0.04	0.26	-0.56	0.48
MinDs:Dps	P(I)	0.18	0.03	0.11	0.24
MinDs:DpovDs	E(I)	-0.04	0.10	-0.23	0.15
MinDs:DpovDs	G(Ia)	-0.14	0.13	-0.40	0.12
MinDs:DpovDs	P(I)	-0.05	0.03	-0.11	0.02
MinDs:CVDp	E(I)	0.06	0.05	-0.05	0.16

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDs:CVDp	G(Ia)	-0.49	0.24	-0.95	-0.02		
MinDs:CVDp	P(I)	-0.02	0.03	-0.09	0.04		
MinDs:CVDs	E(I)	-0.15	0.05	-0.25	-0.06		
MinDs:CVDs	G(Ia)	-0.56	0.23	-1.01	-0.11		
MinDs:CVDs	P(I)	-0.20	0.03	-0.26	-0.13		
MinDs:MaxDp	E(I)	0.15	0.06	0.03	0.27		
MinDs:MaxDp	G(Ia)	-0.38	0.20	-0.77	0.02		
MinDs:MaxDp	P(I)	0.04	0.03	-0.02	0.11		
MinDs:MinDp	E(I)	0.03	0.05	-0.06	0.11		
MinDs:MinDp	G(Ia)	0.38	0.53	-0.66	1.42		
MinDs:MinDp	P(I)	0.05	0.03	-0.02	0.11		
MinDs:MaxDs	E(I)	0.09	0.05	-0.00	0.19		
MinDs:MaxDs	G(Ia)	-0.36	0.29	-0.93	0.22		
MinDs:MaxDs	P(I)	0.04	0.03	-0.02	0.11		
MinDs:MinDs	E(I)	1.00	0.00	1.00	1.00		
MinDs:MinDs	G(Ia)	1.00	0.00	1.00	1.00		
MinDs:MinDs	P(I)	1.00	0.00	1.00	1.00		
MinDs:SDDp	E(I)	0.15	0.06	0.03	0.27		
MinDs:SDDp	G(Ia)	-0.45	0.21	-0.86	-0.05		
MinDs:SDDp	P(I)	0.03	0.03	-0.04	0.09		
MinDs:SDDs	E(I)	-0.03	0.06	-0.14	0.08		
MinDs:SDDs	G(Ia)	-0.46	0.20	-0.86	-0.06		
MinDs:SDDs	P(I)	-0.10	0.03	-0.16	-0.03		
MinDs:SDD	E(I)	-0.01	0.06	-0.11	0.10		
MinDs:SDD	G(Ia)	-0.50	0.21	-0.91	-0.09		
MinDs:SDD	P(I)	-0.08	0.03	-0.15	-0.02		
MinDs:CVD	E(I)	-0.14	0.05	-0.24	-0.04		
MinDs:CVD	G(Ia)	-0.58	0.23	-1.03	-0.14		
MinDs:CVD	P(I)	-0.19	0.03	-0.25	-0.12		
MinDs:Gt30Dp	E(I)	0.15	0.06	0.03	0.26		
MinDs:Gt30Dp	G(Ia)	-0.23	0.19	-0.60	0.14		
MinDs:Gt30Dp	P(I)	0.07	0.03	-0.00	0.13		
MinDs:Gt30Ds	E(I)	0.13	0.05	0.03	0.23		
MinDs:Gt30Ds	G(Ia)	-0.30	0.25	-0.78	0.19		
MinDs:Gt30Ds	P(I)	0.07	0.03	0.00	0.14		
MinDs:Gt30D	E(I)	0.15	0.05	0.05	0.25		
MinDs:Gt30D	G(Ia)	-0.34	0.25	-0.82	0.14		
MinDs:Gt30D	P(I)	0.08	0.03	0.01	0.14		
MinDs:Fnua	E(I)	-0.12	0.05	-0.23	-0.02		
MinDs:Fnua	G(Ia)	0.00	3.72	-7.29	7.29		
MinDs:Fnua	P(I)	-0.10	0.03	-0.16	-0.03		
MinDs:Fr	E(I)	-0.01	0.05	-0.11	0.09		
MinDs:Fr	G(Ia)	-0.21	0.19	-0.59	0.16		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDs:Fr	P(I)	-0.04	0.03	-0.11	0.02		
MinDs:Fnt	E(I)	-0.07	0.05	-0.17	0.03		
MinDs:Fnt	G(Ia)	-0.10	0.19	-0.48	0.28		
MinDs:Fnt	P(I)	-0.07	0.03	-0.13	-0.00		
MinDs:Sarea	E(I)	0.12	0.05	0.02	0.22		
MinDs:Sarea	G(Ia)	-0.27	0.20	-0.67	0.13		
MinDs:Sarea	P(I)	0.06	0.03	-0.01	0.12		
MinDs:Fd	E(I)	0.07	0.07	-0.07	0.21		
MinDs:Fd	G(Ia)	-0.27	0.25	-0.76	0.23		
MinDs:Fd	P(I)	0.01	0.04	-0.08	0.09		
MinDs:Fc	E(I)	0.05	0.08	-0.10	0.21		
MinDs:Fc	G(Ia)	0.07	0.15	-0.21	0.36		
MinDs:Fc	P(I)	0.06	0.04	-0.02	0.14		
MinDs:Fu	E(I)	0.08	0.08	-0.08	0.24		
MinDs:Fu	G(Ia)	0.08	0.15	-0.20	0.36		
MinDs:Fu	P(I)	0.08	0.04	-0.00	0.16		
MinDs:Colour	E(I)	0.06	0.05	-0.04	0.16		
MinDs:Colour	G(Ia)	-0.58	0.24	-1.06	-0.11		
MinDs:Colour	P(I)	-0.03	0.03	-0.10	0.03		
MinDs:Fly	E(I)	0.02	0.05	-0.07	0.11		
MinDs:Fly	G(Ia)	-0.66	0.34	-1.33	0.00		
MinDs:Fly	P(I)	-0.04	0.03	-0.10	0.02		
MinDs:Flcrot	E(I)	0.04	0.05	-0.06	0.13		
MinDs:Flcrot	G(Ia)	-0.69	0.27	-1.22	-0.15		
MinDs:Flcrot	P(I)	-0.05	0.03	-0.12	0.01		
MinDs:Bactst	E(I)	-0.04	0.05	-0.13	0.05		
MinDs:Bactst	G(Ia)	0.09	0.38	-0.65	0.83		
MinDs:Bactst	P(I)	-0.03	0.03	-0.10	0.04		
MinDs:MycD	E(I)	-0.01	0.04	-0.10	0.08		
MinDs:MycD	G(Ia)	-0.10	0.48	-1.05	0.86		
MinDs:MycD	P(I)	-0.02	0.03	-0.08	0.05		
MinDs:Bcts	E(I)	0.21	0.11	-0.00	0.41		
MinDs:Bcts	G(Ia)	-0.45	0.15	-0.74	-0.15		
MinDs:Bcts	P(I)	-0.03	0.03	-0.09	0.03		
MinDs:Bctb	E(I)	0.26	0.10	0.06	0.45		
MinDs:Bctb	G(Ia)	-0.52	0.16	-0.84	-0.20		
MinDs:Bctb	P(I)	-0.02	0.03	-0.08	0.03		
MinDs:Weanwt	E(I)	0.02	0.05	-0.08	0.12		
MinDs:Weanwt	G(Ia)	0.11	0.23	-0.34	0.55		
MinDs:Weanwt	P(I)	0.03	0.03	-0.03	0.10		
MinDs:NLB	E(I)	-0.00	0.05	-0.10	0.10		
MinDs:NLB	G(Ia)	0.12	0.25	-0.36	0.61		
MinDs:NLB	P(I)	0.01	0.03	-0.05	0.08		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MinDs:NLW	E(I)	0.02	0.05	-0.08	0.12		
MinDs:NLW	G(Ia)	0.06	0.23	-0.40	0.52		
MinDs:NLW	P(I)	0.02	0.03	-0.04	0.09		
MinDs:Fnpua	E(I)	-0.09	0.05	-0.19	0.00		
MinDs:Fnpua	G(Ia)	0.13	0.25	-0.36	0.61		
MinDs:Fnpua	P(I)	-0.06	0.03	-0.13	-0.00		
MinDs:Fnsua	E(I)	-0.12	0.05	-0.23	-0.02		
MinDs:Fnsua	G(Ia)	-0.01	0.14	-0.29	0.27		
MinDs:Fnsua	P(I)	-0.10	0.03	-0.16	-0.03		
MinDs:Fnpt	$\mid E(I) \mid$	-0.05	0.05	-0.15	0.04		
MinDs:Fnpt	G(Ia)	0.01	0.26	-0.50	0.52		
MinDs:Fnpt	P(I)	-0.04	0.03	-0.11	0.02		
MinDs:Fnst	E(I)	-0.06	0.05	-0.16	0.04		
MinDs:Fnst	G(Ia)	-0.12	0.21	-0.53	0.30		
MinDs:Fnst	P(I)	-0.07	0.03	-0.13	-0.00		
SDDp:Stal	E(I)	-0.04	0.08	-0.20	0.12		
SDDp:Stal	G(Ia)	-0.12	0.06	-0.23	-0.01		
SDDp:Stal	P(I)	-0.08	0.03	-0.14	-0.02		
SDDp:Diam	E(I)	0.25	0.08	0.09	0.41		
SDDp:Diam	G(Ia)	0.22	0.05	0.12	0.32		
SDDp:Diam	P(I)	0.23	0.03	0.17	0.29		
SDDp:Bwt	E(I)	0.04	0.07	-0.10	0.18		
SDDp:Bwt	G(Ia)	-0.14	0.07	-0.29	0.01		
SDDp:Bwt	P(I)	-0.03	0.03	-0.09	0.04		
SDDp:WrN	$\mid E(I) \mid$	0.39	0.08	0.23	0.54		
SDDp:WrN	G(Ia)	-0.11	0.06	-0.22	-0.00		
SDDp:WrN	P(I)	0.14	0.03	0.08	0.20		
SDDp:WrB	$\mid E(I) \mid$	0.36	0.07	0.22	0.51		
SDDp:WrB	G(Ia)	-0.12	0.06	-0.24	0.01		
SDDp:WrB	P(I)	0.15	0.03	0.08	0.21		
SDDp:WrT	E(I)	0.43	0.08	0.28	0.58		
SDDp:WrT	G(Ia)	-0.12	0.06	-0.23	-0.01		
SDDp:WrT	P(I)	0.16	0.03	0.09	0.22		
SDDp:Face	E(I)	-0.67	0.09	-0.85	-0.50		
SDDp:Face	G(Ia)	0.63	0.04	0.54	0.71		
SDDp:Face	P(I)	0.08	0.03	0.03	0.13		
SDDp:Gfw	E(I)	0.12	0.07	-0.02	0.26		
SDDp:Gfw	G(Ia)	0.01	0.06	-0.10	0.13		
SDDp:Gfw	P(I)	0.07	0.03	0.01	0.13		
SDDp:Yld	E(I)	-0.05	0.07	-0.20	0.09		
SDDp:Yld	G(Ia)	-0.26	0.06	-0.38	-0.13		
SDDp:Yld	P(I)	-0.14	0.03	-0.21	-0.08		
SDDp:Cww	E(I)	0.09	0.08	-0.06	0.24		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
SDDp:Cww	G(Ia)	-0.07	0.06	-0.18	0.04	
SDDp:Cww	P(I)	0.01	0.03	-0.05	0.08	
SDDp:Staladj	E(I)	-0.03	0.08	-0.19	0.12	
SDDp:Staladj	G(Ia)	-0.13	0.06	-0.24	-0.02	
SDDp:Staladj	P(I)	-0.08	0.03	-0.15	-0.01	
SDDp:Gfwadj	E(I)	0.13	0.07	-0.01	0.27	
SDDp:Gfwadj	G(Ia)	0.03	0.06	-0.09	0.15	
SDDp:Gfwadj	P(I)	0.09	0.03	0.02	0.15	
SDDp:Cwwadj	E(I)	0.10	0.08	-0.05	0.25	
SDDp:Cwwadj	G(Ia)	-0.06	0.06	-0.19	0.06	
SDDp:Cwwadj	P(I)	0.03	0.03	-0.04	0.09	
SDDp:Crimp	E(I)	0.18	0.14	-0.09	0.46	
SDDp:Crimp	G(Ia)	-0.41	0.11	-0.62	-0.20	
SDDp:Crimp	P(I)	-0.12	0.04	-0.20	-0.03	
SDDp:Crwvl	E(I)	-0.16	0.13	-0.42	0.10	
SDDp:Crwvl	G(Ia)	0.39	0.11	0.17	0.60	
SDDp:Crwvl	P(I)	0.10	0.04	0.02	0.19	
SDDp:Crst	E(I)	0.24	0.13	-0.01	0.50	
SDDp:Crst	G(Ia)	-0.66	0.12	-0.90	-0.42	
SDDp:Crst	P(I)	-0.16	0.04	-0.25	-0.07	
SDDp:Crstadj	E(I)	0.25	0.13	-0.00	0.51	
SDDp:Crstadj	G(Ia)	-0.67	0.12	-0.91	-0.42	
SDDp:Crstadj	P(I)	-0.16	0.04	-0.25	-0.07	
SDDp:Crwvt	E(I)	-0.23	0.13	-0.48	0.02	
SDDp:Crwvt	G(Ia)	0.69	0.12	0.44	0.93	
SDDp:Crwvt	P(I)	0.17	0.04	0.08	0.25	
SDDp:Dp	E(I)	0.46	0.06	0.34	0.58	
SDDp:Dp	G(Ia)	0.85	0.03	0.78	0.92	
SDDp:Dp	P(I)	0.66	0.02	0.61	0.70	
SDDp:Ds	E(I)	0.33	0.07	0.18	0.47	
SDDp:Ds	G(Ia)	-0.06	0.06	-0.18	0.07	
SDDp:Ds	P(I)	0.15	0.03	0.09	0.22	
SDDp:Dps	E(I)	0.34	0.07	0.20	0.48	
SDDp:Dps	G(Ia)	0.02	0.06	-0.10	0.14	
SDDp:Dps	P(I)	0.20	0.03	0.14	0.26	
SDDp:DpovDs	E(I)	0.31	0.11	0.10	0.52	
SDDp:DpovDs	G(Ia)	0.74	0.03	0.68	0.80	
SDDp:DpovDs	P(I)	0.56	0.02	0.51	0.61	
SDDp:CVDp	E(I)	0.85	0.03	0.80	0.91	
SDDp:CVDp	G(Ia)	0.88	0.03	0.83	0.94	
SDDp:CVDp	P(I)	0.86	0.01	0.83	0.88	
SDDp:CVDs	E(I)	0.10	0.07	-0.03	0.23	
SDDp:CVDs	G(Ia)	0.55	0.07	0.41	0.69	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
SDDp:CVDs	P(I)	0.26	0.03	0.20	0.32		
SDDp:MaxDp	$\mid E(I) \mid$	0.72	0.04	0.64	0.80		
SDDp:MaxDp	G(Ia)	0.95	0.02	0.90	1.00		
SDDp:MaxDp	P(I)	0.83	0.01	0.80	0.86		
SDDp:MinDp	$\mid E(I) \mid$	-0.23	0.06	-0.35	-0.11		
SDDp:MinDp	G(Ia)	0.33	0.21	-0.08	0.74		
SDDp:MinDp	P(I)	-0.11	0.03	-0.17	-0.04		
SDDp:MaxDs	E(I)	0.26	0.06	0.14	0.38		
SDDp:MaxDs	G(Ia)	0.46	0.08	0.30	0.62		
SDDp:MaxDs	P(I)	0.31	0.03	0.25	0.37		
SDDp:MinDs	$\mid E(I) \mid$	0.15	0.06	0.03	0.27		
SDDp:MinDs	G(Ia)	-0.45	0.21	-0.86	-0.05		
SDDp:MinDs	P(I)	0.03	0.03	-0.04	0.09		
SDDp:SDDp	E(I)	1.00	0.00	1.00	1.00		
SDDp:SDDp	G(Ia)	1.00	0.00	1.00	1.00		
SDDp:SDDp	P(I)	1.00	0.00	1.00	1.00		
SDDp:SDDs	E(I)	0.32	0.07	0.18	0.45		
SDDp:SDDs	G(Ia)	0.37	0.06	0.26	0.48		
SDDp:SDDs	P(I)	0.34	0.03	0.28	0.40		
SDDp:SDD	E(I)	0.45	0.06	0.32	0.57		
SDDp:SDD	G(Ia)	0.52	0.05	0.42	0.61		
SDDp:SDD	P(I)	0.48	0.03	0.42	0.53		
SDDp:CVD	E(I)	0.21	0.07	0.09	0.34		
SDDp:CVD	G(Ia)	0.66	0.06	0.53	0.78		
SDDp:CVD	P(I)	0.38	0.03	0.32	0.44		
SDDp:Gt30Dp	$\mid E(I) \mid$	0.56	0.05	0.46	0.66		
SDDp:Gt30Dp	G(Ia)	0.92	0.03	0.86	0.99		
SDDp:Gt30Dp	P(I)	0.73	0.02	0.70	0.77		
SDDp:Gt30Ds	$\mid E(I) \mid$	0.26	0.07	0.13	0.39		
SDDp:Gt30Ds	G(Ia)	0.25	0.07	0.11	0.39		
SDDp:Gt30Ds	P(I)	0.25	0.03	0.19	0.31		
SDDp:Gt30D	E(I)	0.36	0.06	0.24	0.48		
SDDp:Gt30D	G(Ia)	0.50	0.06	0.38	0.63		
SDDp:Gt30D	P(I)	0.41	0.03	0.35	0.46		
SDDp:Fnua	E(I)	-0.24	0.07	-0.37	-0.10		
SDDp:Fnua	G(Ia)	-0.06	0.07	-0.19	0.08		
SDDp:Fnua	P(I)	-0.16	0.03	-0.23	-0.10		
SDDp:Fr	E(I)	-0.05	0.07	-0.19	0.08		
SDDp:Fr	G(Ia)	-0.12	0.07	-0.27	0.02		
SDDp:Fr	P(I)	-0.08	0.03	-0.14	-0.01		
SDDp:Fnt	E(I)	-0.18	0.07	-0.31	-0.05		
SDDp:Fnt	G(Ia)	-0.15	0.08	-0.30	0.00		
SDDp:Fnt	P(I)	-0.17	0.03	-0.23	-0.10		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
SDDp:Sarea	E(I)	0.04	0.07	-0.09	0.18	
SDDp:Sarea	G(Ia)	-0.15	0.07	-0.30	-0.00	
SDDp:Sarea	P(I)	-0.03	0.03	-0.09	0.04	
SDDp:Fd	E(I)	0.16	0.08	-0.00	0.32	
SDDp:Fd	G(Ia)	0.06	0.18	-0.29	0.40	
SDDp:Fd	P(I)	0.13	0.05	0.04	0.22	
SDDp:Fc	E(I)	0.32	0.09	0.15	0.49	
SDDp:Fc	G(Ia)	-0.20	0.13	-0.46	0.05	
SDDp:Fc	P(I)	0.13	0.04	0.05	0.21	
SDDp:Fu	E(I)	0.22	0.09	0.04	0.40	
SDDp:Fu	G(Ia)	-0.13	0.13	-0.37	0.12	
SDDp:Fu	P(I)	0.09	0.04	0.01	0.18	
SDDp:Colour	E(I)	-0.15	0.07	-0.29	-0.02	
SDDp:Colour	G(Ia)	0.52	0.08	0.37	0.66	
SDDp:Colour	P(I)	0.10	0.03	0.04	0.17	
SDDp:Fly	E(I)	-0.15	0.06	-0.27	-0.02	
SDDp:Fly	G(Ia)	0.38	0.12	0.15	0.61	
SDDp:Fly	P(I)	-0.00	0.03	-0.06	0.06	
SDDp:Flcrot	E(I)	0.03	0.07	-0.10	0.16	
SDDp:Flcrot	G(Ia)	0.05	0.08	-0.11	0.21	
SDDp:Flcrot	P(I)	0.03	0.03	-0.03	0.10	
SDDp:Bactst	E(I)	-0.05	0.06	-0.17	0.08	
SDDp:Bactst	G(Ia)	0.23	0.12	-0.01	0.47	
SDDp:Bactst	P(I)	0.02	0.03	-0.04	0.09	
SDDp:MycD	E(I)	0.02	0.06	-0.10	0.13	
SDDp:MycD	G(Ia)	-0.02	0.18	-0.36	0.33	
SDDp:MycD	P(I)	0.01	0.03	-0.06	0.07	
SDDp:Bcts	E(I)	-0.46	0.18	-0.82	-0.10	
SDDp:Bcts	G(Ia)	0.85	0.03	0.79	0.91	
SDDp:Bcts	P(I)	0.44	0.02	0.39	0.49	
SDDp:Bctb	E(I)	-0.52	0.17	-0.85	-0.19	
SDDp:Bctb	G(Ia)	0.85	0.03	0.79	0.91	
SDDp:Bctb	P(I)	0.41	0.02	0.37	0.46	
SDDp:Weanwt	E(I)	0.07	0.07	-0.06	0.21	
SDDp:Weanwt	G(Ia)	-0.44	0.08	-0.59	-0.29	
SDDp:Weanwt	P(I)	-0.12	0.03	-0.18	-0.05	
SDDp:NLB	E(I)	-0.09	0.07	-0.22	0.04	
SDDp:NLB	G(Ia)	0.38	0.08	0.22	0.54	
SDDp:NLB	P(I)	0.08	0.03	0.01	0.14	
SDDp:NLW	E(I)	-0.14	0.07	-0.27	-0.00	
SDDp:NLW	G(Ia)	0.42	0.08	0.27	0.57	
SDDp:NLW	P(I)	0.07	0.03	0.00	0.13	
SDDp:Fnpua	E(I)	-0.02	0.06	-0.14	0.11	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
SDDp:Fnpua	G(Ia)	-0.11	0.09	-0.28	0.05		
SDDp:Fnpua	P(I)	-0.05	0.03	-0.11	0.02		
SDDp:Fnsua	E(I)	-0.24	0.07	-0.38	-0.10		
SDDp:Fnsua	G(Ia)	-0.05	0.07	-0.19	0.09		
SDDp:Fnsua	P(I)	-0.16	0.03	-0.23	-0.10		
SDDp:Fnpt	E(I)	0.02	0.07	-0.11	0.15		
SDDp:Fnpt	G(Ia)	-0.17	0.08	-0.32	-0.02		
SDDp:Fnpt	P(I)	-0.05	0.03	-0.11	0.02		
SDDp:Fnst	E(I)	-0.19	0.07	-0.32	-0.06		
SDDp:Fnst	G(Ia)	-0.14	0.08	-0.29	0.01		
SDDp:Fnst	P(I)	-0.17	0.03	-0.23	-0.10		
SDDs:Stal	E(I)	-0.19	0.08	-0.34	-0.04		
SDDs:Stal	G(Ia)	0.10	0.06	-0.02	0.23		
SDDs:Stal	P(I)	-0.06	0.03	-0.12	0.01		
SDDs:Diam	E(I)	0.14	0.08	-0.01	0.29		
SDDs:Diam	G(Ia)	0.61	0.05	0.51	0.71		
SDDs:Diam	P(I)	0.36	0.03	0.30	0.42		
SDDs:Bwt	E(I)	-0.11	0.07	-0.24	0.02		
SDDs:Bwt	G(Ia)	0.19	0.08	0.03	0.36		
SDDs:Bwt	P(I)	-0.01	0.03	-0.07	0.06		
SDDs:WrN	E(I)	0.19	0.07	0.04	0.33		
SDDs:WrN	G(Ia)	0.08	0.06	-0.04	0.19		
SDDs:WrN	P(I)	0.14	0.03	0.08	0.20		
SDDs:WrB	E(I)	0.30	0.07	0.17	0.44		
SDDs:WrB	G(Ia)	-0.07	0.07	-0.20	0.07		
SDDs:WrB	P(I)	0.15	0.03	0.09	0.21		
SDDs:WrT	E(I)	0.28	0.07	0.14	0.43		
SDDs:WrT	G(Ia)	0.01	0.06	-0.10	0.12		
SDDs:WrT	P(I)	0.16	0.03	0.10	0.22		
SDDs:Face	E(I)	-0.37	0.08	-0.53	-0.22		
SDDs:Face	G(Ia)	0.28	0.04	0.20	0.37		
SDDs:Face	P(I)	-0.02	0.03	-0.07	0.03		
SDDs:Gfw	E(I)	-0.05	0.07	-0.19	0.08		
SDDs:Gfw	G(Ia)	0.40	0.06	0.28	0.53		
SDDs:Gfw	P(I)	0.13	0.03	0.07	0.20		
SDDs:Yld	E(I)	-0.14	0.07	-0.28	-0.01		
SDDs:Yld	G(Ia)	-0.22	0.07	-0.36	-0.08		
SDDs:Yld	P(I)	-0.17	0.03	-0.24	-0.11		
SDDs:Cww	E(I)	-0.12	0.07	-0.26	0.02		
SDDs:Cww	G(Ia)	0.30	0.06	0.18	0.43		
SDDs:Cww	P(I)	0.06	0.03	-0.00	0.12		
SDDs:Staladj	E(I)	-0.20	0.08	-0.35	-0.05		
SDDs:Staladj	G(Ia)	0.11	0.06	-0.02	0.23		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
SDDs:Staladj	P(I)	-0.06	0.03	-0.13	0.00	
SDDs:Gfwadj	E(I)	-0.05	0.07	-0.19	0.09	
SDDs:Gfwadj	G(Ia)	0.41	0.07	0.28	0.54	
SDDs:Gfwadj	P(I)	0.14	0.03	0.07	0.20	
SDDs:Cwwadj	E(I)	-0.12	0.07	-0.26	0.02	
SDDs:Cwwadj	G(Ia)	0.32	0.07	0.19	0.46	
SDDs:Cwwadj	P(I)	0.06	0.03	-0.00	0.13	
SDDs:Crimp	E(I)	0.17	0.13	-0.09	0.42	
SDDs:Crimp	G(Ia)	-0.70	0.11	-0.92	-0.49	
SDDs:Crimp	P(I)	-0.24	0.04	-0.32	-0.15	
SDDs:Crwvl	E(I)	-0.13	0.12	-0.37	0.11	
SDDs:Crwvl	G(Ia)	0.70	0.11	0.47	0.92	
SDDs:Crwvl	P(I)	0.24	0.04	0.15	0.32	
SDDs:Crst	E(I)	-0.01	0.08	-0.16	0.15	
SDDs:Crst	G(Ia)	-0.50	0.12	-0.74	-0.25	
SDDs:Crst	P(I)	-0.21	0.04	-0.29	-0.12	
SDDs:Crstadj	E(I)	-0.00	0.01	-0.02	0.02	
SDDs:Crstadj	G(Ia)	-0.50	0.12	-0.74	-0.25	
SDDs:Crstadj	P(I)	-0.20	0.04	-0.29	-0.12	
SDDs:Crwvt	E(I)	-0.02	0.12	-0.26	0.21	
SDDs:Crwvt	G(Ia)	0.55	0.13	0.29	0.80	
SDDs:Crwvt	P(I)	0.20	0.04	0.12	0.29	
SDDs:Dp	E(I)	0.45	0.07	0.32	0.59	
SDDs:Dp	G(Ia)	0.34	0.05	0.24	0.45	
SDDs:Dp	P(I)	0.40	0.03	0.34	0.46	
SDDs:Ds	E(I)	0.22	0.07	0.09	0.34	
SDDs:Ds	G(Ia)	0.60	0.06	0.48	0.71	
SDDs:Ds	P(I)	0.37	0.03	0.31	0.43	
SDDs:Dps	E(I)	0.23	0.06	0.11	0.36	
SDDs:Dps	G(Ia)	0.63	0.06	0.51	0.75	
SDDs:Dps	P(I)	0.39	0.03	0.33	0.45	
SDDs:DpovDs	E(I)	0.51	0.13	0.27	0.76	
SDDs:DpovDs	G(Ia)	-0.04	0.05	-0.13	0.06	
SDDs:DpovDs	P(I)	0.15	0.03	0.09	0.21	
SDDs:CVDp	E(I)	0.17	0.06	0.04	0.29	
SDDs:CVDp	G(Ia)	0.34	0.07	0.20	0.48	
SDDs:CVDp	P(I)	0.23	0.03	0.17	0.29	
SDDs:CVDs	E(I)	0.80	0.03	0.73	0.86	
SDDs:CVDs	G(Ia)	0.81	0.04	0.74	0.89	
SDDs:CVDs	P(I)	0.80	0.02	0.76	0.83	
SDDs:MaxDp	E(I)	0.35	0.07	0.22	0.49	
SDDs:MaxDp	G(Ia)	0.34	0.06	0.23	0.45	
SDDs:MaxDp	P(I)	0.35	0.03	0.29	0.41	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
SDDs:MinDp	E(I)	0.16	0.06	0.05	0.27	
SDDs:MinDp	G(Ia)	0.18	0.18	-0.18	0.54	
SDDs:MinDp	P(I)	0.15	0.03	0.08	0.21	
SDDs:MaxDs	E(I)	0.56	0.04	0.47	0.64	
SDDs:MaxDs	G(Ia)	0.92	0.06	0.80	1.05	
SDDs:MaxDs	P(I)	0.65	0.02	0.60	0.69	
SDDs:MinDs	E(I)	-0.03	0.06	-0.14	0.08	
SDDs:MinDs	G(Ia)	-0.46	0.20	-0.86	-0.06	
SDDs:MinDs	P(I)	-0.10	0.03	-0.16	-0.03	
SDDs:SDDp	E(I)	0.32	0.07	0.18	0.45	
SDDs:SDDp	G(Ia)	0.37	0.06	0.26	0.48	
SDDs:SDDp	P(I)	0.34	0.03	0.28	0.40	
SDDs:SDDs	E(I)	1.00	0.00	1.00	1.00	
SDDs:SDDs	G(Ia)	1.00	0.00	1.00	1.00	
SDDs:SDDs	P(I)	1.00	0.00	1.00	1.00	
SDDs:SDD	E(I)	0.99	0.01	0.97	1.00	
SDDs:SDD	G(Ia)	0.99	0.01	0.97	1.00	
SDDs:SDD	P(I)	0.99	0.00	0.98	0.99	
SDDs:CVD	E(I)	0.80	0.03	0.73	0.86	
SDDs:CVD	G(Ia)	0.78	0.04	0.70	0.86	
SDDs:CVD	P(I)	0.79	0.02	0.75	0.82	
SDDs:Gt30Dp	E(I)	0.28	0.07	0.14	0.41	
SDDs:Gt30Dp	G(Ia)	0.42	0.06	0.31	0.53	
SDDs:Gt30Dp	P(I)	0.34	0.03	0.28	0.40	
SDDs:Gt30Ds	E(I)	0.54	0.05	0.45	0.63	
SDDs:Gt30Ds	G(Ia)	0.94	0.05	0.84	1.04	
SDDs:Gt30Ds	P(I)	0.67	0.02	0.63	0.72	
SDDs:Gt30D	E(I)	0.53	0.05	0.45	0.62	
SDDs:Gt30D	G(Ia)	0.95	0.05	0.85	1.05	
SDDs:Gt30D	P(I)	0.68	0.02	0.63	0.72	
SDDs:Fnua	E(I)	-0.11	0.06	-0.24	0.02	
SDDs:Fnua	G(Ia)	-0.37	0.07	-0.52	-0.23	
SDDs:Fnua	P(I)	-0.20	0.03	-0.27	-0.14	
SDDs:Fr	E(I)	0.02	0.07	-0.11	0.15	
SDDs:Fr	G(Ia)	-0.27	0.08	-0.43	-0.11	
SDDs:Fr	P(I)	-0.08	0.03	-0.14	-0.01	
SDDs:Fnt	E(I)	-0.13	0.06	-0.26	-0.01	
SDDs:Fnt	G(Ia)	-0.35	0.08	-0.52	-0.19	
SDDs:Fnt	P(I)	-0.21	0.03	-0.27	-0.14	
SDDs:Sarea	E(I)	-0.10	0.07	-0.22	0.03	
SDDs:Sarea	G(Ia)	0.19	0.08	0.03	0.35	
SDDs:Sarea	P(I)	0.00	0.03	-0.06	0.07	
SDDs:Fd	E(I)	0.04	0.10	-0.15	0.23	

Table 24 – Continued from previous page

Table 24 – Continued from previous page								
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi			
SDDs:Fd	G(Ia)	0.27	0.15	-0.02	0.56			
SDDs:Fd	P(I)	0.11	0.05	0.02	0.20			
SDDs:Fc	E(I)	0.48	0.10	0.29	0.68			
SDDs:Fc	G(Ia)	-0.01	0.16	-0.31	0.30			
SDDs:Fc	P(I)	0.26	0.04	0.18	0.34			
SDDs:Fu	E(I)	0.42	0.10	0.22	0.62			
SDDs:Fu	G(Ia)	0.03	0.09	-0.13	0.20			
SDDs:Fu	P(I)	0.24	0.04	0.16	0.32			
SDDs:Colour	E(I)	-0.05	0.06	-0.18	0.08			
SDDs:Colour	G(Ia)	0.51	0.08	0.35	0.67			
SDDs:Colour	P(I)	0.14	0.03	0.08	0.20			
SDDs:Fly	E(I)	-0.05	0.06	-0.17	0.06			
SDDs:Fly	G(Ia)	0.46	0.12	0.22	0.71			
SDDs:Fly	P(I)	0.07	0.03	0.00	0.13			
SDDs:Flcrot	E(I)	0.00	0.06	-0.12	0.12			
SDDs:Flcrot	G(Ia)	0.06	0.09	-0.11	0.24			
SDDs:Flcrot	P(I)	0.02	0.03	-0.04	0.09			
SDDs:Bactst	E(I)	0.05	0.06	-0.07	0.16			
SDDs:Bactst	G(Ia)	-0.16	0.13	-0.42	0.10			
SDDs:Bactst	P(I)	0.00	0.04	-0.07	0.07			
SDDs:MycD	E(I)	0.03	0.06	-0.08	0.14			
SDDs:MycD	G(Ia)	-0.03	0.20	-0.43	0.36			
SDDs:MycD	P(I)	0.02	0.03	-0.04	0.08			
SDDs:Bcts	E(I)	-0.29	0.14	-0.57	-0.01			
SDDs:Bcts	G(Ia)	0.30	0.04	0.23	0.38			
SDDs:Bcts	P(I)	0.10	0.03	0.05	0.16			
SDDs:Bctb	E(I)	-0.32	0.13	-0.58	-0.06			
SDDs:Bctb	G(Ia)	0.31	0.04	0.24	0.38			
SDDs:Bctb	P(I)	0.09	0.03	0.04	0.14			
SDDs:Weanwt	E(I)	-0.07	0.06	-0.20	0.05			
SDDs:Weanwt	G(Ia)	-0.01	0.08	-0.17	0.14			
SDDs:Weanwt	P(I)	-0.05	0.03	-0.12	0.01			
SDDs:NLB	E(I)	0.07	0.06	-0.05	0.19			
SDDs:NLB	G(Ia)	0.06	0.09	-0.10	0.23			
SDDs:NLB	P(I)	0.07	0.03	0.00	0.13			
SDDs:NLW	E(I)	0.04	0.06	-0.08	0.16			
SDDs:NLW	G(Ia)	0.22	0.08	0.06	0.38			
SDDs:NLW	P(I)	0.10	0.03	0.03	0.16			
SDDs:Fnpua	E(I)	-0.10	0.06	-0.21	0.02			
SDDs:Fnpua	G(Ia)	-0.01	0.09	-0.18	0.16			
SDDs:Fnpua	P(I)	-0.07	0.03	-0.13	-0.00			
SDDs:Fnsua	E(I)	-0.11	0.07	-0.23	0.02			
SDDs:Fnsua	G(Ia)	-0.38	0.07	-0.53	-0.23			

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
SDDs:Fnsua	P(I)	-0.21	0.03	-0.27	-0.14	
SDDs:Fnpt	E(I)	-0.11	0.06	-0.23	0.01	
SDDs:Fnpt	G(Ia)	0.04	0.09	-0.13	0.21	
SDDs:Fnpt	P(I)	-0.06	0.03	-0.12	0.00	
SDDs:Fnst	E(I)	-0.13	0.06	-0.25	-0.01	
SDDs:Fnst	G(Ia)	-0.37	0.08	-0.53	-0.21	
SDDs:Fnst	P(I)	-0.21	0.03	-0.27	-0.14	
SDD:Stal	E(I)	-0.18	0.08	-0.33	-0.03	
SDD:Stal	G(Ia)	0.08	0.06	-0.05	0.20	
SDD:Stal	P(I)	-0.06	0.03	-0.13	0.00	
SDD:Diam	E(I)	0.17	0.08	0.03	0.32	
SDD:Diam	G(Ia)	0.61	0.05	0.51	0.71	
SDD:Diam	P(I)	0.38	0.03	0.33	0.44	
SDD:Bwt	E(I)	-0.10	0.07	-0.23	0.03	
SDD:Bwt	G(Ia)	0.16	0.08	-0.00	0.32	
SDD:Bwt	P(I)	-0.01	0.03	-0.07	0.06	
SDD:WrN	E(I)	0.23	0.07	0.09	0.38	
SDD:WrN	G(Ia)	0.05	0.06	-0.06	0.16	
SDD:WrN	P(I)	0.15	0.03	0.08	0.21	
SDD:WrB	E(I)	0.34	0.07	0.21	0.48	
SDD:WrB	G(Ia)	-0.09	0.07	-0.22	0.05	
SDD:WrB	P(I)	0.16	0.03	0.10	0.23	
SDD:WrT	E(I)	0.33	0.07	0.19	0.48	
SDD:WrT	G(Ia)	-0.02	0.06	-0.14	0.11	
SDD:WrT	P(I)	0.17	0.03	0.11	0.23	
SDD:Face	E(I)	-0.46	0.08	-0.62	-0.30	
SDD:Face	G(Ia)	0.37	0.04	0.28	0.45	
SDD:Face	P(I)	-0.00	0.03	-0.06	0.05	
SDD:Gfw	E(I)	-0.04	0.07	-0.17	0.10	
SDD:Gfw	G(Ia)	0.38	0.06	0.25	0.50	
SDD:Gfw	P(I)	0.14	0.03	0.08	0.20	
SDD:Yld	E(I)	-0.14	0.07	-0.27	-0.00	
SDD:Yld	G(Ia)	-0.25	0.07	-0.38	-0.12	
SDD:Yld	P(I)	-0.18	0.03	-0.25	-0.12	
SDD:Cww	E(I)	-0.11	0.07	-0.25	0.04	
SDD:Cww	G(Ia)	0.27	0.06	0.14	0.39	
SDD:Cww	P(I)	0.06	0.03	-0.01	0.12	
SDD:Staladj	E(I)	-0.19	0.08	-0.34	-0.04	
SDD:Staladj	G(Ia)	0.08	0.06	-0.04	0.20	
SDD:Staladj	P(I)	-0.07	0.03	-0.13	-0.00	
SDD:Gfwadj	E(I)	-0.03	0.07	-0.17	0.11	
SDD:Gfwadj	G(Ia)	0.39	0.06	0.26	0.51	
SDD:Gfwadj	P(I)	0.14	0.03	0.08	0.20	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
SDD:Cwwadj	E(I)	-0.10	0.07	-0.25	0.04		
SDD:Cwwadj	G(Ia)	0.29	0.07	0.16	0.42		
SDD:Cwwadj	P(I)	0.06	0.03	-0.00	0.13		
SDD:Crimp	E(I)	0.19	0.14	-0.08	0.45		
SDD:Crimp	G(Ia)	-0.70	0.11	-0.90	-0.49		
SDD:Crimp	P(I)	-0.24	0.04	-0.32	-0.15		
SDD:Crwvl	E(I)	-0.15	0.13	-0.40	0.10		
SDD:Crwvl	G(Ia)	0.69	0.11	0.47	0.90		
SDD:Crwvl	P(I)	0.24	0.04	0.15	0.32		
SDD:Crst	E(I)	0.04	0.13	-0.21	0.29		
SDD:Crst	G(Ia)	-0.56	0.12	-0.80	-0.33		
SDD:Crst	P(I)	-0.22	0.04	-0.30	-0.13		
SDD:Crstadj	E(I)	0.05	0.12	-0.20	0.29		
SDD:Crstadj	G(Ia)	-0.56	0.12	-0.80	-0.33		
SDD:Crstadj	P(I)	-0.21	0.04	-0.30	-0.13		
SDD:Crwvt	E(I)	-0.07	0.12	-0.30	0.17		
SDD:Crwvt	G(Ia)	0.61	0.12	0.37	0.86		
SDD:Crwvt	P(I)	0.21	0.04	0.13	0.30		
SDD:Dp	E(I)	0.50	0.06	0.38	0.63		
SDD:Dp	G(Ia)	0.47	0.05	0.38	0.57		
SDD:Dp	P(I)	0.49	0.03	0.43	0.54		
SDD:Ds	E(I)	0.25	0.07	0.12	0.38		
SDD:Ds	G(Ia)	0.54	0.06	0.42	0.65		
SDD:Ds	P(I)	0.37	0.03	0.31	0.43		
SDD:Dps	E(I)	0.27	0.06	0.15	0.40		
SDD:Dps	G(Ia)	0.59	0.06	0.47	0.70		
SDD:Dps	P(I)	0.40	0.03	0.34	0.46		
SDD:DpovDs	E(I)	0.54	0.12	0.30	0.78		
SDD:DpovDs	G(Ia)	0.10	0.05	0.01	0.19		
SDD:DpovDs	P(I)	0.24	0.03	0.17	0.30		
SDD:CVDp	E(I)	0.28	0.06	0.16	0.40		
SDD:CVDp	G(Ia)	0.46	0.07	0.33	0.59		
SDD:CVDp	P(I)	0.35	0.03	0.29	0.41		
SDD:CVDs	E(I)	0.76	0.03	0.70	0.83		
SDD:CVDs	G(Ia)	0.85	0.04	0.77	0.93		
SDD:CVDs	P(I)	0.78	0.02	0.75	0.82		
SDD:MaxDp	E(I)	0.44	0.06	0.32	0.57		
SDD:MaxDp	G(Ia)	0.49	0.05	0.39	0.58		
SDD:MaxDp	P(I)	0.46	0.03	0.41	0.52		
SDD:MinDp	E(I)	0.12	0.06	0.01	0.23		
SDD:MinDp	G(Ia)	0.24	0.19	-0.13	0.61		
SDD:MinDp	P(I)	0.12	0.03	0.06	0.19		
SDD:MaxDs	E(I)	0.56	0.04	0.48	0.65		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
SDD:MaxDs	G(Ia)	0.93	0.06	0.81	1.05		
SDD:MaxDs	P(I)	0.65	0.02	0.61	0.70		
SDD:MinDs	$\mid E(I) \mid$	-0.01	0.06	-0.11	0.10		
SDD:MinDs	G(Ia)	-0.50	0.21	-0.91	-0.09		
SDD:MinDs	P(I)	-0.08	0.03	-0.15	-0.02		
SDD:SDDp	$\mid E(I) \mid$	0.45	0.06	0.32	0.57		
SDD:SDDp	G(Ia)	0.52	0.05	0.42	0.61		
SDD:SDDp	P(I)	0.48	0.03	0.42	0.53		
SDD:SDDs	$\mid E(I) \mid$	0.99	0.01	0.97	1.00		
SDD:SDDs	G(Ia)	0.99	0.01	0.97	1.00		
SDD:SDDs	P(I)	0.99	0.00	0.98	0.99		
SDD:SDD	$\mid E(I) \mid$	1.00	0.00	1.00	1.00		
SDD:SDD	G(Ia)	1.00	0.00	1.00	1.00		
SDD:SDD	P(I)	1.00	0.00	1.00	1.00		
SDD:CVD	E(I)	0.78	0.03	0.72	0.85		
SDD:CVD	G(Ia)	0.83	0.04	0.76	0.91		
SDD:CVD	P(I)	0.80	0.02	0.76	0.83		
SDD:Gt30Dp	E(I)	0.36	0.07	0.23	0.49		
SDD:Gt30Dp	G(Ia)	0.55	0.05	0.45	0.65		
SDD:Gt30Dp	P(I)	0.44	0.03	0.39	0.50		
SDD:Gt30Ds	E(I)	0.55	0.05	0.46	0.64		
SDD:Gt30Ds	G(Ia)	0.91	0.05	0.81	1.01		
SDD:Gt30Ds	P(I)	0.67	0.02	0.63	0.71		
SDD:Gt30D	E(I)	0.56	0.04	0.48	0.65		
SDD:Gt30D	G(Ia)	0.96	0.05	0.87	1.06		
SDD:Gt30D	P(I)	0.70	0.02	0.66	0.74		
SDD:Fnua	$\mid E(I) \mid$	-0.15	0.07	-0.28	-0.02		
SDD:Fnua	G(Ia)	-0.36	0.07	-0.51	-0.22		
SDD:Fnua	P(I)	-0.23	0.03	-0.29	-0.16		
SDD:Fr	$\mid E(I) \mid$	-0.01	0.06	-0.14	0.11		
SDD:Fr	G(Ia)	-0.28	0.08	-0.44	-0.12		
SDD:Fr	P(I)	-0.11	0.03	-0.17	-0.04		
SDD:Fnt	E(I)	-0.16	0.06	-0.28	-0.04		
SDD:Fnt	G(Ia)	-0.36	0.08	-0.52	-0.20		
SDD:Fnt	P(I)	-0.23	0.03	-0.29	-0.16		
SDD:Sarea	E(I)	-0.08	0.07	-0.21	0.05		
SDD:Sarea	G(Ia)	0.15	0.08	-0.01	0.31		
SDD:Sarea	P(I)	0.00	0.03	-0.07	0.07		
SDD:Fd	E(I)	0.06	0.10	-0.13	0.24		
SDD:Fd	G(Ia)	0.24	0.15	-0.05	0.53		
SDD:Fd	P(I)	0.11	0.05	0.02	0.20		
SDD:Fc	E(I)	0.52	0.10	0.33	0.71		
SDD:Fc	G(Ia)	-0.03	0.10	-0.23	0.18		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
SDD:Fc	P(I)	0.27	0.04	0.19	0.35
SDD:Fu	E(I)	0.44	0.10	0.25	0.64
SDD:Fu	G(Ia)	0.03	0.08	-0.14	0.19
SDD:Fu	P(I)	0.25	0.04	0.17	0.33
SDD:Colour	E(I)	-0.07	0.07	-0.20	0.06
SDD:Colour	G(Ia)	0.56	0.08	0.41	0.72
SDD:Colour	P(I)	0.15	0.03	0.09	0.22
SDD:Fly	E(I)	-0.07	0.06	-0.19	0.04
SDD:Fly	G(Ia)	0.49	0.12	0.25	0.73
SDD:Fly	P(I)	0.06	0.03	-0.00	0.13
SDD:Flcrot	E(I)	0.01	0.06	-0.11	0.13
SDD:Flcrot	G(Ia)	0.05	0.09	-0.12	0.23
SDD:Flcrot	P(I)	0.02	0.03	-0.04	0.09
SDD:Bactst	E(I)	0.04	0.06	-0.07	0.16
SDD:Bactst	G(Ia)	-0.12	0.13	-0.37	0.13
SDD:Bactst	P(I)	0.00	0.03	-0.06	0.07
SDD:MycD	E(I)	0.03	0.06	-0.08	0.14
SDD:MycD	G(Ia)	-0.03	0.20	-0.42	0.35
SDD:MycD	P(I)	0.02	0.03	-0.04	0.09
SDD:Bcts	E(I)	-0.34	0.15	-0.64	-0.05
SDD:Bcts	G(Ia)	0.43	0.04	0.35	0.50
SDD:Bcts	P(I)	0.17	0.03	0.11	0.22
SDD:Bctb	E(I)	-0.39	0.14	-0.66	-0.11
SDD:Bctb	G(Ia)	0.43	0.04	0.36	0.50
SDD:Bctb	P(I)	0.15	0.03	0.10	0.20
SDD:Weanwt	E(I)	-0.06	0.06	-0.19	0.06
SDD:Weanwt	G(Ia)	-0.08	0.08	-0.24	0.08
SDD:Weanwt	P(I)	-0.07	0.03	-0.13	-0.00
SDD:NLB	E(I)	0.06	0.06	-0.07	0.18
SDD:NLB	G(Ia)	0.14	0.08	-0.03	0.30
SDD:NLB	P(I)	0.08	0.03	0.02	0.15
SDD:NLW	E(I)	0.02	0.06	-0.10	0.14
SDD:NLW	G(Ia)	0.28	0.08	0.12	0.44
SDD:NLW	P(I)	0.11	0.03	0.04	0.17
SDD:Fnpua	E(I)	-0.06	0.06	-0.18	0.06
SDD:Fnpua	G(Ia)	-0.03	0.09	-0.20	0.15
SDD:Fnpua	P(I)	-0.05	0.03	-0.12	0.01
SDD:Fnsua	E(I)	-0.15	0.07	-0.27	-0.02
SDD:Fnsua	G(Ia)	-0.37	0.07	-0.51	-0.22
SDD:Fnsua	P(I)	-0.23	0.03	-0.29	-0.16
SDD:Fnpt	E(I)	-0.07	0.06	-0.19	0.05
SDD:Fnpt	G(Ia)	0.01	0.09	-0.16	0.18
SDD:Fnpt	P(I)	-0.04	0.03	-0.11	0.02

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
SDD:Fnst	E(I)	-0.16	0.06	-0.28	-0.04
SDD:Fnst	G(Ia)	-0.37	0.08	-0.53	-0.21
SDD:Fnst	P(I)	-0.23	0.03	-0.29	-0.17
CVD:Stal	E(I)	-0.17	0.07	-0.30	-0.03
CVD:Stal	G(Ia)	-0.11	0.07	-0.25	0.04
CVD:Stal	P(I)	-0.14	0.03	-0.21	-0.08
CVD:Diam	E(I)	-0.05	0.08	-0.20	0.10
CVD:Diam	G(Ia)	0.15	0.07	0.02	0.29
CVD:Diam	P(I)	0.04	0.03	-0.03	0.10
CVD:Bwt	E(I)	-0.17	0.06	-0.29	-0.05
CVD:Bwt	G(Ia)	-0.03	0.09	-0.21	0.15
CVD:Bwt	P(I)	-0.13	0.03	-0.19	-0.06
CVD:WrN	E(I)	0.25	0.07	0.11	0.38
CVD:WrN	G(Ia)	-0.25	0.07	-0.39	-0.11
CVD:WrN	P(I)	0.05	0.03	-0.02	0.11
CVD:WrB	E(I)	0.28	0.07	0.15	0.41
CVD:WrB	G(Ia)	-0.38	0.08	-0.54	-0.22
CVD:WrB	P(I)	0.04	0.03	-0.02	0.11
CVD:WrT	E(I)	0.30	0.07	0.16	0.44
CVD:WrT	G(Ia)	-0.33	0.07	-0.47	-0.18
CVD:WrT	P(I)	0.05	0.03	-0.01	0.11
CVD:Face	E(I)	-0.32	0.07	-0.46	-0.17
CVD:Face	G(Ia)	0.56	0.05	0.46	0.66
CVD:Face	P(I)	0.10	0.03	0.05	0.15
CVD:Gfw	E(I)	-0.02	0.06	-0.14	0.11
CVD:Gfw	G(Ia)	0.04	0.08	-0.11	0.19
CVD:Gfw	P(I)	0.00	0.03	-0.06	0.07
CVD:Yld	E(I)	-0.07	0.06	-0.19	0.05
CVD:Yld	G(Ia)	-0.32	0.08	-0.48	-0.16
CVD:Yld	P(I)	-0.15	0.03	-0.22	-0.09
CVD:Cww	E(I)	-0.05	0.07	-0.18	0.08
CVD:Cww	G(Ia)	-0.06	0.07	-0.21	0.08
CVD:Cww	P(I)	-0.06	0.03	-0.12	0.01
CVD:Staladj	E(I)	-0.18	0.07	-0.32	-0.04
CVD:Staladj	G(Ia)	-0.10	0.07	-0.24	0.04
CVD:Staladj	P(I)	-0.14	0.03	-0.21	-0.08
CVD:Gfwadj	E(I)	-0.01	0.06	-0.14	0.11
CVD:Gfwadj	G(Ia)	0.02	0.08	-0.13	0.18
CVD:Gfwadj	P(I)	0.00	0.03	-0.06	0.07
CVD:Cwwadj	E(I)	-0.04	0.07	-0.17	0.09
CVD:Cwwadj	G(Ia)	-0.08	0.08	-0.24	0.07
CVD:Cwwadj	P(I)	-0.06	0.03	-0.12	0.01
CVD:Crimp	E(I)	0.13	0.12	-0.09	0.36

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
CVD:Crimp	G(Ia)	-0.65	0.14	-0.91	-0.38
CVD:Crimp	P(I)	-0.17	0.04	-0.26	-0.09
CVD:Crwvl	E(I)	-0.11	0.11	-0.33	0.10
CVD:Crwvl	G(Ia)	0.63	0.14	0.36	0.90
CVD:Crwvl	P(I)	0.17	0.04	0.08	0.25
CVD:Crst	E(I)	0.05	0.11	-0.16	0.26
CVD:Crst	G(Ia)	-0.80	0.15	-1.09	-0.50
CVD:Crst	P(I)	-0.24	0.04	-0.33	-0.16
CVD:Crstadj	E(I)	0.05	0.11	-0.16	0.26
CVD:Crstadj	G(Ia)	-0.80	0.15	-1.10	-0.51
CVD:Crstadj	P(I)	-0.24	0.04	-0.33	-0.16
CVD:Crwvt	E(I)	-0.06	0.10	-0.26	0.15
CVD:Crwvt	G(Ia)	0.81	0.16	0.50	1.11
CVD:Crwvt	P(I)	0.23	0.04	0.15	0.32
CVD:Dp	E(I)	-0.02	0.08	-0.17	0.13
CVD:Dp	G(Ia)	0.60	0.07	0.46	0.73
CVD:Dp	P(I)	0.23	0.03	0.16	0.29
CVD:Ds	E(I)	-0.38	0.06	-0.50	-0.26
CVD:Ds	G(Ia)	-0.01	0.07	-0.14	0.12
CVD:Ds	P(I)	-0.25	0.03	-0.31	-0.18
CVD:Dps	E(I)	-0.36	0.06	-0.48	-0.24
CVD:Dps	G(Ia)	0.05	0.09	-0.12	0.21
CVD:Dps	P(I)	-0.22	0.03	-0.28	-0.16
CVD:DpovDs	E(I)	0.47	0.10	0.28	0.66
CVD:DpovDs	G(Ia)	0.48	0.05	0.38	0.57
CVD:DpovDs	P(I)	0.41	0.03	0.35	0.46
CVD:CVDp	E(I)	0.31	0.06	0.20	0.42
CVD:CVDp	G(Ia)	0.54	0.08	0.39	0.69
CVD:CVDp	P(I)	0.38	0.03	0.32	0.44
CVD:CVDs	E(I)	0.99	0.01	0.98	1.00
CVD:CVDs	G(Ia)	0.99	0.01	0.97	1.01
CVD:CVDs	P(I)	0.99	0.00	0.98	1.00
CVD:MaxDp	E(I)	0.07	0.07	-0.06	0.21
CVD:MaxDp	G(Ia)	0.62	0.07	0.49	0.76
CVD:MaxDp	P(I)	0.29	0.03	0.22	0.35
CVD:MinDp	E(I)	-0.10	0.05	-0.20	0.00
CVD:MinDp	G(Ia)	0.22	0.24	-0.25	0.69
CVD:MinDp	P(I)	-0.05	0.03	-0.12	0.01
CVD:MaxDs	E(I)	0.28	0.05	0.18	0.38
CVD:MaxDs	G(Ia)	0.63	0.10	0.44	0.83
CVD:MaxDs	P(I)	0.37	0.03	0.31	0.43
CVD:MinDs	E(I)	-0.14	0.05	-0.24	-0.04
CVD:MinDs	G(Ia)	-0.58	0.23	-1.03	-0.14

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
CVD:MinDs	P(I)	-0.19	0.03	-0.25	-0.12		
CVD:SDDp	E(I)	0.21	0.07	0.09	0.34		
CVD:SDDp	G(Ia)	0.66	0.06	0.53	0.78		
CVD:SDDp	P(I)	0.38	0.03	0.32	0.44		
CVD:SDDs	E(I)	0.80	0.03	0.73	0.86		
CVD:SDDs	G(Ia)	0.78	0.04	0.70	0.86		
CVD:SDDs	P(I)	0.79	0.02	0.75	0.82		
CVD:SDD	E(I)	0.78	0.03	0.72	0.85		
CVD:SDD	G(Ia)	0.83	0.04	0.76	0.91		
CVD:SDD	P(I)	0.80	0.02	0.76	0.83		
CVD:CVD	E(I)	1.00	0.00	1.00	1.00		
CVD:CVD	G(Ia)	1.00	0.00	1.00	1.00		
CVD:CVD	P(I)	1.00	0.00	1.00	1.00		
CVD:Gt30Dp	E(I)	0.03	0.07	-0.10	0.16		
CVD:Gt30Dp	G(Ia)	0.69	0.07	0.55	0.83		
CVD:Gt30Dp	P(I)	0.28	0.03	0.22	0.34		
CVD:Gt30Ds	E(I)	0.15	0.06	0.04	0.27		
CVD:Gt30Ds	G(Ia)	0.58	0.09	0.40	0.75		
CVD:Gt30Ds	P(I)	0.28	0.03	0.22	0.34		
CVD:Gt30D	E(I)	0.14	0.06	0.02	0.25		
CVD:Gt30D	G(Ia)	0.72	0.09	0.56	0.89		
CVD:Gt30D	P(I)	0.31	0.03	0.25	0.38		
CVD:Fnua	E(I)	0.10	0.06	-0.02	0.22		
CVD:Fnua	G(Ia)	0.04	0.09	-0.13	0.22		
CVD:Fnua	P(I)	0.08	0.03	0.01	0.15		
CVD:Fr	E(I)	0.14	0.06	0.02	0.26		
CVD:Fr	G(Ia)	-0.29	0.10	-0.48	-0.10		
CVD:Fr	P(I)	0.01	0.03	-0.05	0.08		
CVD:Fnt	E(I)	0.03	0.06	-0.09	0.15		
CVD:Fnt	G(Ia)	0.02	0.10	-0.17	0.21		
CVD:Fnt	P(I)	0.03	0.03	-0.04	0.09		
CVD:Sarea	E(I)	-0.16	0.06	-0.27	-0.04		
CVD:Sarea	G(Ia)	-0.04	0.09	-0.22	0.14		
CVD:Sarea	P(I)	-0.12	0.03	-0.19	-0.06		
CVD:Fd	E(I)	-0.19	0.09	-0.35	-0.02		
CVD:Fd	G(Ia)	0.28	0.19	-0.09	0.65		
CVD:Fd	P(I)	-0.06	0.05	-0.15	0.03		
CVD:Fc	E(I)	0.44	0.09	0.26	0.63		
CVD:Fc	G(Ia)	-0.47	0.13	-0.72	-0.22		
CVD:Fc	P(I)	0.09	0.04	0.01	0.18		
CVD:Fu	E(I)	0.35	0.10	0.16	0.54		
CVD:Fu	G(Ia)	-0.39	0.12	-0.63	-0.16		
CVD:Fu	P(I)	0.06	0.04	-0.03	0.14		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
CVD:Colour	E(I)	-0.11	0.06	-0.23	0.01		
CVD:Colour	G(Ia)	0.74	0.10	0.55	0.93		
CVD:Colour	P(I)	0.14	0.03	0.08	0.20		
CVD:Fly	E(I)	0.04	0.05	-0.07	0.14		
CVD:Fly	G(Ia)	0.51	0.14	0.23	0.78		
CVD:Fly	P(I)	0.13	0.03	0.07	0.19		
CVD:Flcrot	E(I)	0.09	0.06	-0.02	0.20		
CVD:Flcrot	G(Ia)	0.14	0.10	-0.06	0.34		
CVD:Flcrot	P(I)	0.10	0.03	0.04	0.17		
CVD:Bactst	E(I)	0.05	0.05	-0.05	0.16		
CVD:Bactst	G(Ia)	-0.16	0.15	-0.46	0.14		
CVD:Bactst	P(I)	0.01	0.03	-0.05	0.08		
CVD:MycD	E(I)	0.06	0.05	-0.04	0.16		
CVD:MycD	G(Ia)	-0.16	0.23	-0.62	0.30		
CVD:MycD	P(I)	0.03	0.03	-0.04	0.09		
CVD:Bcts	E(I)	-0.34	0.14	-0.61	-0.06		
CVD:Bcts	G(Ia)	0.60	0.05	0.51	0.69		
CVD:Bcts	P(I)	0.21	0.03	0.16	0.27		
CVD:Bctb	E(I)	-0.42	0.13	-0.68	-0.17		
CVD:Bctb	G(Ia)	0.61	0.05	0.52	0.70		
CVD:Bctb	P(I)	0.18	0.03	0.13	0.24		
CVD:Weanwt	E(I)	-0.03	0.06	-0.15	0.08		
CVD:Weanwt	G(Ia)	-0.16	0.10	-0.35	0.03		
CVD:Weanwt	P(I)	-0.07	0.03	-0.13	-0.00		
CVD:NLB	E(I)	-0.05	0.06	-0.17	0.06		
CVD:NLB	G(Ia)	0.26	0.10	0.07	0.46		
CVD:NLB	P(I)	0.04	0.03	-0.03	0.10		
CVD:NLW	E(I)	-0.09	0.06	-0.21	0.02		
CVD:NLW	G(Ia)	0.50	0.10	0.31	0.69		
CVD:NLW	P(I)	0.08	0.03	0.01	0.14		
CVD:Fnpua	E(I)	0.02	0.06	-0.09	0.13		
CVD:Fnpua	G(Ia)	0.29	0.11	0.08	0.51		
CVD:Fnpua	P(I)	0.09	0.03	0.02	0.15		
CVD:Fnsua	E(I)	0.10	0.06	-0.02	0.22		
CVD:Fnsua	G(Ia)	0.03	0.09	-0.15	0.20		
CVD:Fnsua	P(I)	0.08	0.03	0.01	0.14		
CVD:Fnpt	E(I)	-0.01	0.06	-0.13	0.10		
CVD:Fnpt	G(Ia)	0.24	0.10	0.05	0.43		
CVD:Fnpt	P(I)	0.06	0.03	-0.01	0.12		
CVD:Fnst	E(I)	0.03	0.06	-0.08	0.15		
CVD:Fnst	G(Ia)	0.00	0.09	-0.18	0.19		
CVD:Fnst	P(I)	0.02	0.03	-0.04	0.09		
Gt30Dp:Stal	E(I)	0.07	0.08	-0.09	0.23		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gt30Dp:Stal	G(Ia)	-0.21	0.06	-0.33	-0.10		
Gt30Dp:Stal	P(I)	-0.07	0.03	-0.13	-0.00		
Gt30Dp:Diam	E(I)	0.46	0.08	0.30	0.61		
Gt30Dp:Diam	G(Ia)	0.19	0.05	0.09	0.29		
Gt30Dp:Diam	P(I)	0.32	0.03	0.26	0.38		
Gt30Dp:Bwt	E(I)	0.06	0.07	-0.07	0.20		
Gt30Dp:Bwt	G(Ia)	-0.32	0.08	-0.46	-0.17		
Gt30Dp:Bwt	P(I)	-0.08	0.03	-0.14	-0.01		
Gt30Dp:WrN	E(I)	0.27	0.08	0.11	0.42		
Gt30Dp:WrN	G(Ia)	-0.12	0.06	-0.23	-0.01		
Gt30Dp:WrN	P(I)	0.08	0.03	0.01	0.14		
Gt30Dp:WrB	E(I)	0.23	0.07	0.09	0.38		
Gt30Dp:WrB	G(Ia)	-0.07	0.06	-0.19	0.05		
Gt30Dp:WrB	P(I)	0.10	0.03	0.03	0.16		
Gt30Dp:WrT	E(I)	0.28	0.08	0.13	0.44		
Gt30Dp:WrT	G(Ia)	-0.10	0.06	-0.21	0.01		
Gt30Dp:WrT	P(I)	0.09	0.03	0.03	0.16		
Gt30Dp:Face	E(I)	-0.77	0.09	-0.95	-0.59		
Gt30Dp:Face	G(Ia)	0.61	0.04	0.53	0.69		
Gt30Dp:Face	P(I)	0.03	0.03	-0.02	0.08		
Gt30Dp:Gfw	E(I)	0.15	0.07	0.00	0.29		
Gt30Dp:Gfw	G(Ia)	-0.01	0.06	-0.13	0.12		
Gt30Dp:Gfw	P(I)	0.08	0.03	0.02	0.14		
Gt30Dp:Yld	E(I)	0.11	0.08	-0.04	0.26		
Gt30Dp:Yld	G(Ia)	-0.33	0.07	-0.46	-0.20		
Gt30Dp:Yld	P(I)	-0.08	0.03	-0.14	-0.01		
Gt30Dp:Cww	E(I)	0.17	0.08	0.02	0.32		
Gt30Dp:Cww	G(Ia)	-0.09	0.06	-0.21	0.02		
Gt30Dp:Cww	P(I)	0.05	0.03	-0.02	0.11		
Gt30Dp:Staladj	E(I)	0.07	0.08	-0.10	0.23		
Gt30Dp:Staladj	G(Ia)	-0.21	0.06	-0.32	-0.10		
Gt30Dp:Staladj	P(I)	-0.07	0.03	-0.13	-0.00		
Gt30Dp:Gfwadj	E(I)	0.15	0.07	0.01	0.29		
Gt30Dp:Gfwadj	G(Ia)	0.00	0.05	-0.10	0.11		
Gt30Dp:Gfwadj	P(I)	0.08	0.03	0.02	0.15		
Gt30Dp:Cwwadj	E(I)	0.17	0.08	0.02	0.32		
Gt30Dp:Cwwadj	G(Ia)	-0.09	0.06	-0.22	0.03		
Gt30Dp:Cwwadj	P(I)	0.05	0.03	-0.01	0.12		
Gt30Dp:Crimp	E(I)	0.00	0.58	-1.14	1.14		
Gt30Dp:Crimp	G(Ia)	-0.36	0.10	-0.55	-0.16		
Gt30Dp:Crimp	P(I)	-0.18	0.04	-0.27	-0.10		
Gt30Dp:Crwvl	E(I)	0.01	0.08	-0.16	0.17		
Gt30Dp:Crwvl	G(Ia)	0.37	0.10	0.17	0.57		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gt30Dp:Crwvl	P(I)	0.18	0.04	0.10	0.27		
Gt30Dp:Crst	E(I)	0.12	0.13	-0.14	0.38		
Gt30Dp:Crst	G(Ia)	-0.62	0.12	-0.85	-0.40		
Gt30Dp:Crst	P(I)	-0.22	0.04	-0.31	-0.13		
Gt30Dp:Crstadj	E(I)	0.13	0.13	-0.13	0.40		
Gt30Dp:Crstadj	G(Ia)	-0.63	0.12	-0.86	-0.41		
Gt30Dp:Crstadj	P(I)	-0.22	0.04	-0.30	-0.13		
Gt30Dp:Crwvt	E(I)	-0.13	0.13	-0.38	0.13		
Gt30Dp:Crwvt	G(Ia)	0.66	0.12	0.43	0.89		
Gt30Dp:Crwvt	P(I)	0.22	0.04	0.14	0.31		
Gt30Dp:Dp	E(I)	0.79	0.03	0.73	0.86		
Gt30Dp:Dp	G(Ia)	0.95	0.02	0.91	0.99		
Gt30Dp:Dp	P(I)	0.87	0.01	0.85	0.90		
Gt30Dp:Ds	E(I)	0.44	0.07	0.30	0.58		
Gt30Dp:Ds	G(Ia)	-0.07	0.07	-0.19	0.06		
Gt30Dp:Ds	P(I)	0.22	0.03	0.15	0.28		
Gt30Dp:Dps	E(I)	0.48	0.07	0.34	0.61		
Gt30Dp:Dps	G(Ia)	0.02	0.06	-0.10	0.14		
Gt30Dp:Dps	P(I)	0.28	0.03	0.22	0.34		
Gt30Dp:DpovDs	E(I)	0.68	0.08	0.52	0.83		
Gt30Dp:DpovDs	G(Ia)	0.82	0.03	0.77	0.87		
Gt30Dp:DpovDs	P(I)	0.72	0.02	0.68	0.76		
Gt30Dp:CVDp	E(I)	0.20	0.07	0.07	0.32		
Gt30Dp:CVDp	G(Ia)	0.69	0.06	0.57	0.81		
Gt30Dp:CVDp	P(I)	0.39	0.03	0.33	0.45		
Gt30Dp:CVDs	E(I)	-0.02	0.07	-0.16	0.13		
Gt30Dp:CVDs	G(Ia)	0.60	0.08	0.46	0.75		
Gt30Dp:CVDs	P(I)	0.21	0.03	0.15	0.27		
Gt30Dp:MaxDp	E(I)	0.65	0.05	0.56	0.74		
Gt30Dp:MaxDp	G(Ia)	0.94	0.03	0.88	0.99		
Gt30Dp:MaxDp	P(I)	0.79	0.02	0.75	0.82		
Gt30Dp:MinDp	E(I)	0.25	0.06	0.14	0.36		
Gt30Dp:MinDp	G(Ia)	0.55	0.19	0.18	0.93		
Gt30Dp:MinDp	P(I)	0.26	0.03	0.20	0.33		
Gt30Dp:MaxDs	E(I)	0.27	0.06	0.16	0.39		
Gt30Dp:MaxDs	G(Ia)	0.45	0.08	0.29	0.61		
Gt30Dp:MaxDs	P(I)	0.32	0.03	0.26	0.38		
Gt30Dp:MinDs	E(I)	0.15	0.06	0.03	0.26		
Gt30Dp:MinDs	G(Ia)	-0.23	0.19	-0.60	0.14		
Gt30Dp:MinDs	P(I)	0.07	0.03	-0.00	0.13		
Gt30Dp:SDDp	E(I)	0.56	0.05	0.46	0.66		
Gt30Dp:SDDp	G(Ia)	0.92	0.03	0.86	0.99		
Gt30Dp:SDDp	P(I)	0.73	0.02	0.70	0.77		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gt30Dp:SDDs	E(I)	0.28	0.07	0.14	0.41		
Gt30Dp:SDDs	G(Ia)	0.42	0.06	0.31	0.53		
Gt30Dp:SDDs	P(I)	0.34	0.03	0.28	0.40		
Gt30Dp:SDD	E(I)	0.36	0.07	0.23	0.49		
Gt30Dp:SDD	G(Ia)	0.55	0.05	0.45	0.65		
Gt30Dp:SDD	P(I)	0.44	0.03	0.39	0.50		
Gt30Dp:CVD	E(I)	0.03	0.07	-0.10	0.16		
Gt30Dp:CVD	G(Ia)	0.69	0.07	0.55	0.83		
Gt30Dp:CVD	P(I)	0.28	0.03	0.22	0.34		
Gt30Dp:Gt30Dp	E(I)	1.00	0.00	1.00	1.00		
Gt30Dp:Gt30Dp	G(Ia)	1.00	0.00	1.00	1.00		
Gt30Dp:Gt30Dp	P(I)	1.00	0.00	1.00	1.00		
Gt30Dp:Gt30Ds	E(I)	0.36	0.06	0.24	0.49		
Gt30Dp:Gt30Ds	G(Ia)	0.29	0.07	0.15	0.42		
Gt30Dp:Gt30Ds	P(I)	0.33	0.03	0.27	0.39		
Gt30Dp:Gt30D	E(I)	0.56	0.05	0.45	0.66		
Gt30Dp:Gt30D	G(Ia)	0.56	0.06	0.45	0.67		
Gt30Dp:Gt30D	P(I)	0.55	0.03	0.50	0.60		
Gt30Dp:Fnua	E(I)	-0.28	0.07	-0.42	-0.15		
Gt30Dp:Fnua	G(Ia)	-0.05	0.07	-0.19	0.09		
Gt30Dp:Fnua	P(I)	-0.19	0.03	-0.25	-0.12		
Gt30Dp:Fr	E(I)	-0.07	0.07	-0.20	0.07		
Gt30Dp:Fr	G(Ia)	-0.15	0.07	-0.30	-0.01		
Gt30Dp:Fr	P(I)	-0.10	0.03	-0.16	-0.03		
Gt30Dp:Fnt	E(I)	-0.22	0.07	-0.35	-0.09		
Gt30Dp:Fnt	G(Ia)	-0.20	0.08	-0.35	-0.05		
Gt30Dp:Fnt	P(I)	-0.21	0.03	-0.27	-0.14		
Gt30Dp:Sarea	E(I)	0.06	0.07	-0.07	0.20		
Gt30Dp:Sarea	G(Ia)	-0.31	0.08	-0.46	-0.16		
Gt30Dp:Sarea	P(I)	-0.08	0.03	-0.14	-0.01		
Gt30Dp:Fd	E(I)	0.07	0.09	-0.10	0.24		
Gt30Dp:Fd	G(Ia)	0.22	0.17	-0.13	0.56		
Gt30Dp:Fd	P(I)	0.11	0.05	0.02	0.20		
Gt30Dp:Fc	E(I)	0.30	0.10	0.11	0.48		
Gt30Dp:Fc	G(Ia)	-0.29	0.12	-0.53	-0.06		
Gt30Dp:Fc	P(I)	0.07	0.04	-0.01	0.15		
Gt30Dp:Fu	E(I)	0.30	0.10	0.10	0.49		
Gt30Dp:Fu	G(Ia)	-0.30	0.12	-0.53	-0.07		
Gt30Dp:Fu	P(I)	0.06	0.04	-0.03	0.15		
Gt30Dp:Colour	E(I)	-0.12	0.07	-0.25	0.02		
Gt30Dp:Colour	G(Ia)	0.58	0.08	0.43	0.73		
Gt30Dp:Colour	P(I)	0.14	0.03	0.08	0.21		
Gt30Dp:Fly	E(I)	-0.16	0.06	-0.28	-0.04		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Gt30Dp:Fly	G(Ia)	0.35	0.12	0.12	0.58		
Gt30Dp:Fly	P(I)	-0.02	0.03	-0.08	0.04		
Gt30Dp:Flcrot	E(I)	-0.01	0.07	-0.14	0.12		
Gt30Dp:Flcrot	G(Ia)	0.00	0.08	-0.16	0.17		
Gt30Dp:Flcrot	P(I)	-0.01	0.03	-0.07	0.06		
Gt30Dp:Bactst	E(I)	-0.02	0.06	-0.15	0.10		
Gt30Dp:Bactst	G(Ia)	0.26	0.12	0.02	0.50		
Gt30Dp:Bactst	P(I)	0.04	0.03	-0.02	0.11		
Gt30Dp:MycD	E(I)	-0.03	0.06	-0.15	0.08		
Gt30Dp:MycD	G(Ia)	0.05	0.18	-0.32	0.41		
Gt30Dp:MycD	P(I)	-0.02	0.03	-0.08	0.05		
Gt30Dp:Bcts	E(I)	-0.41	0.18	-0.76	-0.06		
Gt30Dp:Bcts	G(Ia)	0.82	0.03	0.76	0.88		
Gt30Dp:Bcts	P(I)	0.42	0.02	0.37	0.47		
Gt30Dp:Bctb	E(I)	-0.41	0.16	-0.72	-0.10		
Gt30Dp:Bctb	G(Ia)	0.78	0.03	0.72	0.84		
Gt30Dp:Bctb	P(I)	0.39	0.02	0.34	0.43		
Gt30Dp:Weanwt	E(I)	0.04	0.07	-0.10	0.17		
Gt30Dp:Weanwt	G(Ia)	-0.42	0.08	-0.57	-0.27		
Gt30Dp:Weanwt	P(I)	-0.13	0.03	-0.19	-0.06		
Gt30Dp:NLB	E(I)	-0.03	0.07	-0.17	0.10		
Gt30Dp:NLB	G(Ia)	0.43	0.08	0.27	0.58		
Gt30Dp:NLB	P(I)	0.13	0.03	0.06	0.19		
Gt30Dp:NLW	E(I)	-0.07	0.07	-0.21	0.06		
Gt30Dp:NLW	G(Ia)	0.50	0.08	0.35	0.65		
Gt30Dp:NLW	P(I)	0.13	0.03	0.07	0.20		
Gt30Dp:Fnpua	E(I)	-0.12	0.06	-0.24	0.01		
Gt30Dp:Fnpua	G(Ia)	-0.04	0.08	-0.21	0.12		
Gt30Dp:Fnpua	P(I)	-0.09	0.03	-0.15	-0.02		
Gt30Dp:Fnsua	E(I)	-0.28	0.07	-0.42	-0.15		
Gt30Dp:Fnsua	G(Ia)	-0.05	0.07	-0.18	0.09		
Gt30Dp:Fnsua	P(I)	-0.18	0.03	-0.25	-0.12		
Gt30Dp:Fnpt	E(I)	-0.07	0.07	-0.20	0.06		
Gt30Dp:Fnpt	G(Ia)	-0.16	0.08	-0.31	-0.01		
Gt30Dp:Fnpt	P(I)	-0.10	0.03	-0.16	-0.04		
Gt30Dp:Fnst	E(I)	-0.22	0.07	-0.35	-0.09		
Gt30Dp:Fnst	G(Ia)	-0.20	0.08	-0.35	-0.05		
Gt30Dp:Fnst	P(I)	-0.21	0.03	-0.27	-0.14		
Gt30Ds:Stal	E(I)	-0.06	0.07	-0.19	0.08		
Gt30Ds:Stal	G(Ia)	0.10	0.08	-0.05	0.25		
Gt30Ds:Stal	P(I)	0.00	0.03	-0.06	0.07		
Gt30Ds:Diam	E(I)	0.34	0.06	0.22	0.46		
Gt30Ds:Diam	G(Ia)	0.74	0.06	0.63	0.85		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Gt30Ds:Diam	P(I)	0.49	0.03	0.43	0.54
Gt30Ds:Bwt	E(I)	-0.06	0.06	-0.18	0.06
Gt30Ds:Bwt	G(Ia)	0.19	0.10	-0.00	0.39
Gt30Ds:Bwt	P(I)	0.01	0.03	-0.05	0.08
Gt30Ds:WrN	E(I)	0.08	0.07	-0.05	0.21
Gt30Ds:WrN	G(Ia)	0.21	0.07	0.07	0.35
Gt30Ds:WrN	P(I)	0.13	0.03	0.06	0.19
Gt30Ds:WrB	E(I)	0.20	0.06	0.08	0.32
Gt30Ds:WrB	G(Ia)	0.15	0.08	-0.00	0.31
Gt30Ds:WrB	P(I)	0.18	0.03	0.12	0.24
Gt30Ds:WrT	E(I)	0.16	0.07	0.03	0.29
Gt30Ds:WrT	G(Ia)	0.19	0.07	0.05	0.33
Gt30Ds:WrT	P(I)	0.17	0.03	0.11	0.23
Gt30Ds:Face	E(I)	-0.11	0.07	-0.25	0.02
Gt30Ds:Face	G(Ia)	0.10	0.05	-0.00	0.20
Gt30Ds:Face	P(I)	-0.01	0.03	-0.06	0.04
Gt30Ds:Gfw	E(I)	0.01	0.06	-0.10	0.12
Gt30Ds:Gfw	G(Ia)	0.55	0.08	0.40	0.70
Gt30Ds:Gfw	P(I)	0.19	0.03	0.13	0.25
Gt30Ds:Yld	E(I)	-0.10	0.06	-0.23	0.02
Gt30Ds:Yld	G(Ia)	-0.21	0.09	-0.38	-0.04
Gt30Ds:Yld	P(I)	-0.14	0.03	-0.20	-0.07
Gt30Ds:Cww	E(I)	-0.04	0.07	-0.17	0.09
Gt30Ds:Cww	G(Ia)	0.43	0.08	0.28	0.58
Gt30Ds:Cww	P(I)	0.13	0.03	0.06	0.19
Gt30Ds:Staladj	E(I)	-0.06	0.07	-0.20	0.08
Gt30Ds:Staladj	G(Ia)	0.11	0.08	-0.04	0.26
Gt30Ds:Staladj	P(I)	0.00	0.03	-0.06	0.07
Gt30Ds:Gfwadj	E(I)	0.01	0.06	-0.10	0.12
Gt30Ds:Gfwadj	G(Ia)	0.56	0.08	0.40	0.71
Gt30Ds:Gfwadj	P(I)	0.20	0.03	0.13	0.26
Gt30Ds:Cwwadj	E(I)	-0.04	0.07	-0.17	0.09
Gt30Ds:Cwwadj	G(Ia)	0.48	0.08	0.31	0.64
Gt30Ds:Cwwadj	P(I)	0.14	0.03	0.07	0.20
Gt30Ds:Crimp	E(I)	0.11	0.12	-0.12	0.33
Gt30Ds:Crimp	G(Ia)	-0.60	0.14	-0.88	-0.32
Gt30Ds:Crimp	P(I)	-0.16	0.04	-0.25	-0.07
Gt30Ds:Crwvl	E(I)	-0.06	0.11	-0.28	0.15
Gt30Ds:Crwvl	G(Ia)	0.55	0.14	0.27	0.84
Gt30Ds:Crwvl	P(I)	0.16	0.04	0.08	0.25
Gt30Ds:Crst	E(I)	-0.01	0.09	-0.18	0.17
Gt30Ds:Crst	G(Ia)	-0.29	0.16	-0.60	0.03
Gt30Ds:Crst	P(I)	-0.10	0.05	-0.19	-0.01

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gt30Ds:Crstadj	E(I)	-0.00	0.08	-0.15	0.15	
Gt30Ds:Crstadj	G(Ia)	-0.28	0.16	-0.60	0.03	
Gt30Ds:Crstadj	P(I)	-0.10	0.05	-0.19	-0.01	
Gt30Ds:Crwvt	E(I)	0.00	0.08	-0.15	0.15	
Gt30Ds:Crwvt	G(Ia)	0.29	0.16	-0.03	0.61	
Gt30Ds:Crwvt	P(I)	0.09	0.04	0.01	0.18	
Gt30Ds:Dp	E(I)	0.47	0.06	0.35	0.59	
Gt30Ds:Dp	G(Ia)	0.24	0.07	0.11	0.37	
Gt30Ds:Dp	P(I)	0.37	0.03	0.31	0.43	
Gt30Ds:Ds	E(I)	0.58	0.05	0.49	0.67	
Gt30Ds:Ds	G(Ia)	0.77	0.05	0.66	0.87	
Gt30Ds:Ds	P(I)	0.64	0.02	0.60	0.69	
Gt30Ds:Dps	E(I)	0.58	0.04	0.50	0.67	
Gt30Ds:Dps	G(Ia)	0.79	0.06	0.68	0.90	
Gt30Ds:Dps	P(I)	0.65	0.02	0.60	0.69	
Gt30Ds:DpovDs	E(I)	0.11	0.12	-0.12	0.33	
Gt30Ds:DpovDs	G(Ia)	-0.20	0.06	-0.32	-0.09	
Gt30Ds:DpovDs	P(I)	-0.06	0.03	-0.12	0.01	
Gt30Ds:CVDp	E(I)	0.06	0.06	-0.06	0.18	
Gt30Ds:CVDp	G(Ia)	0.24	0.09	0.07	0.42	
Gt30Ds:CVDp	P(I)	0.12	0.03	0.05	0.18	
Gt30Ds:CVDs	E(I)	0.15	0.06	0.04	0.26	
Gt30Ds:CVDs	G(Ia)	0.62	0.09	0.44	0.80	
Gt30Ds:CVDs	P(I)	0.28	0.03	0.22	0.34	
Gt30Ds:MaxDp	E(I)	0.36	0.06	0.23	0.48	
Gt30Ds:MaxDp	G(Ia)	0.23	0.07	0.09	0.37	
Gt30Ds:MaxDp	P(I)	0.30	0.03	0.24	0.36	
Gt30Ds:MinDp	E(I)	0.17	0.05	0.07	0.27	
Gt30Ds:MinDp	G(Ia)	0.25	0.22	-0.19	0.68	
Gt30Ds:MinDp	P(I)	0.17	0.03	0.10	0.23	
Gt30Ds:MaxDs	E(I)	0.43	0.04	0.34	0.52	
Gt30Ds:MaxDs	G(Ia)	0.95	0.09	0.78	1.12	
Gt30Ds:MaxDs	P(I)	0.55	0.03	0.50	0.60	
Gt30Ds:MinDs	E(I)	0.13	0.05	0.03	0.23	
Gt30Ds:MinDs	G(Ia)	-0.30	0.25	-0.78	0.19	
Gt30Ds:MinDs	P(I)	0.07	0.03	0.00	0.14	
Gt30Ds:SDDp	E(I)	0.26	0.07	0.13	0.39	
Gt30Ds:SDDp	G(Ia)	0.25	0.07	0.11	0.39	
Gt30Ds:SDDp	P(I)	0.25	0.03	0.19	0.31	
Gt30Ds:SDDs	E(I)	0.54	0.05	0.45	0.63	
Gt30Ds:SDDs	G(Ia)	0.94	0.05	0.84	1.04	
Gt30Ds:SDDs	P(I)	0.67	0.02	0.63	0.72	
Gt30Ds:SDD	E(I)	0.55	0.05	0.46	0.64	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gt30Ds:SDD	G(Ia)	0.91	0.05	0.81	1.01	
Gt30Ds:SDD	P(I)	0.67	0.02	0.63	0.71	
Gt30Ds:CVD	E(I)	0.15	0.06	0.04	0.27	
Gt30Ds:CVD	G(Ia)	0.58	0.09	0.40	0.75	
Gt30Ds:CVD	P(I)	0.28	0.03	0.22	0.34	
Gt30Ds:Gt30Dp	E(I)	0.36	0.06	0.24	0.49	
Gt30Ds:Gt30Dp	G(Ia)	0.29	0.07	0.15	0.42	
Gt30Ds:Gt30Dp	P(I)	0.33	0.03	0.27	0.39	
Gt30Ds:Gt30Ds	E(I)	1.00	0.00	1.00	1.00	
Gt30Ds:Gt30Ds	G(Ia)	1.00	0.00	1.00	1.00	
Gt30Ds:Gt30Ds	P(I)	1.00	0.00	1.00	1.00	
Gt30Ds:Gt30D	E(I)	0.97	0.01	0.95	0.99	
Gt30Ds:Gt30D	G(Ia)	0.95	0.02	0.92	0.99	
Gt30Ds:Gt30D	P(I)	0.97	0.01	0.95	0.98	
Gt30Ds:Fnua	E(I)	-0.25	0.06	-0.36	-0.14	
Gt30Ds:Fnua	G(Ia)	-0.50	0.09	-0.67	-0.33	
Gt30Ds:Fnua	P(I)	-0.32	0.03	-0.38	-0.26	
Gt30Ds:Fr	E(I)	-0.14	0.06	-0.26	-0.03	
Gt30Ds:Fr	G(Ia)	-0.18	0.10	-0.37	0.01	
Gt30Ds:Fr	P(I)	-0.15	0.03	-0.22	-0.09	
Gt30Ds:Fnt	E(I)	-0.25	0.05	-0.36	-0.14	
Gt30Ds:Fnt	G(Ia)	-0.48	0.09	-0.67	-0.30	
Gt30Ds:Fnt	P(I)	-0.32	0.03	-0.38	-0.25	
Gt30Ds:Sarea	E(I)	-0.05	0.06	-0.17	0.06	
Gt30Ds:Sarea	G(Ia)	0.19	0.10	-0.01	0.39	
Gt30Ds:Sarea	P(I)	0.01	0.03	-0.05	0.08	
Gt30Ds:Fd	E(I)	0.06	0.09	-0.11	0.24	
Gt30Ds:Fd	G(Ia)	0.16	0.16	-0.16	0.47	
Gt30Ds:Fd	P(I)	0.09	0.05	-0.00	0.18	
Gt30Ds:Fc	E(I)	0.23	0.09	0.05	0.42	
Gt30Ds:Fc	G(Ia)	0.15	0.10	-0.04	0.34	
Gt30Ds:Fc	P(I)	0.20	0.04	0.12	0.28	
Gt30Ds:Fu	E(I)	0.23	0.10	0.04	0.42	
Gt30Ds:Fu	G(Ia)	0.20	0.10	0.01	0.38	
Gt30Ds:Fu	P(I)	0.22	0.04	0.14	0.30	
Gt30Ds:Colour	E(I)	0.00	0.04	-0.08	0.09	
Gt30Ds:Colour	G(Ia)	0.37	0.10	0.18	0.56	
Gt30Ds:Colour	P(I)	0.11	0.03	0.04	0.17	
Gt30Ds:Fly	E(I)	-0.05	0.05	-0.16	0.05	
Gt30Ds:Fly	G(Ia)	0.40	0.15	0.11	0.69	
Gt30Ds:Fly	P(I)	0.03	0.03	-0.03	0.10	
Gt30Ds:Flcrot	E(I)	-0.04	0.06	-0.16	0.07	
Gt30Ds:Flcrot	G(Ia)	0.03	0.11	-0.19	0.24	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gt30Ds:Flcrot	P(I)	-0.03	0.03	-0.09	0.04	
Gt30Ds:Bactst	E(I)	0.00	0.05	-0.10	0.11	
Gt30Ds:Bactst	G(Ia)	-0.04	0.16	-0.34	0.27	
Gt30Ds:Bactst	P(I)	-0.00	0.03	-0.07	0.06	
Gt30Ds:MycD	E(I)	-0.00	0.05	-0.10	0.10	
Gt30Ds:MycD	G(Ia)	0.05	0.23	-0.41	0.51	
Gt30Ds:MycD	P(I)	0.01	0.03	-0.06	0.07	
Gt30Ds:Bcts	E(I)	-0.08	0.12	-0.33	0.16	
Gt30Ds:Bcts	G(Ia)	0.25	0.05	0.16	0.34	
Gt30Ds:Bcts	P(I)	0.10	0.03	0.05	0.16	
Gt30Ds:Bctb	E(I)	-0.03	0.12	-0.26	0.19	
Gt30Ds:Bctb	G(Ia)	0.25	0.05	0.16	0.34	
Gt30Ds:Bctb	P(I)	0.11	0.03	0.06	0.17	
Gt30Ds:Weanwt	E(I)	-0.03	0.06	-0.14	0.08	
Gt30Ds:Weanwt	G(Ia)	-0.01	0.10	-0.21	0.18	
Gt30Ds:Weanwt	P(I)	-0.02	0.03	-0.09	0.04	
Gt30Ds:NLB	E(I)	0.07	0.06	-0.04	0.18	
Gt30Ds:NLB	G(Ia)	-0.03	0.11	-0.24	0.18	
Gt30Ds:NLB	P(I)	0.04	0.03	-0.02	0.11	
Gt30Ds:NLW	E(I)	0.02	0.06	-0.09	0.14	
Gt30Ds:NLW	G(Ia)	0.09	0.10	-0.10	0.29	
Gt30Ds:NLW	P(I)	0.04	0.03	-0.02	0.11	
Gt30Ds:Fnpua	E(I)	-0.09	0.05	-0.20	0.02	
Gt30Ds:Fnpua	G(Ia)	-0.21	0.11	-0.43	0.01	
Gt30Ds:Fnpua	P(I)	-0.12	0.03	-0.18	-0.06	
Gt30Ds:Fnsua	E(I)	-0.25	0.06	-0.36	-0.14	
Gt30Ds:Fnsua	G(Ia)	-0.50	0.09	-0.66	-0.33	
Gt30Ds:Fnsua	P(I)	-0.32	0.03	-0.38	-0.26	
Gt30Ds:Fnpt	E(I)	-0.11	0.06	-0.22	0.00	
Gt30Ds:Fnpt	G(Ia)	-0.13	0.10	-0.33	0.06	
Gt30Ds:Fnpt	P(I)	-0.11	0.03	-0.18	-0.05	
Gt30Ds:Fnst	E(I)	-0.25	0.05	-0.36	-0.14	
Gt30Ds:Fnst	G(Ia)	-0.49	0.09	-0.67	-0.30	
Gt30Ds:Fnst	P(I)	-0.32	0.03	-0.38	-0.25	
Gt30D:Stal	E(I)	-0.04	0.07	-0.18	0.10	
Gt30D:Stal	G(Ia)	0.05	0.07	-0.10	0.19	
Gt30D:Stal	P(I)	-0.01	0.03	-0.07	0.06	
Gt30D:Diam	E(I)	0.42	0.06	0.30	0.54	
Gt30D:Diam	G(Ia)	0.71	0.05	0.61	0.82	
Gt30D:Diam	P(I)	0.53	0.03	0.48	0.58	
Gt30D:Bwt	E(I)	-0.04	0.06	-0.16	0.08	
Gt30D:Bwt	G(Ia)	0.07	0.10	-0.12	0.26	
Gt30D:Bwt	P(I)	-0.01	0.03	-0.07	0.06	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gt30D:WrN	E(I)	0.13	0.07	-0.01	0.26	
Gt30D:WrN	G(Ia)	0.13	0.07	-0.00	0.27	
Gt30D:WrN	P(I)	0.13	0.03	0.06	0.19	
Gt30D:WrB	E(I)	0.22	0.06	0.10	0.34	
Gt30D:WrB	G(Ia)	0.09	0.08	-0.06	0.24	
Gt30D:WrB	P(I)	0.17	0.03	0.11	0.24	
Gt30D:WrT	E(I)	0.20	0.07	0.07	0.33	
Gt30D:WrT	G(Ia)	0.12	0.07	-0.02	0.26	
Gt30D:WrT	P(I)	0.17	0.03	0.10	0.23	
Gt30D:Face	E(I)	-0.28	0.07	-0.42	-0.14	
Gt30D:Face	G(Ia)	0.28	0.05	0.18	0.38	
Gt30D:Face	P(I)	-0.01	0.03	-0.06	0.04	
Gt30D:Gfw	E(I)	0.03	0.06	-0.09	0.15	
Gt30D:Gfw	G(Ia)	0.48	0.07	0.33	0.62	
Gt30D:Gfw	P(I)	0.19	0.03	0.13	0.25	
Gt30D:Yld	E(I)	-0.06	0.06	-0.19	0.06	
Gt30D:Yld	G(Ia)	-0.30	0.08	-0.46	-0.14	
Gt30D:Yld	P(I)	-0.14	0.03	-0.21	-0.08	
Gt30D:Cww	E(I)	-0.01	0.07	-0.15	0.13	
Gt30D:Cww	G(Ia)	0.34	0.07	0.20	0.49	
Gt30D:Cww	P(I)	0.12	0.03	0.06	0.18	
Gt30D:Staladj	E(I)	-0.05	0.07	-0.19	0.10	
Gt30D:Staladj	G(Ia)	0.05	0.07	-0.09	0.20	
Gt30D:Staladj	P(I)	-0.01	0.03	-0.07	0.06	
Gt30D:Gfwadj	E(I)	0.03	0.06	-0.09	0.16	
Gt30D:Gfwadj	G(Ia)	0.50	0.08	0.35	0.64	
Gt30D:Gfwadj	P(I)	0.19	0.03	0.13	0.26	
Gt30D:Cwwadj	E(I)	-0.01	0.07	-0.15	0.14	
Gt30D:Cwwadj	G(Ia)	0.38	0.08	0.23	0.54	
Gt30D:Cwwadj	P(I)	0.13	0.03	0.07	0.20	
Gt30D:Crimp	E(I)	0.09	0.12	-0.14	0.33	
Gt30D:Crimp	G(Ia)	-0.60	0.13	-0.85	-0.34	
Gt30D:Crimp	P(I)	-0.19	0.04	-0.28	-0.10	
Gt30D:Crwvl	E(I)	-0.05	0.12	-0.28	0.18	
Gt30D:Crwvl	G(Ia)	0.56	0.13	0.30	0.82	
Gt30D:Crwvl	P(I)	0.19	0.04	0.10	0.27	
Gt30D:Crst	E(I)	0.02	0.12	-0.21	0.24	
Gt30D:Crst	G(Ia)	-0.42	0.15	-0.71	-0.13	
Gt30D:Crst	P(I)	-0.14	0.05	-0.23	-0.05	
Gt30D:Crstadj	E(I)	0.02	0.11	-0.20	0.24	
Gt30D:Crstadj	G(Ia)	-0.42	0.15	-0.71	-0.13	
Gt30D:Crstadj	P(I)	-0.14	0.05	-0.23	-0.05	
Gt30D:Crwvt	E(I)	-0.02	0.11	-0.24	0.19	

Table 24 – Continued from previous page

Tab	$\frac{\text{le } 24 - Contin}{\text{Component}}$	ued from prev Estimate	StdErr	CI95lo	CI95hi
Gt30D:Crwvt	G(Ia)	0.43	0.15	0.13	0.72
Gt30D:Crwvt		0.43	0.13	0.15	0.72
Gt30D:Dp	P(I)	0.15	0.04	0.05	0.22
Gt30D:Dp	E(I)	0.50	0.05	0.30 0.39	0.71
1	G(Ia)	0.50 0.55	0.03	$0.59 \\ 0.50$	0.60
Gt30D:Dp Gt30D:Ds	P(I)	$\begin{bmatrix} 0.55 \\ 0.62 \end{bmatrix}$	0.05	$0.50 \\ 0.53$	0.00
Gt30D:Ds Gt30D:Ds	E(I)	$0.62 \\ 0.65$	0.05	$0.53 \\ 0.54$	0.71
Gt30D:Ds Gt30D:Ds	G(Ia)	0.63	0.00	$0.54 \\ 0.58$	0.75
Gt30D:Ds Gt30D:Dps	P(I)				
1 *	E(I)	0.63	0.04 0.05	0.55	0.72
Gt30D:Dps	G(Ia)	0.69		0.59	0.80
Gt30D:Dps	P(I)	0.65	0.02	0.61	0.69
Gt30D:DpovDs	E(I)	0.25	0.11	0.03	0.47
Gt30D:DpovDs	G(Ia)	0.07	0.05	-0.03	0.18
Gt30D:DpovDs	P(I)	0.13	0.03	0.06	0.19
Gt30D:CVDp	E(I)	0.09	0.06	-0.03	0.21
Gt30D:CVDp	G(Ia)	0.43	0.09	0.27	0.60
Gt30D:CVDp	P(I)	0.20	0.03	0.14	0.26
Gt30D:CVDs	E(I)	0.12	0.06	0.00	0.23
Gt30D:CVDs	G(Ia)	0.73	0.09	0.55	0.91
Gt30D:CVDs	P(I)	0.30	0.03	0.23	0.36
Gt30D:MaxDp	E(I)	0.47	0.06	0.36	0.58
Gt30D:MaxDp	G(Ia)	0.49	0.06	0.37	0.61
Gt30D:MaxDp	P(I)	0.47	0.03	0.41	0.52
Gt30D:MinDp	E(I)	0.21	0.05	0.11	0.31
Gt30D:MinDp	G(Ia)	0.37	0.22	-0.05	0.80
Gt30D:MinDp	P(I)	0.22	0.03	0.15	0.28
Gt30D:MaxDs	E(I)	0.44	0.04	0.35	0.53
Gt30D:MaxDs	G(Ia)	0.96	0.08	0.80	1.13
Gt30D:MaxDs	P(I)	0.57	0.03	0.52	0.62
Gt30D:MinDs	E(I)	0.15	0.05	0.05	0.25
Gt30D:MinDs	G(Ia)	-0.34	0.25	-0.82	0.14
Gt30D:MinDs	P(I)	0.08	0.03	0.01	0.14
Gt30D:SDDp	E(I)	0.36	0.06	0.24	0.48
Gt30D:SDDp	G(Ia)	0.50	0.06	0.38	0.63
Gt30D:SDDp	P(I)	0.41	0.03	0.35	0.46
Gt30D:SDDs	E(I)	0.53	0.05	0.45	0.62
Gt30D:SDDs	G(Ia)	0.95	0.05	0.85	1.05
Gt30D:SDDs	P(I)	0.68	0.02	0.63	0.72
Gt30D:SDD	E(I)	0.56	0.04	0.48	0.65
Gt30D:SDD	G(Ia)	0.96	0.05	0.87	1.06
Gt30D:SDD	P(I)	0.70	0.02	0.66	0.74
Gt30D:CVD	E(I)	0.14	0.06	0.02	0.25
Gt30D:CVD	G(Ia)	0.72	0.09	0.56	0.89

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Gt30D:CVD	P(I)	0.31	0.03	0.25	0.38	
Gt30D:Gt30Dp	E(I)	0.56	0.05	0.45	0.66	
Gt30D:Gt30Dp	G(Ia)	0.56	0.06	0.45	0.67	
Gt30D:Gt30Dp	P(I)	0.55	0.03	0.50	0.60	
Gt30D:Gt30Ds	E(I)	0.97	0.01	0.95	0.99	
Gt30D:Gt30Ds	G(Ia)	0.95	0.02	0.92	0.99	
Gt30D:Gt30Ds	P(I)	0.97	0.01	0.95	0.98	
Gt30D:Gt30D	E(I)	1.00	0.00	1.00	1.00	
Gt30D:Gt30D	G(Ia)	1.00	0.00	1.00	1.00	
Gt30D:Gt30D	P(I)	1.00	0.00	1.00	1.00	
Gt30D:Fnua	$\mid E(I) \mid$	-0.29	0.06	-0.40	-0.18	
Gt30D:Fnua	G(Ia)	-0.46	0.08	-0.62	-0.30	
Gt30D:Fnua	P(I)	-0.35	0.03	-0.41	-0.29	
Gt30D:Fr	E(I)	-0.17	0.06	-0.29	-0.05	
Gt30D:Fr	G(Ia)	-0.24	0.09	-0.42	-0.06	
Gt30D:Fr	P(I)	-0.19	0.03	-0.25	-0.13	
Gt30D:Fnt	E(I)	-0.28	0.05	-0.39	-0.18	
Gt30D:Fnt	G(Ia)	-0.50	0.09	-0.67	-0.33	
Gt30D:Fnt	P(I)	-0.35	0.03	-0.41	-0.28	
Gt30D:Sarea	E(I)	-0.04	0.06	-0.15	0.08	
Gt30D:Sarea	G(Ia)	0.07	0.10	-0.12	0.26	
Gt30D:Sarea	P(I)	-0.00	0.03	-0.07	0.06	
Gt30D:Fd	E(I)	0.06	0.09	-0.11	0.24	
Gt30D:Fd	G(Ia)	0.21	0.16	-0.11	0.53	
Gt30D:Fd	P(I)	0.10	0.05	0.01	0.19	
Gt30D:Fc	E(I)	0.28	0.09	0.10	0.47	
Gt30D:Fc	G(Ia)	0.05	0.10	-0.14	0.24	
Gt30D:Fc	P(I)	0.19	0.04	0.11	0.27	
Gt30D:Fu	E(I)	0.28	0.09	0.09	0.46	
Gt30D:Fu	G(Ia)	0.10	0.10	-0.09	0.29	
Gt30D:Fu	P(I)	0.20	0.04	0.12	0.28	
Gt30D:Colour	E(I)	-0.02	0.06	-0.14	0.10	
Gt30D:Colour	G(Ia)	0.50	0.09	0.32	0.68	
Gt30D:Colour	P(I)	0.13	0.03	0.07	0.19	
Gt30D:Fly	E(I)	-0.08	0.05	-0.19	0.02	
Gt30D:Fly	G(Ia)	0.47	0.15	0.18	0.76	
Gt30D:Fly	P(I)	0.03	0.03	-0.04	0.09	
Gt30D:Flcrot	E(I)	-0.04	0.06	-0.15	0.07	
Gt30D:Flcrot	G(Ia)	0.02	0.11	-0.20	0.23	
Gt30D:Flcrot	P(I)	-0.03	0.03	-0.09	0.04	
Gt30D:Bactst	E(I)	-0.00	0.05	-0.11	0.10	
Gt30D:Bactst	G(Ia)	0.03	0.15	-0.27	0.33	
Gt30D:Bactst	P(I)	0.00	0.03	-0.06	0.07	

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Gt30D:MycD	E(I)	-0.01	0.05	-0.11	0.09
Gt30D:MycD	G(Ia)	0.05	0.03	-0.40	0.50
Gt30D:MycD	P(I)	0.00	0.23	-0.06	0.07
Gt30D:Bcts	$\mathrm{E}(\mathrm{I})$	-0.16	0.03	-0.42	0.09
Gt30D:Bcts	G(Ia)	0.47	0.15	0.38	0.05
Gt30D:Bcts	P(I)	0.19	0.03	0.14	0.24
Gt30D:Bctb	E(I)	-0.13	0.12	-0.36	0.10
Gt30D:Bctb	G(Ia)	0.45	0.04	0.37	0.54
Gt30D:Bctb	P(I)	0.19	0.03	0.14	0.24
Gt30D:Weanwt	$\mathrm{E}(\mathrm{I})$	-0.02	0.06	-0.14	0.09
Gt30D:Weanwt	G(Ia)	-0.13	0.10	-0.32	0.06
Gt30D:Weanwt	P(I)	-0.05	0.03	-0.12	0.01
Gt30D:NLB	E(I)	0.06	0.06	-0.06	0.17
Gt30D:NLB	G(Ia)	0.11	0.10	-0.08	0.31
Gt30D:NLB	P(I)	0.07	0.03	0.01	0.14
Gt30D:NLW	E(I)	0.01	0.06	-0.10	0.12
Gt30D:NLW	G(Ia)	0.25	0.10	0.06	0.44
Gt30D:NLW	P(I)	0.08	0.03	0.01	0.14
Gt30D:Fnpua	$\mathrm{E}(\mathrm{I})$	-0.09	0.06	-0.20	0.02
Gt30D:Fnpua	G(Ia)	-0.19	0.11	-0.40	0.02
Gt30D:Fnpua	P(I)	-0.11	0.03	-0.18	-0.05
Gt30D:Fnsua	E(I)	-0.30	0.06	-0.41	-0.18
Gt30D:Fnsua	G(Ia)	-0.46	0.08	-0.62	-0.30
Gt30D:Fnsua	P(I)	-0.35	0.03	-0.41	-0.29
Gt30D:Fnpt	E(I)	-0.09	0.06	-0.20	0.02
Gt30D:Fnpt	G(Ia)	-0.15	0.10	-0.34	0.03
Gt30D:Fnpt	P(I)	-0.11	0.03	-0.17	-0.04
Gt30D:Fnst	E(I)	-0.28	0.05	-0.39	-0.18
Gt30D:Fnst	G(Ia)	-0.50	0.09	-0.68	-0.33
Gt30D:Fnst	P(I)	-0.35	0.03	-0.41	-0.29
Fnua:Stal	$\mathrm{E}(\mathrm{I})$	-0.19	0.03	-0.25	-0.13
Fnua:Stal	G(Ia)	-0.13	0.04	-0.20	-0.06
Fnua:Stal	P(I)	-0.17	0.02	-0.20	-0.14
Fnua:Diam	$\mathrm{E}(\mathrm{I})$	-0.47	0.03	-0.53	-0.42
Fnua:Diam	G(Ia)	-0.58	0.03	-0.63	-0.52
Fnua:Diam	P(I)	-0.51	0.01	-0.53	-0.48
Fnua:Bwt	$\mathrm{E}(\mathrm{I})$	-0.23	0.03	-0.29	-0.17
Fnua:Bwt	G(Ia)	-0.21	0.04	-0.28	-0.15
Fnua:Bwt	P(I)	-0.23	0.02	-0.26	-0.19
Fnua:WrN	$\mathrm{E}(\mathrm{I})$	0.03	0.03	-0.03	0.10
Fnua:WrN	G(Ia)	-0.09	0.04	-0.17	-0.02
Fnua:WrN	P(I)	-0.01	0.02	-0.04	0.03
Fnua:WrB	E(I)	0.07	Continued of	0.00	0.13

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnua:WrB	G(Ia)	-0.14	0.04	-0.21	-0.07	
Fnua:WrB	P(I)	-0.00	0.02	-0.04	0.03	
Fnua:WrT	E(I)	0.06	0.03	-0.00	0.13	
Fnua:WrT	G(Ia)	-0.13	0.03	-0.20	-0.07	
Fnua:WrT	P(I)	-0.01	0.02	-0.04	0.03	
Fnua:Face	E(I)	0.13	0.05	0.04	0.23	
Fnua:Face	G(Ia)	0.09	0.03	0.04	0.14	
Fnua:Face	P(I)	0.10	0.02	0.06	0.13	
Fnua:Gfw	E(I)	-0.04	0.03	-0.10	0.03	
Fnua:Gfw	G(Ia)	-0.20	0.04	-0.27	-0.12	
Fnua:Gfw	P(I)	-0.09	0.02	-0.12	-0.05	
Fnua:Yld	E(I)	-0.06	0.03	-0.12	0.01	
Fnua:Yld	G(Ia)	0.42	0.03	0.36	0.49	
Fnua:Yld	P(I)	0.12	0.02	0.09	0.15	
Fnua:Cww	E(I)	-0.05	0.03	-0.11	0.01	
Fnua:Cww	G(Ia)	0.01	0.04	-0.07	0.08	
Fnua:Cww	P(I)	-0.03	0.02	-0.07	0.00	
Fnua:Staladj	E(I)	-0.18	0.03	-0.23	-0.12	
Fnua:Staladj	G(Ia)	-0.15	0.04	-0.22	-0.07	
Fnua:Staladj	P(I)	-0.17	0.02	-0.20	-0.13	
Fnua:Gfwadj	E(I)	-0.03	0.03	-0.09	0.03	
Fnua:Gfwadj	G(Ia)	-0.21	0.04	-0.28	-0.14	
Fnua:Gfwadj	P(I)	-0.09	0.02	-0.12	-0.05	
Fnua:Cwwadj	E(I)	-0.04	0.03	-0.10	0.02	
Fnua:Cwwadj	G(Ia)	-0.02	0.04	-0.09	0.06	
Fnua:Cwwadj	P(I)	-0.03	0.02	-0.07	0.00	
Fnua:Crimp	E(I)	0.60	0.13	0.36	0.85	
Fnua:Crimp	G(Ia)	-0.40	0.04	-0.47	-0.32	
Fnua:Crimp	P(I)	-0.03	0.02	-0.07	0.01	
Fnua:Crwvl	E(I)	-0.37	0.06	-0.50	-0.25	
Fnua:Crwvl	G(Ia)	0.40	0.05	0.31	0.49	
Fnua:Crwvl	P(I)	-0.01	0.02	-0.06	0.04	
Fnua:Crst	E(I)	0.20	0.07	0.07	0.34	
Fnua:Crst	G(Ia)	-0.56	0.04	-0.65	-0.48	
Fnua:Crst	P(I)	-0.15	0.02	-0.20	-0.11	
Fnua:Crstadj	E(I)	0.18	0.06	0.06	0.31	
Fnua:Crstadj	G(Ia)	-0.56	0.05	-0.65	-0.47	
Fnua:Crstadj	P(I)	-0.15	0.02	-0.19	-0.10	
Fnua:Crwvt	E(I)	-0.16	0.05	-0.26	-0.06	
Fnua:Crwvt	G(Ia)	0.58	0.05	0.48	0.68	
Fnua:Crwvt	P(I)	0.12	0.02	0.07	0.16	
Fnua:Dp	E(I)	-0.42	0.07	-0.56	-0.28	
Fnua:Dp	G(Ia)	0.00	1.34	-2.63	2.63	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnua:Dp	P(I)	-0.24	0.03	-0.30	-0.17	
Fnua:Ds	E(I)	-0.40	0.06	-0.51	-0.29	
Fnua:Ds	G(Ia)	-0.73	0.06	-0.85	-0.61	
Fnua:Ds	P(I)	-0.52	0.03	-0.57	-0.46	
Fnua:Dps	E(I)	-0.41	0.05	-0.52	-0.31	
Fnua:Dps	G(Ia)	-0.74	0.06	-0.86	-0.62	
Fnua:Dps	P(I)	-0.52	0.03	-0.58	-0.47	
Fnua:DpovDs	E(I)	-0.20	0.12	-0.45	0.04	
Fnua:DpovDs	G(Ia)	0.36	0.06	0.26	0.47	
Fnua:DpovDs	P(I)	0.11	0.03	0.05	0.18	
Fnua:CVDp	E(I)	-0.02	0.06	-0.15	0.10	
Fnua:CVDp	G(Ia)	-0.16	0.09	-0.33	0.01	
Fnua:CVDp	P(I)	-0.07	0.03	-0.13	-0.00	
Fnua:CVDs	E(I)	0.12	0.06	-0.00	0.24	
Fnua:CVDs	G(Ia)	0.04	0.09	-0.14	0.23	
Fnua:CVDs	P(I)	0.10	0.03	0.03	0.16	
Fnua:MaxDp	E(I)	-0.30	0.07	-0.44	-0.16	
Fnua:MaxDp	G(Ia)	0.00	0.10	-0.19	0.20	
Fnua:MaxDp	P(I)	-0.18	0.03	-0.24	-0.11	
Fnua:MinDp	E(I)	-0.16	0.05	-0.26	-0.06	
Fnua:MinDp	G(Ia)	0.04	0.21	-0.37	0.46	
Fnua:MinDp	P(I)	-0.12	0.03	-0.19	-0.05	
Fnua:MaxDs	E(I)	-0.17	0.06	-0.28	-0.06	
Fnua:MaxDs	G(Ia)	-0.48	0.11	-0.69	-0.27	
Fnua:MaxDs	P(I)	-0.25	0.03	-0.31	-0.18	
Fnua:MinDs	E(I)	-0.12	0.05	-0.23	-0.02	
Fnua:MinDs	G(Ia)	0.00	3.72	-7.29	7.29	
Fnua:MinDs	P(I)	-0.10	0.03	-0.16	-0.03	
Fnua:SDDp	E(I)	-0.24	0.07	-0.37	-0.10	
Fnua:SDDp	G(Ia)	-0.06	0.07	-0.19	0.08	
Fnua:SDDp	P(I)	-0.16	0.03	-0.23	-0.10	
Fnua:SDDs	E(I)	-0.11	0.06	-0.24	0.02	
Fnua:SDDs	G(Ia)	-0.37	0.07	-0.52	-0.23	
Fnua:SDDs	P(I)	-0.20	0.03	-0.27	-0.14	
Fnua:SDD	E(I)	-0.15	0.07	-0.28	-0.02	
Fnua:SDD	G(Ia)	-0.36	0.07	-0.51	-0.22	
Fnua:SDD	P(I)	-0.23	0.03	-0.29	-0.16	
Fnua:CVD	E(I)	0.10	0.06	-0.02	0.22	
Fnua:CVD	G(Ia)	0.04	0.09	-0.13	0.22	
Fnua:CVD	P(I)	0.08	0.03	0.01	0.15	
Fnua:Gt30Dp	E(I)	-0.28	0.07	-0.42	-0.15	
Fnua:Gt30Dp	G(Ia)	-0.05	0.07	-0.19	0.09	
Fnua:Gt30Dp	P(I)	-0.19	0.03	-0.25	-0.12	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnua:Gt30Ds	E(I)	-0.25	0.06	-0.36	-0.14	
Fnua:Gt30Ds	G(Ia)	-0.50	0.09	-0.67	-0.33	
Fnua:Gt30Ds	P(I)	-0.32	0.03	-0.38	-0.26	
Fnua:Gt30D	E(I)	-0.29	0.06	-0.40	-0.18	
Fnua:Gt30D	G(Ia)	-0.46	0.08	-0.62	-0.30	
Fnua:Gt30D	P(I)	-0.35	0.03	-0.41	-0.29	
Fnua:Fnua	E(I)	1.00	0.00	1.00	1.00	
Fnua:Fnua	G(Ia)	1.00	0.00	1.00	1.00	
Fnua:Fnua	P(I)	1.00	0.00	1.00	1.00	
Fnua:Fr	E(I)	0.52	0.02	0.47	0.56	
Fnua:Fr	G(Ia)	0.49	0.03	0.43	0.56	
Fnua:Fr	P(I)	0.51	0.01	0.48	0.54	
Fnua:Fnt	E(I)	0.89	0.01	0.87	0.91	
Fnua:Fnt	G(Ia)	0.88	0.01	0.86	0.91	
Fnua:Fnt	P(I)	0.89	0.01	0.88	0.90	
Fnua:Sarea	E(I)	-0.23	0.03	-0.29	-0.17	
Fnua:Sarea	G(Ia)	-0.22	0.04	-0.29	-0.14	
Fnua:Sarea	P(I)	-0.23	0.02	-0.26	-0.19	
Fnua:Fd	E(I)	0.05	0.03	-0.01	0.11	
Fnua:Fd	G(Ia)	-0.16	0.06	-0.27	-0.05	
Fnua:Fd	P(I)	-0.00	0.02	-0.04	0.04	
Fnua:Fc	E(I)	-0.08	0.05	-0.17	0.01	
Fnua:Fc	G(Ia)	-0.51	0.03	-0.57	-0.46	
Fnua:Fc	P(I)	-0.27	0.02	-0.30	-0.23	
Fnua:Fu	E(I)	-0.08	0.03	-0.14	-0.01	
Fnua:Fu	G(Ia)	-0.38	0.04	-0.46	-0.30	
Fnua:Fu	P(I)	-0.18	0.02	-0.21	-0.14	
Fnua:Colour	E(I)	-0.02	0.03	-0.08	0.03	
Fnua:Colour	G(Ia)	0.23	0.06	0.12	0.34	
Fnua:Colour	P(I)	0.03	0.02	-0.00	0.07	
Fnua:Fly	E(I)	-0.01	0.03	-0.07	0.04	
Fnua:Fly	G(Ia)	0.20	0.08	0.05	0.35	
Fnua:Fly	P(I)	0.02	0.02	-0.01	0.06	
Fnua:Flcrot	E(I)	-0.00	0.03	-0.06	0.05	
Fnua:Flcrot	G(Ia)	0.46	0.19	0.08	0.84	
Fnua:Flcrot	P(I)	0.04	0.02	-0.00	0.07	
Fnua:Bactst	E(I)	0.02	0.04	-0.05	0.09	
Fnua:Bactst	G(Ia)	0.19	0.13	-0.06	0.43	
Fnua:Bactst	P(I)	0.04	0.02	-0.00	0.09	
Fnua:MycD	E(I)	0.02	0.03	-0.05	0.09	
Fnua:MycD	G(Ia)	0.08	0.25	-0.42	0.57	
Fnua:MycD	P(I)	0.02	0.02	-0.02	0.07	
Fnua:Bcts	E(I)	-0.11	0.05	-0.21	-0.00	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnua:Bcts	G(Ia)	0.04	0.03	-0.01	0.10	
Fnua:Bcts	P(I)	-0.03	0.02	-0.06	0.01	
Fnua:Bctb	E(I)	-0.14	0.05	-0.25	-0.04	
Fnua:Bctb	G(Ia)	0.07	0.03	0.02	0.13	
Fnua:Bctb	P(I)	-0.03	0.02	-0.06	0.01	
Fnua:Weanwt	$\mid E(I) \mid$	0.09	0.03	0.03	0.16	
Fnua:Weanwt	G(Ia)	-0.48	0.05	-0.58	-0.37	
Fnua:Weanwt	P(I)	-0.07	0.02	-0.11	-0.03	
Fnua:NLB	E(I)	-0.16	0.03	-0.22	-0.11	
Fnua:NLB	G(Ia)	0.15	0.05	0.05	0.25	
Fnua:NLB	P(I)	-0.08	0.02	-0.12	-0.05	
Fnua:NLW	E(I)	-0.14	0.03	-0.20	-0.09	
Fnua:NLW	G(Ia)	0.22	0.05	0.11	0.32	
Fnua:NLW	P(I)	-0.06	0.02	-0.09	-0.02	
Fnua:Fnpua	E(I)	0.45	0.02	0.40	0.49	
Fnua:Fnpua	G(Ia)	0.48	0.04	0.40	0.56	
Fnua:Fnpua	P(I)	0.45	0.01	0.42	0.48	
Fnua:Fnsua	E(I)	1.00	0.00	1.00	1.00	
Fnua:Fnsua	G(Ia)	1.00	0.00	1.00	1.00	
Fnua:Fnsua	P(I)	1.00	0.00	1.00	1.00	
Fnua:Fnpt	E(I)	0.36	0.03	0.31	0.42	
Fnua:Fnpt	G(Ia)	0.33	0.04	0.25	0.41	
Fnua:Fnpt	P(I)	0.35	0.02	0.32	0.39	
Fnua:Fnst	E(I)	0.89	0.01	0.87	0.91	
Fnua:Fnst	G(Ia)	0.89	0.01	0.86	0.92	
Fnua:Fnst	P(I)	0.89	0.01	0.88	0.90	
Fr:Stal	E(I)	-0.07	0.03	-0.13	-0.01	
Fr:Stal	G(Ia)	-0.25	0.04	-0.32	-0.18	
Fr:Stal	P(I)	-0.13	0.02	-0.17	-0.10	
Fr:Diam	E(I)	-0.42	0.03	-0.48	-0.36	
Fr:Diam	G(Ia)	-0.20	0.03	-0.26	-0.14	
Fr:Diam	P(I)	-0.33	0.02	-0.36	-0.30	
Fr:Bwt	E(I)	0.06	0.03	-0.00	0.12	
Fr:Bwt	G(Ia)	-0.11	0.04	-0.18	-0.04	
Fr:Bwt	P(I)	0.00	0.02	-0.03	0.04	
Fr:WrN	E(I)	0.05	0.03	-0.02	0.11	
Fr:WrN	G(Ia)	0.35	0.04	0.28	0.42	
Fr:WrN	P(I)	0.15	0.02	0.11	0.18	
Fr:WrB	E(I)	0.13	0.03	0.07	0.19	
Fr:WrB	G(Ia)	0.20	0.03	0.13	0.27	
Fr:WrB	P(I)	0.16	0.02	0.12	0.19	
Fr:WrT	E(I)	0.10	0.03	0.04	0.17	
Fr:WrT	G(Ia)	0.27	0.03	0.20	0.33	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fr:WrT	P(I)	0.16	0.02	0.13	0.19	
Fr:Face	E(I)	0.02	0.05	-0.07	0.12	
Fr:Face	G(Ia)	0.09	0.03	0.04	0.14	
Fr:Face	P(I)	0.05	0.02	0.02	0.09	
Fr:Gfw	E(I)	0.18	0.03	0.12	0.25	
Fr:Gfw	G(Ia)	0.02	0.04	-0.05	0.09	
Fr:Gfw	P(I)	0.13	0.02	0.10	0.16	
Fr:Yld	E(I)	0.02	0.03	-0.05	0.08	
Fr:Yld	G(Ia)	0.11	0.03	0.05	0.17	
Fr:Yld	P(I)	0.05	0.02	0.02	0.09	
Fr:Cww	E(I)	0.19	0.03	0.13	0.25	
Fr:Cww	G(Ia)	0.06	0.04	-0.01	0.13	
Fr:Cww	P(I)	0.15	0.02	0.12	0.18	
Fr:Staladj	E(I)	-0.08	0.03	-0.14	-0.02	
Fr:Staladj	G(Ia)	-0.25	0.04	-0.32	-0.17	
Fr:Staladj	P(I)	-0.13	0.02	-0.17	-0.10	
Fr:Gfwadj	$\mid E(I) \mid$	0.18	0.03	0.12	0.24	
Fr:Gfwadj	G(Ia)	0.02	0.04	-0.05	0.09	
Fr:Gfwadj	P(I)	0.13	0.02	0.09	0.16	
Fr:Cwwadj	$\mid E(I) \mid$	0.18	0.03	0.12	0.24	
Fr:Cwwadj	G(Ia)	0.07	0.04	-0.01	0.14	
Fr:Cwwadj	P(I)	0.15	0.02	0.11	0.18	
Fr:Crimp	E(I)	0.40	0.11	0.18	0.61	
Fr:Crimp	G(Ia)	-0.22	0.04	-0.30	-0.14	
Fr:Crimp	P(I)	0.01	0.02	-0.03	0.05	
Fr:Crwvl	E(I)	-0.25	0.06	-0.37	-0.13	
Fr:Crwvl	G(Ia)	0.21	0.05	0.12	0.31	
Fr:Crwvl	P(I)	-0.04	0.02	-0.09	0.01	
Fr:Crst	E(I)	0.05	0.07	-0.08	0.18	
Fr:Crst	G(Ia)	-0.23	0.05	-0.32	-0.14	
Fr:Crst	P(I)	-0.07	0.02	-0.12	-0.02	
Fr:Crstadj	E(I)	0.03	0.06	-0.09	0.15	
Fr:Crstadj	G(Ia)	-0.22	0.05	-0.31	-0.13	
Fr:Crstadj	P(I)	-0.07	0.02	-0.12	-0.03	
Fr:Crwvt	E(I)	-0.07	0.05	-0.16	0.03	
Fr:Crwvt	G(Ia)	0.25	0.05	0.14	0.35	
Fr:Crwvt	P(I)	0.05	0.02	0.00	0.09	
Fr:Dp	E(I)	-0.11	0.07	-0.25	0.04	
Fr:Dp	G(Ia)	-0.13	0.07	-0.27	0.01	
Fr:Dp	P(I)	-0.11	0.03	-0.18	-0.05	
Fr:Ds	E(I)	-0.23	0.06	-0.36	-0.11	
Fr:Ds	G(Ia)	-0.12	0.08	-0.28	0.03	
Fr:Ds	P(I)	-0.19	0.03	-0.26	-0.13	

Table 24 – Continued from previous page

		ued from previ		CTOT1-	CIOTI:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fr:Dps	E(I)	-0.24	0.06	-0.36	-0.12
Fr:Dps	G(Ia)	-0.15	0.08	-0.31	0.01
Fr:Dps	P(I)	-0.21	0.03	-0.27	-0.15
Fr:DpovDs	E(I)	0.11	0.12	-0.12	0.34
Fr:DpovDs	G(Ia)	-0.03	0.06	-0.15	0.08
Fr:DpovDs	P(I)	0.02	0.03	-0.04	0.09
Fr:CVDp	E(I)	0.00	0.06	-0.12	0.13
Fr:CVDp	G(Ia)	-0.17	0.09	-0.35	0.01
Fr:CVDp	P(I)	-0.05	0.03	-0.12	0.02
Fr:CVDs	E(I)	0.16	0.06	0.05	0.28
Fr:CVDs	G(Ia)	-0.29	0.10	-0.49	-0.09
Fr:CVDs	P(I)	0.03	0.03	-0.03	0.10
Fr:MaxDp	E(I)	-0.14	0.07	-0.27	-0.00
Fr:MaxDp	G(Ia)	-0.09	0.07	-0.23	0.06
Fr:MaxDp	P(I)	-0.12	0.03	-0.18	-0.05
Fr:MinDp	E(I)	0.00	0.05	-0.10	0.10
Fr:MinDp	G(Ia)	0.44	0.20	0.04	0.83
Fr:MinDp	P(I)	0.07	0.03	0.00	0.14
Fr:MaxDs	E(I)	-0.02	0.06	-0.13	0.09
Fr:MaxDs	G(Ia)	-0.24	0.12	-0.47	-0.00
Fr:MaxDs	P(I)	-0.07	0.03	-0.14	-0.00
Fr:MinDs	E(I)	-0.01	0.05	-0.11	0.09
Fr:MinDs	G(Ia)	-0.21	0.19	-0.59	0.16
Fr:MinDs	P(I)	-0.04	0.03	-0.11	0.02
Fr:SDDp	E(I)	-0.05	0.07	-0.19	0.08
Fr:SDDp	G(Ia)	-0.12	0.07	-0.27	0.02
Fr:SDDp	P(I)	-0.08	0.03	-0.14	-0.01
Fr:SDDs	E(I)	0.02	0.07	-0.11	0.15
Fr:SDDs	G(Ia)	-0.27	0.08	-0.43	-0.11
Fr:SDDs	P(I)	-0.08	0.03	-0.14	-0.01
Fr:SDD	E(I)	-0.01	0.06	-0.14	0.11
Fr:SDD	G(Ia)	-0.28	0.08	-0.44	-0.12
Fr:SDD	P(I)	-0.11	0.03	-0.17	-0.04
Fr:CVD	E(I)	0.14	0.06	0.02	0.26
Fr:CVD	G(Ia)	-0.29	0.10	-0.48	-0.10
Fr:CVD	P(I)	0.01	0.03	-0.05	0.08
Fr:Gt30Dp	E(I)	-0.07	0.07	-0.20	0.07
Fr:Gt30Dp	G(Ia)	-0.15	0.07	-0.30	-0.01
Fr:Gt30Dp	P(I)	-0.10	0.03	-0.16	-0.03
Fr:Gt30Ds	E(I)	-0.14	0.06	-0.26	-0.03
Fr:Gt30Ds	G(Ia)	-0.18	0.10	-0.37	0.01
Fr:Gt30Ds	P(I)	-0.15	0.03	-0.22	-0.09
Fr:Gt30D	E(I)	-0.17	0.06	-0.29	-0.05

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fr:Gt30D	G(Ia)	-0.24	0.09	-0.42	-0.06		
Fr:Gt30D	P(I)	-0.19	0.03	-0.25	-0.13		
Fr:Fnua	E(I)	0.52	0.02	0.47	0.56		
Fr:Fnua	G(Ia)	0.49	0.03	0.43	0.56		
Fr:Fnua	P(I)	0.51	0.01	0.48	0.54		
Fr:Fr	E(I)	1.00	0.00	1.00	1.00		
Fr:Fr	G(Ia)	1.00	0.00	1.00	1.00		
Fr:Fr	P(I)	1.00	0.00	1.00	1.00		
Fr:Fnt	E(I)	0.54	0.02	0.50	0.59		
Fr:Fnt	G(Ia)	0.43	0.03	0.36	0.49		
Fr:Fnt	P(I)	0.51	0.01	0.48	0.54		
Fr:Sarea	E(I)	0.05	0.03	-0.01	0.12		
Fr:Sarea	G(Ia)	-0.11	0.04	-0.18	-0.04		
Fr:Sarea	P(I)	0.00	0.02	-0.03	0.04		
Fr:Fd	E(I)	0.09	0.03	0.03	0.15		
Fr:Fd	G(Ia)	0.07	0.06	-0.04	0.18		
Fr:Fd	P(I)	0.08	0.02	0.05	0.12		
Fr:Fc	E(I)	-0.14	0.05	-0.23	-0.05		
Fr:Fc	G(Ia)	-0.06	0.03	-0.12	-0.00		
Fr:Fc	P(I)	-0.10	0.02	-0.14	-0.06		
Fr:Fu	E(I)	-0.11	0.04	-0.18	-0.04		
Fr:Fu	G(Ia)	0.06	0.04	-0.02	0.14		
Fr:Fu	P(I)	-0.05	0.02	-0.09	-0.02		
Fr:Colour	E(I)	-0.06	0.03	-0.12	-0.00		
Fr:Colour	G(Ia)	0.18	0.06	0.07	0.29		
Fr:Colour	P(I)	-0.00	0.02	-0.04	0.03		
Fr:Fly	E(I)	0.02	0.03	-0.04	0.07		
Fr:Fly	G(Ia)	-0.01	0.08	-0.16	0.14		
Fr:Fly	P(I)	0.01	0.02	-0.02	0.05		
Fr:Flcrot	E(I)	-0.00	0.03	-0.06	0.05		
Fr:Flcrot	G(Ia)	0.20	0.16	-0.12	0.52		
Fr:Flcrot	P(I)	0.01	0.02	-0.02	0.05		
Fr:Bactst	E(I)	-0.00	0.04	-0.08	0.07		
Fr:Bactst	G(Ia)	0.29	0.12	0.05	0.53		
Fr:Bactst	P(I)	0.04	0.02	-0.00	0.09		
Fr:MycD	E(I)	0.02	0.04	-0.05	0.09		
Fr:MycD	G(Ia)	0.43	0.30	-0.16	1.03		
Fr:MycD	P(I)	0.05	0.02	0.01	0.10		
Fr:Bcts	E(I)	-0.05	0.05	-0.16	0.06		
Fr:Bcts	G(Ia)	-0.02	0.03	-0.07	0.04		
Fr:Bcts	P(I)	-0.03	0.02	-0.07	0.01		
Fr:Bctb	E(I)	-0.08	0.05	-0.19	0.02		
Fr:Bctb	G(Ia)	0.02	0.03	-0.04	0.07		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fr:Bctb	P(I)	-0.03	0.02	-0.06	0.01		
Fr:Weanwt	E(I)	0.26	0.03	0.20	0.33		
Fr:Weanwt	G(Ia)	-0.49	0.05	-0.59	-0.38		
Fr:Weanwt	P(I)	0.04	0.02	0.00	0.08		
Fr:NLB	E(I)	-0.17	0.03	-0.22	-0.11		
Fr:NLB	G(Ia)	0.08	0.05	-0.02	0.18		
Fr:NLB	P(I)	-0.10	0.02	-0.14	-0.07		
Fr:NLW	E(I)	-0.15	0.03	-0.21	-0.10		
Fr:NLW	G(Ia)	0.12	0.05	0.02	0.22		
Fr:NLW	P(I)	-0.08	0.02	-0.12	-0.05		
Fr:Fnpua	E(I)	-0.43	0.02	-0.48	-0.38		
Fr:Fnpua	G(Ia)	-0.52	0.04	-0.60	-0.45		
Fr:Fnpua	P(I)	-0.45	0.01	-0.48	-0.42		
Fr:Fnsua	E(I)	0.55	0.02	0.51	0.60		
Fr:Fnsua	G(Ia)	0.53	0.03	0.47	0.59		
Fr:Fnsua	P(I)	0.55	0.01	0.52	0.57		
Fr:Fnpt	$\mid E(I) \mid$	-0.41	0.03	-0.46	-0.37		
Fr:Fnpt	G(Ia)	-0.53	0.04	-0.60	-0.46		
Fr:Fnpt	P(I)	-0.45	0.01	-0.48	-0.42		
Fr:Fnst	$\mid E(I) \mid$	0.58	0.02	0.53	0.62		
Fr:Fnst	G(Ia)	0.47	0.03	0.40	0.53		
Fr:Fnst	P(I)	0.54	0.01	0.52	0.57		
Fnt:Stal	E(I)	-0.07	0.03	-0.13	-0.01		
Fnt:Stal	G(Ia)	-0.06	0.04	-0.14	0.01		
Fnt:Stal	P(I)	-0.07	0.02	-0.11	-0.04		
Fnt:Diam	$\mid E(I) \mid$	-0.38	0.03	-0.44	-0.32		
Fnt:Diam	G(Ia)	-0.51	0.03	-0.56	-0.45		
Fnt:Diam	P(I)	-0.42	0.02	-0.45	-0.39		
Fnt:Bwt	E(I)	0.21	0.03	0.15	0.27		
Fnt:Bwt	G(Ia)	0.26	0.03	0.20	0.33		
Fnt:Bwt	P(I)	0.22	0.02	0.19	0.26		
Fnt:WrN	E(I)	0.14	0.03	0.08	0.20		
Fnt:WrN	G(Ia)	-0.29	0.04	-0.36	-0.22		
Fnt:WrN	P(I)	-0.01	0.02	-0.04	0.03		
Fnt:WrB	E(I)	0.18	0.03	0.12	0.24		
Fnt:WrB	G(Ia)	-0.34	0.04	-0.41	-0.26		
Fnt:WrB	P(I)	0.00	0.02	-0.03	0.04		
Fnt:WrT	E(I)	0.19	0.03	0.12	0.25		
Fnt:WrT	G(Ia)	-0.33	0.03	-0.40	-0.27		
Fnt:WrT	P(I)	-0.00	0.02	-0.04	0.03		
Fnt:Face	E(I)	0.12	0.05	0.02	0.22		
Fnt:Face	G(Ia)	-0.07	0.03	-0.12	-0.02		
Fnt:Face	P(I)	0.02	0.02	-0.02	0.05		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnt:Gfw	E(I)	0.22	0.03	0.16	0.28		
Fnt:Gfw	G(Ia)	-0.10	0.04	-0.17	-0.02		
Fnt:Gfw	P(I)	0.11	0.02	0.08	0.15		
Fnt:Yld	E(I)	-0.03	0.03	-0.10	0.04		
Fnt:Yld	G(Ia)	0.43	0.03	0.37	0.49		
Fnt:Yld	P(I)	0.14	0.02	0.11	0.18		
Fnt:Cww	E(I)	0.21	0.03	0.15	0.26		
Fnt:Cww	G(Ia)	0.11	0.04	0.03	0.18		
Fnt:Cww	P(I)	0.17	0.02	0.14	0.21		
Fnt:Staladj	E(I)	-0.07	0.03	-0.13	-0.01		
Fnt:Staladj	G(Ia)	-0.08	0.04	-0.16	-0.00		
Fnt:Staladj	P(I)	-0.07	0.02	-0.11	-0.04		
Fnt:Gfwadj	E(I)	0.20	0.03	0.14	0.26		
Fnt:Gfwadj	G(Ia)	-0.11	0.04	-0.19	-0.04		
Fnt:Gfwadj	P(I)	0.10	0.02	0.07	0.13		
Fnt:Cwwadj	E(I)	0.20	0.03	0.14	0.26		
Fnt:Cwwadj	G(Ia)	0.09	0.04	0.01	0.16		
Fnt:Cwwadj	P(I)	0.16	0.02	0.13	0.20		
Fnt:Crimp	E(I)	0.76	0.14	0.48	1.03		
Fnt:Crimp	G(Ia)	-0.46	0.04	-0.53	-0.39		
Fnt:Crimp	P(I)	-0.04	0.02	-0.08	0.00		
Fnt:Crwvl	E(I)	-0.47	0.07	-0.60	-0.34		
Fnt:Crwvl	G(Ia)	0.48	0.04	0.40	0.57		
Fnt:Crwvl	P(I)	-0.00	0.02	-0.05	0.04		
Fnt:Crst	E(I)	0.45	0.07	0.30	0.59		
Fnt:Crst	G(Ia)	-0.63	0.04	-0.71	-0.54		
Fnt:Crst	P(I)	-0.09	0.02	-0.14	-0.05		
Fnt:Crstadj	E(I)	0.39	0.07	0.25	0.52		
Fnt:Crstadj	G(Ia)	-0.61	0.04	-0.69	-0.52		
Fnt:Crstadj	P(I)	-0.09	0.02	-0.14	-0.04		
Fnt:Crwvt	E(I)	-0.33	0.05	-0.43	-0.22		
Fnt:Crwvt	G(Ia)	0.64	0.05	0.54	0.74		
Fnt:Crwvt	P(I)	0.07	0.02	0.02	0.11		
Fnt:Dp	E(I)	-0.33	0.07	-0.47	-0.20		
Fnt:Dp	G(Ia)	-0.11	0.07	-0.25	0.03		
Fnt:Dp	P(I)	-0.24	0.03	-0.30	-0.17		
Fnt:Ds	E(I)	-0.31	0.06	-0.42	-0.20		
Fnt:Ds	G(Ia)	-0.69	0.07	-0.83	-0.55		
Fnt:Ds	P(I)	-0.43	0.03	-0.49	-0.38		
Fnt:Dps	E(I)	-0.32	0.06	-0.43	-0.21		
Fnt:Dps	G(Ia)	-0.71	0.07	-0.85	-0.57		
Fnt:Dps	P(I)	-0.44	0.03	-0.50	-0.39		
Fnt:DpovDs	E(I)	-0.18	0.12	-0.41	0.05		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnt:DpovDs	G(Ia)	0.25	0.06	0.13	0.37		
Fnt:DpovDs	P(I)	0.05	0.03	-0.01	0.12		
Fnt:CVDp	E(I)	-0.02	0.06	-0.13	0.10		
Fnt:CVDp	G(Ia)	-0.21	0.10	-0.40	-0.02		
Fnt:CVDp	P(I)	-0.07	0.03	-0.14	-0.01		
Fnt:CVDs	E(I)	0.04	0.06	-0.07	0.16		
Fnt:CVDs	G(Ia)	0.04	0.10	-0.17	0.24		
Fnt:CVDs	P(I)	0.04	0.03	-0.02	0.11		
Fnt:MaxDp	E(I)	-0.25	0.07	-0.38	-0.12		
Fnt:MaxDp	G(Ia)	-0.07	0.08	-0.22	0.08		
Fnt:MaxDp	P(I)	-0.18	0.03	-0.24	-0.11		
Fnt:MinDp	E(I)	-0.11	0.05	-0.22	-0.01		
Fnt:MinDp	G(Ia)	-0.15	0.19	-0.53	0.23		
Fnt:MinDp	P(I)	-0.12	0.03	-0.18	-0.05		
Fnt:MaxDs	E(I)	-0.15	0.05	-0.26	-0.05		
Fnt:MaxDs	G(Ia)	-0.50	0.12	-0.73	-0.26		
Fnt:MaxDs	P(I)	-0.23	0.03	-0.29	-0.17		
Fnt:MinDs	E(I)	-0.07	0.05	-0.17	0.03		
Fnt:MinDs	G(Ia)	-0.10	0.19	-0.48	0.28		
Fnt:MinDs	P(I)	-0.07	0.03	-0.13	-0.00		
Fnt:SDDp	E(I)	-0.18	0.07	-0.31	-0.05		
Fnt:SDDp	G(Ia)	-0.15	0.08	-0.30	0.00		
Fnt:SDDp	P(I)	-0.17	0.03	-0.23	-0.10		
Fnt:SDDs	E(I)	-0.13	0.06	-0.26	-0.01		
Fnt:SDDs	G(Ia)	-0.35	0.08	-0.52	-0.19		
Fnt:SDDs	P(I)	-0.21	0.03	-0.27	-0.14		
Fnt:SDD	E(I)	-0.16	0.06	-0.28	-0.04		
Fnt:SDD	G(Ia)	-0.36	0.08	-0.52	-0.20		
Fnt:SDD	P(I)	-0.23	0.03	-0.29	-0.16		
Fnt:CVD	E(I)	0.03	0.06	-0.09	0.15		
Fnt:CVD	G(Ia)	0.02	0.10	-0.17	0.21		
Fnt:CVD	P(I)	0.03	0.03	-0.04	0.09		
Fnt:Gt30Dp	E(I)	-0.22	0.07	-0.35	-0.09		
Fnt:Gt30Dp	G(Ia)	-0.20	0.08	-0.35	-0.05		
Fnt:Gt30Dp	P(I)	-0.21	0.03	-0.27	-0.14		
Fnt:Gt30Ds	E(I)	-0.25	0.05	-0.36	-0.14		
Fnt:Gt30Ds	G(Ia)	-0.48	0.09	-0.67	-0.30		
Fnt:Gt30Ds	P(I)	-0.32	0.03	-0.38	-0.25		
Fnt:Gt30D	E(I)	-0.28	0.05	-0.39	-0.18		
Fnt:Gt30D	G(Ia)	-0.50	0.09	-0.67	-0.33		
Fnt:Gt30D	P(I)	-0.35	0.03	-0.41	-0.28		
Fnt:Fnua	E(I)	0.89	0.01	0.87	0.91		
Fnt:Fnua	G(Ia)	0.88	0.01	0.86	0.91		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnt:Fnua	P(I)	0.89	0.01	0.88	0.90		
Fnt:Fr	E(I)	0.54	0.02	0.50	0.59		
Fnt:Fr	G(Ia)	0.43	0.03	0.36	0.49		
Fnt:Fr	P(I)	0.51	0.01	0.48	0.54		
Fnt:Fnt	E(I)	1.00	0.00	1.00	1.00		
Fnt:Fnt	G(Ia)	1.00	0.00	1.00	1.00		
Fnt:Fnt	P(I)	1.00	0.00	1.00	1.00		
Fnt:Sarea	E(I)	0.21	0.03	0.15	0.27		
Fnt:Sarea	G(Ia)	0.27	0.04	0.20	0.34		
Fnt:Sarea	P(I)	0.23	0.02	0.19	0.26		
Fnt:Fd	E(I)	0.13	0.03	0.07	0.19		
Fnt:Fd	G(Ia)	-0.14	0.06	-0.25	-0.03		
Fnt:Fd	P(I)	0.06	0.02	0.02	0.10		
Fnt:Fc	E(I)	0.01	0.05	-0.08	0.11		
Fnt:Fc	G(Ia)	-0.55	0.03	-0.60	-0.49		
Fnt:Fc	P(I)	-0.25	0.02	-0.28	-0.21		
Fnt:Fu	E(I)	-0.05	0.04	-0.12	0.02		
Fnt:Fu	G(Ia)	-0.37	0.04	-0.45	-0.30		
Fnt:Fu	P(I)	-0.16	0.02	-0.20	-0.13		
Fnt:Colour	E(I)	-0.06	0.03	-0.12	-0.00		
Fnt:Colour	G(Ia)	0.18	0.05	0.07	0.29		
Fnt:Colour	P(I)	-0.00	0.02	-0.04	0.03		
Fnt:Fly	E(I)	-0.02	0.03	-0.08	0.03		
Fnt:Fly	G(Ia)	0.28	0.08	0.13	0.43		
Fnt:Fly	P(I)	0.03	0.02	-0.01	0.07		
Fnt:Flcrot	E(I)	-0.02	0.03	-0.07	0.03		
Fnt:Flcrot	G(Ia)	0.37	0.18	0.02	0.71		
Fnt:Flcrot	P(I)	0.02	0.02	-0.02	0.05		
Fnt:Bactst	E(I)	-0.03	0.04	-0.10	0.04		
Fnt:Bactst	G(Ia)	0.33	0.13	0.07	0.59		
Fnt:Bactst	P(I)	0.02	0.02	-0.02	0.07		
Fnt:MycD	E(I)	-0.01	0.03	-0.07	0.06		
Fnt:MycD	G(Ia)	0.15	0.27	-0.39	0.68		
Fnt:MycD	P(I)	0.00	0.02	-0.04	0.05		
Fnt:Bcts	E(I)	-0.08	0.05	-0.18	0.03		
Fnt:Bcts	G(Ia)	0.03	0.03	-0.03	0.09		
Fnt:Bcts	P(I)	-0.02	0.02	-0.06	0.02		
Fnt:Bctb	E(I)	-0.10	0.05	-0.20	0.00		
Fnt:Bctb	G(Ia)	0.04	0.03	-0.02	0.10		
Fnt:Bctb	P(I)	-0.02	0.02	-0.06	0.01		
Fnt:Weanwt	E(I)	0.31	0.03	0.25	0.37		
Fnt:Weanwt	G(Ia)	-0.19	0.05	-0.29	-0.08		
Fnt:Weanwt	P(I)	0.17	0.02	0.14	0.21		

Table 24 – Continued from previous page

Table 24 – Continued from previous page								
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi			
Fnt:NLB	E(I)	-0.22	0.03	-0.27	-0.16			
Fnt:NLB	G(Ia)	0.05	0.05	-0.05	0.15			
Fnt:NLB	P(I)	-0.15	0.02	-0.18	-0.11			
Fnt:NLW	E(I)	-0.20	0.03	-0.25	-0.14			
Fnt:NLW	G(Ia)	0.13	0.05	0.04	0.23			
Fnt:NLW	P(I)	-0.12	0.02	-0.15	-0.08			
Fnt:Fnpua	E(I)	0.32	0.03	0.27	0.37			
Fnt:Fnpua	G(Ia)	0.45	0.04	0.37	0.53			
Fnt:Fnpua	P(I)	0.35	0.02	0.32	0.38			
Fnt:Fnsua	E(I)	0.90	0.01	0.88	0.92			
Fnt:Fnsua	G(Ia)	0.88	0.01	0.85	0.91			
Fnt:Fnsua	P(I)	0.89	0.01	0.88	0.90			
Fnt:Fnpt	E(I)	0.42	0.02	0.37	0.47			
Fnt:Fnpt	G(Ia)	0.53	0.04	0.46	0.60			
Fnt:Fnpt	P(I)	0.45	0.01	0.42	0.48			
Fnt:Fnst	E(I)	1.00	0.00	1.00	1.00			
Fnt:Fnst	G(Ia)	1.00	0.00	1.00	1.00			
Fnt:Fnst	P(I)	1.00	0.00	1.00	1.00			
Sarea:Stal	E(I)	0.26	0.03	0.20	0.32			
Sarea:Stal	G(Ia)	0.10	0.03	0.04	0.17			
Sarea:Stal	P(I)	0.20	0.02	0.17	0.24			
Sarea:Diam	E(I)	0.21	0.03	0.14	0.28			
Sarea:Diam	G(Ia)	0.15	0.03	0.09	0.21			
Sarea:Diam	P(I)	0.18	0.02	0.15	0.22			
Sarea:Bwt	E(I)	1.00	0.00	1.00	1.00			
Sarea:Bwt	G(Ia)	1.00	0.00	1.00	1.00			
Sarea:Bwt	P(I)	1.00	0.00	1.00	1.00			
Sarea:WrN	E(I)	0.25	0.03	0.19	0.32			
Sarea:WrN	G(Ia)	-0.38	0.03	-0.45	-0.31			
Sarea:WrN	P(I)	0.02	0.02	-0.01	0.06			
Sarea:WrB	E(I)	0.28	0.03	0.21	0.35			
Sarea:WrB	G(Ia)	-0.39	0.03	-0.46	-0.33			
Sarea:WrB	P(I)	0.03	0.02	-0.00	0.06			
Sarea:WrT	E(I)	0.30	0.03	0.23	0.37			
Sarea:WrT	G(Ia)	-0.39	0.03	-0.46	-0.33			
Sarea:WrT	P(I)	0.03	0.02	-0.00	0.06			
Sarea:Face	E(I)	-0.07	0.05	-0.17	0.03			
Sarea:Face	G(Ia)	-0.30	0.02	-0.34	-0.25			
Sarea:Face	P(I)	-0.18	0.02	-0.21	-0.15			
Sarea:Gfw	E(I)	0.58	0.03	0.53	0.63			
Sarea:Gfw	G(Ia)	0.23	0.03	0.17	0.29			
Sarea:Gfw	P(I)	0.45	0.01	0.42	0.48			
Sarea:Yld	E(I)	0.05	0.04	-0.02	0.12			

Table 24 – Continued from previous page

Table 24 – Continued from previous page								
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi			
Sarea:Yld	G(Ia)	-0.01	0.03	-0.07	0.05			
Sarea:Yld	P(I)	0.03	0.02	-0.01	0.06			
Sarea:Cww	$\mid E(I) \mid$	0.58	0.03	0.53	0.63			
Sarea:Cww	G(Ia)	0.22	0.03	0.16	0.28			
Sarea:Cww	P(I)	0.45	0.01	0.42	0.48			
Sarea:Staladj	E(I)	0.23	0.03	0.17	0.29			
Sarea:Staladj	G(Ia)	0.12	0.03	0.05	0.18			
Sarea:Staladj	P(I)	0.19	0.02	0.16	0.23			
Sarea:Gfwadj	$\mid E(I) \mid$	0.53	0.03	0.48	0.59			
Sarea:Gfwadj	G(Ia)	0.23	0.03	0.17	0.29			
Sarea:Gfwadj	P(I)	0.42	0.02	0.39	0.45			
Sarea:Cwwadj	$\mid E(I) \mid$	0.54	0.03	0.48	0.59			
Sarea:Cwwadj	G(Ia)	0.22	0.03	0.16	0.29			
Sarea:Cwwadj	P(I)	0.43	0.02	0.40	0.46			
Sarea:Crimp	E(I)	0.20	0.11	-0.01	0.41			
Sarea:Crimp	G(Ia)	-0.18	0.03	-0.24	-0.12			
Sarea:Crimp	P(I)	-0.05	0.02	-0.10	-0.01			
Sarea:Crwvl	E(I)	-0.24	0.07	-0.37	-0.11			
Sarea:Crwvl	G(Ia)	0.22	0.04	0.14	0.29			
Sarea:Crwvl	P(I)	0.00	0.02	-0.04	0.05			
Sarea:Crst	E(I)	0.55	0.07	0.41	0.69			
Sarea:Crst	G(Ia)	-0.21	0.04	-0.28	-0.13			
Sarea:Crst	P(I)	0.12	0.02	0.08	0.17			
Sarea:Crstadj	E(I)	0.47	0.07	0.34	0.59			
Sarea:Crstadj	G(Ia)	-0.18	0.04	-0.25	-0.10			
Sarea:Crstadj	P(I)	0.12	0.02	0.08	0.17			
Sarea:Crwvt	$\mid E(I) \mid$	-0.41	0.05	-0.51	-0.31			
Sarea:Crwvt	G(Ia)	0.21	0.04	0.13	0.29			
Sarea:Crwvt	P(I)	-0.13	0.02	-0.18	-0.09			
Sarea:Dp	$\mid E(I) \mid$	0.13	0.07	-0.01	0.27			
Sarea:Dp	G(Ia)	-0.26	0.07	-0.40	-0.11			
Sarea:Dp	P(I)	-0.03	0.03	-0.09	0.04			
Sarea:Ds	E(I)	0.12	0.06	-0.01	0.24			
Sarea:Ds	G(Ia)	0.34	0.08	0.18	0.49			
Sarea:Ds	P(I)	0.19	0.03	0.13	0.26			
Sarea:Dps	E(I)	0.12	0.06	-0.00	0.24			
Sarea:Dps	G(Ia)	0.32	0.08	0.16	0.48			
Sarea:Dps	P(I)	0.18	0.03	0.12	0.25			
Sarea:DpovDs	E(I)	0.06	0.12	-0.18	0.30			
Sarea:DpovDs	G(Ia)	-0.40	0.06	-0.51	-0.29			
Sarea:DpovDs	P(I)	-0.17	0.03	-0.23	-0.11			
Sarea:CVDp	E(I)	-0.04	0.06	-0.16	0.08			
Sarea:CVDp	G(Ia)	0.03	0.09	-0.15	0.21			

Table 24 – Continued from previous page

Sarea:CVDp	Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Sarea:CVDs		_				
Sarea:CVDs	_					
Sarea:CVDs		' '				
Sarea:MaxDp E(I) 0.04 0.07 -0.10 0.18		l ' '				
Sarea:MaxDp						
Sarea:MaxDp	1					
Sarea:MinDp G(Ia) -0.53 -0.02 -0.02 -0.18	_	\ /				
Sarea:MinDp	_	' '				
Sarea:MinDp	_					
Sarea:MaxDs E(I) -0.00 0.06 -0.13 0.12 Sarea:MaxDs G(Ia) 0.17 0.12 -0.06 0.40 Sarea:MaxDs P(I) 0.04 0.03 -0.03 0.11 Sarea:MinDs E(I) 0.12 0.05 0.02 0.22 Sarea:MinDs P(I) 0.06 0.03 -0.01 0.12 Sarea:MinDs P(I) 0.06 0.03 -0.01 0.12 Sarea:MinDs P(I) 0.06 0.03 -0.01 0.12 Sarea:SDDp E(I) 0.04 0.07 -0.09 0.18 Sarea:SDDp G(Ia) -0.15 0.07 -0.30 -0.00 Sarea:SDDp E(I) -0.03 0.03 -0.09 0.04 Sarea:SDDs E(I) -0.10 0.07 -0.22 0.03 Sarea:SDDs P(I) 0.00 0.03 -0.03 -0.07 Sarea:SDD E(I) -0.08 0.07 -0.21	1	\ /				
Sarea:MaxDs	1	' '				
Sarea:MaxDs		' '				
Sarea:MinDs E(I) 0.12 0.05 0.02 0.22 Sarea:MinDs G(Ia) -0.27 0.20 -0.67 0.13 Sarea:MinDs P(I) 0.06 0.03 -0.01 0.12 Sarea:SDDp E(I) 0.04 0.07 -0.09 0.18 Sarea:SDDp G(Ia) -0.15 0.07 -0.30 -0.00 Sarea:SDDp P(I) -0.03 0.03 -0.09 0.04 Sarea:SDDs E(I) -0.10 0.07 -0.22 0.03 Sarea:SDDs G(Ia) 0.19 0.08 0.03 0.35 Sarea:SDD F(I) -0.08 0.07 -0.21 0.05 Sarea:SDD G(Ia) 0.15 0.08 -0.01 0.31 Sarea:CVD F(I) 0.00 0.03 -0.07 0.07 Sarea:CVD G(Ia) -0.04 0.09 -0.22 0.14 Sarea:Gt30Dp E(I) -0.04 0.09 -0.22 <t< td=""><td></td><td>l ' '</td><td></td><td></td><td></td><td></td></t<>		l ' '				
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:CVD	G(Ia)	-0.04	0.09	-0.22	0.14
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:CVD	l ' '	-0.12	0.03	-0.19	-0.06
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Dp		0.06	0.07	-0.07	0.20
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Dp	G(Ia)	-0.31	0.08	-0.46	-0.16
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Dp	P(I)	-0.08	0.03	-0.14	-0.01
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Ds	E(I)	-0.05	0.06	-0.17	0.06
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Ds	G(Ia)	0.19	0.10	-0.01	0.39
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30Ds	P(I)	0.01	0.03	-0.05	0.08
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sarea:Gt30D		-0.04	0.06	-0.15	0.08
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sarea:Gt30D	G(Ia)	0.07	0.10	-0.12	0.26
Sarea:Fnua G(Ia) -0.22 0.04 -0.29 -0.14 Sarea:Fnua P(I) -0.23 0.02 -0.26 -0.19 Sarea:Fr E(I) 0.05 0.03 -0.01 0.12 Sarea:Fr G(Ia) -0.11 0.04 -0.18 -0.04	Sarea:Gt30D	P(I)	-0.00	0.03	-0.07	0.06
	Sarea:Fnua			0.03		-0.17
	Sarea:Fnua	\ /			-0.29	-0.14
Sarea:Fr G(Ia) -0.11 0.04 -0.18 -0.04					-0.26	-0.19
	1					
Sarea:Fr						
Continued on next nage	Sarea:Fr	P(I)	0.00		-0.03	0.04

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Sarea:Fnt	E(I)	0.21	0.03	0.15	0.27		
Sarea:Fnt	G(Ia)	0.27	0.04	0.20	0.34		
Sarea:Fnt	P(I)	0.23	0.02	0.19	0.26		
Sarea:Sarea	E(I)	1.00	0.00	1.00	1.00		
Sarea:Sarea	G(Ia)	1.00	0.00	1.00	1.00		
Sarea:Sarea	P(I)	1.00	0.00	1.00	1.00		
Sarea:Fd	E(I)	0.19	0.03	0.13	0.26		
Sarea:Fd	G(Ia)	0.00	0.04	-0.08	0.08		
Sarea:Fd	P(I)	0.14	0.02	0.10	0.17		
Sarea:Fc	$\mid E(I) \mid$	0.24	0.05	0.14	0.34		
Sarea:Fc	G(Ia)	-0.13	0.03	-0.18	-0.07		
Sarea:Fc	P(I)	0.05	0.02	0.01	0.08		
Sarea:Fu	$\mid E(I) \mid$	0.09	0.04	0.01	0.16		
Sarea:Fu	G(Ia)	-0.04	0.04	-0.11	0.03		
Sarea:Fu	P(I)	0.04	0.02	-0.00	0.08		
Sarea:Colour	E(I)	-0.07	0.03	-0.13	-0.01		
Sarea:Colour	G(Ia)	-0.06	0.05	-0.16	0.04		
Sarea:Colour	P(I)	-0.07	0.02	-0.10	-0.03		
Sarea:Fly	$\mid E(I) \mid$	-0.04	0.03	-0.09	0.02		
Sarea:Fly	G(Ia)	0.24	0.07	0.10	0.38		
Sarea:Fly	P(I)	0.02	0.02	-0.02	0.05		
Sarea:Flcrot	$\mid E(I) \mid$	-0.04	0.03	-0.09	0.02		
Sarea:Flcrot	G(Ia)	-0.17	0.15	-0.45	0.12		
Sarea:Flcrot	P(I)	-0.04	0.02	-0.08	-0.01		
Sarea:Bactst	$\mid E(I) \mid$	-0.11	0.04	-0.18	-0.04		
Sarea:Bactst	G(Ia)	0.33	0.13	0.07	0.59		
Sarea:Bactst	P(I)	-0.04	0.02	-0.09	0.00		
Sarea:MycD	$\mid E(I) \mid$	-0.07	0.03	-0.14	-0.00		
Sarea:MycD	G(Ia)	0.17	0.28	-0.38	0.73		
Sarea:MycD	P(I)	-0.05	0.02	-0.09	-0.00		
Sarea:Bcts	E(I)	0.02	0.05	-0.08	0.12		
Sarea:Bcts	G(Ia)	-0.01	0.03	-0.07	0.05		
Sarea:Bcts	P(I)	0.00	0.02	-0.03	0.04		
Sarea:Bctb	$\mid E(I) \mid$	0.06	0.05	-0.04	0.16		
Sarea:Bctb	G(Ia)	-0.06	0.03	-0.12	0.00		
Sarea:Bctb	P(I)	-0.00	0.02	-0.04	0.04		
Sarea:Weanwt	E(I)	0.50	0.03	0.45	0.55		
Sarea:Weanwt	G(Ia)	0.73	0.04	0.65	0.80		
Sarea:Weanwt	P(I)	0.56	0.01	0.53	0.59		
Sarea:NLB	E(I)	-0.13	0.03	-0.18	-0.07		
Sarea:NLB	G(Ia)	-0.22	0.04	-0.31	-0.14		
Sarea:NLB	P(I)	-0.15	0.02	-0.18	-0.12		
Sarea:NLW	E(I)	-0.13	0.03	-0.19	-0.07		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Sarea:NLW	G(Ia)	-0.18	0.05	-0.26	-0.09		
Sarea:NLW	P(I)	-0.14	0.02	-0.17	-0.10		
Sarea:Fnpua	E(I)	-0.29	0.03	-0.35	-0.23		
Sarea:Fnpua	G(Ia)	-0.07	0.04	-0.15	0.01		
Sarea:Fnpua	P(I)	-0.22	0.02	-0.25	-0.19		
Sarea:Fnsua	$\mid E(I) \mid$	-0.23	0.03	-0.29	-0.17		
Sarea:Fnsua	G(Ia)	-0.22	0.04	-0.29	-0.14		
Sarea:Fnsua	P(I)	-0.22	0.02	-0.26	-0.19		
Sarea:Fnpt	$\mid E(I) \mid$	0.13	0.03	0.07	0.19		
Sarea:Fnpt	G(Ia)	0.41	0.04	0.34	0.49		
Sarea:Fnpt	P(I)	0.22	0.02	0.18	0.25		
Sarea:Fnst	E(I)	0.21	0.03	0.15	0.27		
Sarea:Fnst	G(Ia)	0.25	0.04	0.18	0.32		
Sarea:Fnst	P(I)	0.22	0.02	0.19	0.26		
Fd:Stal	E(I)	0.16	0.03	0.10	0.22		
Fd:Stal	G(Ia)	0.42	0.05	0.32	0.53		
Fd:Stal	P(I)	0.22	0.02	0.18	0.26		
Fd:Diam	E(I)	0.06	0.03	-0.01	0.13		
Fd:Diam	G(Ia)	0.27	0.05	0.17	0.36		
Fd:Diam	P(I)	0.12	0.02	0.08	0.15		
Fd:Bwt	E(I)	0.19	0.03	0.12	0.25		
Fd:Bwt	G(Ia)	0.01	0.05	-0.08	0.11		
Fd:Bwt	P(I)	0.13	0.02	0.10	0.17		
Fd:WrN	E(I)	0.16	0.03	0.09	0.22		
Fd:WrN	G(Ia)	0.19	0.05	0.09	0.29		
Fd:WrN	P(I)	0.16	0.02	0.12	0.20		
Fd:WrB	E(I)	0.22	0.03	0.15	0.28		
Fd:WrB	G(Ia)	0.13	0.05	0.04	0.23		
Fd:WrB	P(I)	0.19	0.02	0.15	0.22		
Fd:WrT	E(I)	0.22	0.03	0.16	0.29		
Fd:WrT	G(Ia)	0.16	0.05	0.07	0.25		
Fd:WrT	P(I)	0.20	0.02	0.16	0.23		
Fd:Face	E(I)	-0.12	0.05	-0.22	-0.01		
Fd:Face	G(Ia)	-0.13	0.04	-0.20	-0.05		
Fd:Face	P(I)	-0.10	0.02	-0.14	-0.06		
Fd:Gfw	E(I)	0.17	0.03	0.11	0.23		
Fd:Gfw	G(Ia)	0.51	0.05	0.41	0.61		
Fd:Gfw	P(I)	0.25	0.02	0.22	0.29		
Fd:Yld	E(I)	-0.04	0.04	-0.11	0.03		
Fd:Yld	G(Ia)	-0.15	0.05	-0.24	-0.06		
Fd:Yld	P(I)	-0.07	0.02	-0.11	-0.03		
Fd:Cww	E(I)	0.15	0.03	0.09	0.21		
Fd:Cww	G(Ia)	0.43	0.05	0.33	0.53		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fd:Cww	P(I)	0.22	0.02	0.18	0.25		
Fd:Staladj	E(I)	0.15	0.03	0.10	0.21		
Fd:Staladj	G(Ia)	0.42	0.06	0.32	0.53		
Fd:Staladj	P(I)	0.22	0.02	0.18	0.25		
Fd:Gfwadj	E(I)	0.15	0.03	0.09	0.21		
Fd:Gfwadj	G(Ia)	0.50	0.05	0.40	0.60		
Fd:Gfwadj	P(I)	0.24	0.02	0.20	0.27		
Fd:Cwwadj	E(I)	0.14	0.03	0.08	0.20		
Fd:Cwwadj	G(Ia)	0.43	0.06	0.32	0.54		
Fd:Cwwadj	P(I)	0.21	0.02	0.17	0.24		
Fd:Crimp	E(I)	-0.23	0.14	-0.50	0.04		
Fd:Crimp	G(Ia)	-0.64	0.04	-0.73	-0.56		
Fd:Crimp	P(I)	-0.32	0.02	-0.36	-0.27		
Fd:Crwvl	E(I)	-0.11	0.07	-0.24	0.02		
Fd:Crwvl	G(Ia)	0.61	0.05	0.51	0.71		
Fd:Crwvl	P(I)	0.17	0.02	0.12	0.22		
Fd:Crst	E(I)	0.27	0.07	0.13	0.40		
Fd:Crst	G(Ia)	-0.49	0.05	-0.59	-0.38		
Fd:Crst	P(I)	-0.05	0.03	-0.10	-0.01		
Fd:Crstadj	E(I)	0.26	0.07	0.13	0.39		
Fd:Crstadj	G(Ia)	-0.51	0.05	-0.62	-0.41		
Fd:Crstadj	P(I)	-0.06	0.03	-0.11	-0.01		
Fd:Crwvt	E(I)	-0.23	0.05	-0.33	-0.12		
Fd:Crwvt	G(Ia)	0.43	0.06	0.32	0.54		
Fd:Crwvt	P(I)	0.01	0.02	-0.04	0.06		
Fd:Dp	E(I)	0.27	0.09	0.08	0.45		
Fd:Dp	G(Ia)	0.15	0.13	-0.11	0.41		
Fd:Dp	P(I)	0.21	0.04	0.13	0.30		
Fd:Ds	E(I)	0.28	0.09	0.11	0.45		
Fd:Ds	G(Ia)	0.01	0.10	-0.19	0.22		
Fd:Ds	P(I)	0.19	0.04	0.10	0.27		
Fd:Dps	E(I)	0.27	0.08	0.11	0.44		
Fd:Dps	G(Ia)	0.03	0.13	-0.22	0.29		
Fd:Dps	P(I)	0.20	0.04	0.11	0.28		
Fd:DpovDs	E(I)	0.11	0.19	-0.27	0.50		
Fd:DpovDs	G(Ia)	0.11	0.10	-0.08	0.31		
Fd:DpovDs	P(I)	0.08	0.04	-0.00	0.16		
Fd:CVDp	E(I)	0.05	0.08	-0.11	0.20		
Fd:CVDp	G(Ia)	0.01	0.18	-0.34	0.36		
Fd:CVDp	P(I)	0.04	0.05	-0.05	0.13		
Fd:CVDs	E(I)	-0.20	0.08	-0.36	-0.03		
Fd:CVDs	G(Ia)	0.33	0.20	-0.06	0.71		
Fd:CVDs	P(I)	-0.06	0.05	-0.15	0.03		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fd:MaxDp	E(I)	0.16	0.09	-0.01	0.34		
Fd:MaxDp	G(Ia)	0.07	0.16	-0.24	0.38		
Fd:MaxDp	P(I)	0.14	0.05	0.05	0.22		
Fd:MinDp	E(I)	0.11	0.07	-0.03	0.25		
Fd:MinDp	G(Ia)	0.16	0.40	-0.62	0.95		
Fd:MinDp	P(I)	0.11	0.05	0.02	0.20		
Fd:MaxDs	E(I)	0.07	0.07	-0.08	0.21		
Fd:MaxDs	G(Ia)	0.26	0.28	-0.28	0.81		
Fd:MaxDs	P(I)	0.10	0.05	0.01	0.19		
Fd:MinDs	E(I)	0.07	0.07	-0.07	0.21		
Fd:MinDs	G(Ia)	-0.27	0.25	-0.76	0.23		
Fd:MinDs	P(I)	0.01	0.04	-0.08	0.09		
Fd:SDDp	E(I)	0.16	0.08	-0.00	0.32		
Fd:SDDp	G(Ia)	0.06	0.18	-0.29	0.40		
Fd:SDDp	P(I)	0.13	0.05	0.04	0.22		
Fd:SDDs	E(I)	0.04	0.10	-0.15	0.23		
Fd:SDDs	G(Ia)	0.27	0.15	-0.02	0.56		
Fd:SDDs	P(I)	0.11	0.05	0.02	0.20		
Fd:SDD	E(I)	0.06	0.10	-0.13	0.24		
Fd:SDD	G(Ia)	0.24	0.15	-0.05	0.53		
Fd:SDD	P(I)	0.11	0.05	0.02	0.20		
Fd:CVD	E(I)	-0.19	0.09	-0.35	-0.02		
Fd:CVD	G(Ia)	0.28	0.19	-0.09	0.65		
Fd:CVD	P(I)	-0.06	0.05	-0.15	0.03		
Fd:Gt30Dp	E(I)	0.07	0.09	-0.10	0.24		
Fd:Gt30Dp	G(Ia)	0.22	0.17	-0.13	0.56		
Fd:Gt30Dp	P(I)	0.11	0.05	0.02	0.20		
Fd:Gt30Ds	E(I)	0.06	0.09	-0.11	0.24		
Fd:Gt30Ds	G(Ia)	0.16	0.16	-0.16	0.47		
Fd:Gt30Ds	P(I)	0.09	0.05	-0.00	0.18		
Fd:Gt30D	E(I)	0.06	0.09	-0.11	0.24		
Fd:Gt30D	G(Ia)	0.21	0.16	-0.11	0.53		
Fd:Gt30D	P(I)	0.10	0.05	0.01	0.19		
Fd:Fnua	E(I)	0.05	0.03	-0.01	0.11		
Fd:Fnua	G(Ia)	-0.16	0.06	-0.27	-0.05		
Fd:Fnua	P(I)	-0.00	0.02	-0.04	0.04		
Fd:Fr	E(I)	0.09	0.03	0.03	0.15		
Fd:Fr	G(Ia)	0.07	0.06	-0.04	0.18		
Fd:Fr	P(I)	0.08	0.02	0.05	0.12		
Fd:Fnt	E(I)	0.13	0.03	0.07	0.19		
Fd:Fnt	G(Ia)	-0.14	0.06	-0.25	-0.03		
Fd:Fnt	P(I)	0.06	0.02	0.02	0.10		
Fd:Sarea	E(I)	0.19	0.03	0.13	0.26		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fd:Sarea	G(Ia)	0.00	0.04	-0.08	0.08
Fd:Sarea	P(I)	0.14	0.02	0.10	0.17
Fd:Fd	E(I)	1.00	0.00	1.00	1.00
Fd:Fd	G(Ia)	1.00	0.00	1.00	1.00
Fd:Fd	P(I)	1.00	0.00	1.00	1.00
Fd:Fc	E(I)	0.28	0.04	0.20	0.37
Fd:Fc	G(Ia)	-0.12	0.04	-0.21	-0.04
Fd:Fc	P(I)	0.11	0.02	0.08	0.15
Fd:Fu	E(I)	0.29	0.03	0.23	0.35
Fd:Fu	G(Ia)	0.18	0.05	0.08	0.28
Fd:Fu	P(I)	0.25	0.02	0.22	0.29
Fd:Colour	E(I)	-0.00	0.03	-0.06	0.06
Fd:Colour	G(Ia)	-0.02	0.07	-0.16	0.13
Fd:Colour	P(I)	-0.00	0.02	-0.04	0.03
Fd:Fly	E(I)	0.07	0.03	0.01	0.12
Fd:Fly	G(Ia)	-0.29	0.09	-0.47	-0.12
Fd:Fly	P(I)	0.01	0.02	-0.03	0.04
Fd:Flcrot	E(I)	0.00	0.03	-0.05	0.06
Fd:Flcrot	G(Ia)	0.07	0.24	-0.40	0.55
Fd:Flcrot	P(I)	0.01	0.02	-0.03	0.05
Fd:Bactst	E(I)	-0.01	0.04	-0.09	0.07
Fd:Bactst	G(Ia)	-0.34	0.19	-0.72	0.04
Fd:Bactst	P(I)	-0.05	0.03	-0.10	0.00
Fd:MycD	E(I)	-0.01	0.04	-0.09	0.07
Fd:MycD	G(Ia)	0.00	0.24	-0.47	0.48
Fd:MycD	P(I)	-0.01	0.03	-0.06	0.04
Fd:Bcts	E(I)	0.10	0.05	0.01	0.19
Fd:Bcts	G(Ia)	0.02	0.05	-0.07	0.12
Fd:Bcts	P(I)	0.07	0.02	0.03	0.11
Fd:Bctb	E(I)	0.12	0.05	0.03	0.21
Fd:Bctb	G(Ia)	0.01	0.05	-0.08	0.11
Fd:Bctb	P(I)	0.08	0.02	0.03	0.12
Fd:Weanwt	E(I)	-0.05	0.03	-0.11	0.02
Fd:Weanwt	G(Ia)	0.08	0.07	-0.07	0.22
Fd:Weanwt	P(I)	-0.02	0.02	-0.06	0.02
Fd:NLB	E(I)	-0.05	0.03	-0.11	0.01
Fd:NLB	G(Ia)	0.28	0.07	0.14	0.42
Fd:NLB	P(I)	0.01	0.02	-0.02	0.05
Fd:NLW	E(I)	-0.03	0.03	-0.09	0.03
Fd:NLW	G(Ia)	0.21	0.07	0.07	0.35
Fd:NLW	P(I)	0.02	0.02	-0.02	0.06
Fd:Fnpua	E(I)	-0.02	0.03	-0.08	0.03
Fd:Fnpua	G(Ia)	-0.30	0.07	-0.43	-0.16

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fd:Fnpua	P(I)	-0.08	0.02	-0.12	-0.04	
Fd:Fnsua	E(I)	0.05	0.03	-0.01	0.11	
Fd:Fnsua	G(Ia)	-0.15	0.06	-0.26	-0.04	
Fd:Fnsua	P(I)	0.00	0.02	-0.04	0.04	
Fd:Fnpt	E(I)	0.05	0.03	-0.01	0.11	
Fd:Fnpt	G(Ia)	-0.29	0.06	-0.41	-0.16	
Fd:Fnpt	P(I)	-0.03	0.02	-0.06	0.01	
Fd:Fnst	E(I)	0.13	0.03	0.07	0.19	
Fd:Fnst	G(Ia)	-0.13	0.06	-0.24	-0.02	
Fd:Fnst	P(I)	0.06	0.02	0.02	0.10	
Fc:Stal	E(I)	0.03	0.05	-0.06	0.13	
Fc:Stal	G(Ia)	-0.44	0.03	-0.50	-0.38	
Fc:Stal	P(I)	-0.19	0.02	-0.22	-0.15	
Fc:Diam	E(I)	0.62	0.05	0.54	0.71	
Fc:Diam	G(Ia)	0.13	0.02	0.08	0.18	
Fc:Diam	P(I)	0.35	0.02	0.32	0.38	
Fc:Bwt	E(I)	0.24	0.05	0.15	0.34	
Fc:Bwt	G(Ia)	-0.13	0.03	-0.19	-0.08	
Fc:Bwt	P(I)	0.05	0.02	0.01	0.08	
Fc:WrN	E(I)	0.17	0.04	0.08	0.25	
Fc:WrN	G(Ia)	0.61	0.02	0.56	0.66	
Fc:WrN	P(I)	0.38	0.02	0.34	0.41	
Fc:WrB	E(I)	0.10	0.05	0.01	0.19	
Fc:WrB	G(Ia)	0.73	0.02	0.68	0.77	
Fc:WrB	P(I)	0.42	0.02	0.38	0.45	
Fc:WrT	E(I)	0.12	0.05	0.03	0.22	
Fc:WrT	G(Ia)	0.69	0.02	0.65	0.74	
Fc:WrT	P(I)	0.42	0.02	0.39	0.45	
Fc:Face	E(I)	-0.44	0.08	-0.60	-0.29	
Fc:Face	G(Ia)	0.23	0.02	0.19	0.27	
Fc:Face	P(I)	0.02	0.02	-0.01	0.06	
Fc:Gfw	E(I)	0.38	0.05	0.29	0.47	
Fc:Gfw	G(Ia)	-0.15	0.03	-0.20	-0.09	
Fc:Gfw	P(I)	0.11	0.02	0.08	0.15	
Fc:Yld	E(I)	-0.28	0.05	-0.37	-0.18	
Fc:Yld	G(Ia)	-0.47	0.02	-0.51	-0.42	
Fc:Yld	P(I)	-0.38	0.02	-0.41	-0.34	
Fc:Cww	E(I)	0.26	0.05	0.16	0.35	
Fc:Cww	G(Ia)	-0.38	0.03	-0.43	-0.32	
Fc:Cww	P(I)	-0.05	0.02	-0.09	-0.01	
Fc:Staladj	E(I)	-0.02	0.05	-0.11	0.07	
Fc:Staladj	G(Ia)	-0.40	0.03	-0.46	-0.34	
Fc:Staladj	P(I)	-0.19	0.02	-0.22	-0.15	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fc:Gfwadj	E(I)	0.31	0.05	0.22	0.40		
Fc:Gfwadj	G(Ia)	-0.11	0.03	-0.17	-0.05		
Fc:Gfwadj	P(I)	0.11	0.02	0.07	0.14		
Fc:Cwwadj	E(I)	0.20	0.05	0.11	0.29		
Fc:Cwwadj	G(Ia)	-0.35	0.03	-0.41	-0.29		
Fc:Cwwadj	P(I)	-0.06	0.02	-0.09	-0.02		
Fc:Crimp	E(I)	-0.34	0.24	-0.81	0.13		
Fc:Crimp	G(Ia)	0.92	0.02	0.88	0.95		
Fc:Crimp	P(I)	0.59	0.02	0.55	0.62		
Fc:Crwvl	E(I)	0.55	0.10	0.35	0.74		
Fc:Crwvl	G(Ia)	-0.93	0.02	-0.98	-0.88		
Fc:Crwvl	P(I)	-0.36	0.02	-0.40	-0.32		
Fc:Crst	E(I)	-0.69	0.11	-0.90	-0.48		
Fc:Crst	G(Ia)	0.89	0.03	0.84	0.94		
Fc:Crst	P(I)	0.30	0.02	0.26	0.34		
Fc:Crstadj	E(I)	-0.68	0.10	-0.88	-0.48		
Fc:Crstadj	G(Ia)	0.88	0.03	0.83	0.93		
Fc:Crstadj	P(I)	0.28	0.02	0.23	0.32		
Fc:Crwvt	E(I)	0.62	0.08	0.47	0.78		
Fc:Crwvt	G(Ia)	-0.87	0.03	-0.93	-0.82		
Fc:Crwvt	P(I)	-0.20	0.02	-0.24	-0.16		
Fc:Dp	E(I)	0.25	0.11	0.04	0.46		
Fc:Dp	G(Ia)	-0.32	0.09	-0.51	-0.14		
Fc:Dp	P(I)	-0.02	0.04	-0.10	0.06		
Fc:Ds	E(I)	0.03	0.09	-0.15	0.21		
Fc:Ds	G(Ia)	0.72	0.09	0.54	0.89		
Fc:Ds	P(I)	0.33	0.04	0.26	0.41		
Fc:Dps	E(I)	0.05	0.09	-0.13	0.23		
Fc:Dps	G(Ia)	0.71	0.09	0.52	0.89		
Fc:Dps	P(I)	0.33	0.04	0.25	0.40		
Fc:DpovDs	E(I)	0.47	0.26	-0.04	0.97		
Fc:DpovDs	G(Ia)	-0.55	0.07	-0.67	-0.42		
Fc:DpovDs	P(I)	-0.22	0.04	-0.29	-0.14		
Fc:CVDp	E(I)	0.21	0.08	0.05	0.38		
Fc:CVDp	G(Ia)	0.11	0.14	-0.17	0.39		
Fc:CVDp	P(I)	0.18	0.04	0.09	0.26		
Fc:CVDs	E(I)	0.41	0.09	0.23	0.60		
Fc:CVDs	G(Ia)	-0.47	0.13	-0.72	-0.22		
Fc:CVDs	P(I)	0.08	0.04	-0.01	0.16		
Fc:MaxDp	E(I)	0.32	0.10	0.13	0.52		
Fc:MaxDp	G(Ia)	-0.34	0.11	-0.57	-0.12		
Fc:MaxDp	P(I)	0.05	0.04	-0.03	0.13		
Fc:MinDp	E(I)	0.01	0.08	-0.14	0.16		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fc:MinDp	G(Ia)	0.38	0.31	-0.23	1.00		
Fc:MinDp	P(I)	0.07	0.04	-0.01	0.15		
Fc:MaxDs	E(I)	0.21	0.08	0.05	0.36		
Fc:MaxDs	G(Ia)	0.38	0.17	0.05	0.71		
Fc:MaxDs	P(I)	0.24	0.04	0.16	0.32		
Fc:MinDs	E(I)	0.05	0.08	-0.10	0.21		
Fc:MinDs	G(Ia)	0.07	0.15	-0.21	0.36		
Fc:MinDs	P(I)	0.06	0.04	-0.02	0.14		
Fc:SDDp	E(I)	0.32	0.09	0.15	0.49		
Fc:SDDp	G(Ia)	-0.20	0.13	-0.46	0.05		
Fc:SDDp	P(I)	0.13	0.04	0.05	0.21		
Fc:SDDs	E(I)	0.48	0.10	0.29	0.68		
Fc:SDDs	G(Ia)	-0.01	0.16	-0.31	0.30		
Fc:SDDs	P(I)	0.26	0.04	0.18	0.34		
Fc:SDD	E(I)	0.52	0.10	0.33	0.71		
Fc:SDD	G(Ia)	-0.03	0.10	-0.23	0.18		
Fc:SDD	P(I)	0.27	0.04	0.19	0.35		
Fc:CVD	E(I)	0.44	0.09	0.26	0.63		
Fc:CVD	G(Ia)	-0.47	0.13	-0.72	-0.22		
Fc:CVD	P(I)	0.09	0.04	0.01	0.18		
Fc:Gt30Dp	E(I)	0.30	0.10	0.11	0.48		
Fc:Gt30Dp	G(Ia)	-0.29	0.12	-0.53	-0.06		
Fc:Gt30Dp	P(I)	0.07	0.04	-0.01	0.15		
Fc:Gt30Ds	E(I)	0.23	0.09	0.05	0.42		
Fc:Gt30Ds	G(Ia)	0.15	0.10	-0.04	0.34		
Fc:Gt30Ds	P(I)	0.20	0.04	0.12	0.28		
Fc:Gt30D	E(I)	0.28	0.09	0.10	0.47		
Fc:Gt30D	G(Ia)	0.05	0.10	-0.14	0.24		
Fc:Gt30D	P(I)	0.19	0.04	0.11	0.27		
Fc:Fnua	E(I)	-0.08	0.05	-0.17	0.01		
Fc:Fnua	G(Ia)	-0.51	0.03	-0.57	-0.46		
Fc:Fnua	P(I)	-0.27	0.02	-0.30	-0.23		
Fc:Fr	E(I)	-0.14	0.05	-0.23	-0.05		
Fc:Fr	G(Ia)	-0.06	0.03	-0.12	-0.00		
Fc:Fr	P(I)	-0.10	0.02	-0.14	-0.06		
Fc:Fnt	E(I)	0.01	0.05	-0.08	0.11		
Fc:Fnt	G(Ia)	-0.55	0.03	-0.60	-0.49		
Fc:Fnt	P(I)	-0.25	0.02	-0.28	-0.21		
Fc:Sarea	E(I)	0.24	0.05	0.14	0.34		
Fc:Sarea	G(Ia)	-0.13	0.03	-0.18	-0.07		
Fc:Sarea	P(I)	0.05	0.02	0.01	0.08		
Fc:Fd	E(I)	0.28	0.04	0.20	0.37		
Fc:Fd	G(Ia)	-0.12	0.04	-0.21	-0.04		

Table 24 – Continued from previous page

		ued from previ		CIOELo	CIOEL:
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fc:Fd	P(I)	0.11	0.02	0.08	0.15
Fc:Fc	E(I)	1.00	0.00	1.00	1.00
Fc:Fc	G(Ia)	1.00	0.00	1.00	1.00
Fc:Fc	P(I)	1.00	0.00	1.00	1.00
Fc:Fu	E(I)	0.67	0.03	0.61	0.73
Fc:Fu	G(Ia)	0.82	0.02	0.79	0.85
Fc:Fu	P(I)	0.72	0.01	0.69	0.74
Fc:Colour	E(I)	0.12	0.04	0.04	0.21
Fc:Colour	G(Ia)	-0.14	0.05	-0.24	-0.04
Fc:Colour	P(I)	0.03	0.02	-0.01	0.07
Fc:Fly	E(I)	-0.11	0.04	-0.19	-0.02
Fc:Fly	G(Ia)	0.38	0.06	0.26	0.51
Fc:Fly	P(I)	0.04	0.02	-0.00	0.08
Fc:Flcrot	E(I)	0.08	0.04	-0.00	0.16
Fc:Flcrot	G(Ia)	-0.62	0.30	-1.22	-0.03
Fc:Flcrot	P(I)	-0.01	0.02	-0.05	0.02
Fc:Bactst	E(I)	0.00	0.05	-0.10	0.11
Fc:Bactst	G(Ia)	-0.29	0.12	-0.52	-0.05
Fc:Bactst	P(I)	-0.05	0.03	-0.11	-0.00
Fc:MycD	E(I)	-0.07	0.05	-0.17	0.03
Fc:MycD	G(Ia)	0.23	0.14	-0.03	0.50
Fc:MycD	P(I)	-0.00	0.03	-0.06	0.05
Fc:Bcts	E(I)	0.16	0.06	0.04	0.27
Fc:Bcts	G(Ia)	-0.01	0.03	-0.07	0.05
Fc:Bcts	P(I)	0.06	0.02	0.02	0.10
Fc:Bctb	E(I)	0.18	0.06	0.06	0.30
Fc:Bctb	G(Ia)	-0.02	0.03	-0.08	0.04
Fc:Bctb	P(I)	0.07	0.02	0.03	0.11
Fc:Weanwt	E(I)	-0.17	0.05	-0.26	-0.08
Fc:Weanwt	G(Ia)	0.21	0.04	0.13	0.30
Fc:Weanwt	P(I)	-0.01	0.02	-0.06	0.03
Fc:NLB	E(I)	0.00	0.04	-0.08	0.09
Fc:NLB	G(Ia)	0.03	0.04	-0.05	0.10
Fc:NLB	P(I)	0.01	0.02	-0.03	0.05
Fc:NLW	E(I)	-0.00	0.04	-0.08	0.08
Fc:NLW	G(Ia)	-0.07	0.04	-0.15	-0.00
Fc:NLW	P(I)	-0.03	0.02	-0.07	0.01
Fc:Fnpua	E(I)	0.03	0.04	-0.06	0.11
Fc:Fnpua	G(Ia)	-0.44	0.04	-0.52	-0.37
Fc:Fnpua	P(I)	-0.15	0.02	-0.19	-0.11
Fc:Fnsua	E(I)	-0.09	0.05	-0.17	0.00
Fc:Fnsua	G(Ia)	-0.50	0.03	-0.56	-0.45
Fc:Fnsua	P(I)	-0.27	0.02	-0.30	-0.23

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fc:Fnpt	E(I)	0.12	0.05	0.03	0.21		
Fc:Fnpt	G(Ia)	-0.47	0.03	-0.53	-0.40		
Fc:Fnpt	P(I)	-0.13	0.02	-0.16	-0.09		
Fc:Fnst	E(I)	0.01	0.05	-0.09	0.11		
Fc:Fnst	G(Ia)	-0.54	0.03	-0.59	-0.48		
Fc:Fnst	P(I)	-0.25	0.02	-0.28	-0.21		
Fu:Stal	E(I)	-0.06	0.04	-0.13	0.01		
Fu:Stal	G(Ia)	-0.36	0.04	-0.44	-0.29		
Fu:Stal	P(I)	-0.17	0.02	-0.20	-0.13		
Fu:Diam	E(I)	0.38	0.04	0.31	0.45		
Fu:Diam	G(Ia)	0.25	0.03	0.19	0.31		
Fu:Diam	P(I)	0.33	0.02	0.30	0.36		
Fu:Bwt	E(I)	0.08	0.04	0.01	0.16		
Fu:Bwt	G(Ia)	-0.04	0.04	-0.11	0.03		
Fu:Bwt	P(I)	0.03	0.02	-0.00	0.07		
Fu:WrN	E(I)	0.22	0.03	0.15	0.28		
Fu:WrN	G(Ia)	0.63	0.03	0.56	0.69		
Fu:WrN	P(I)	0.37	0.02	0.33	0.40		
Fu:WrB	E(I)	0.19	0.04	0.12	0.26		
Fu:WrB	G(Ia)	0.70	0.03	0.64	0.76		
Fu:WrB	P(I)	0.39	0.02	0.36	0.42		
Fu:WrT	E(I)	0.21	0.04	0.14	0.28		
Fu:WrT	G(Ia)	0.68	0.03	0.63	0.74		
Fu:WrT	P(I)	0.40	0.02	0.36	0.43		
Fu:Face	E(I)	-0.06	0.06	-0.18	0.05		
Fu:Face	G(Ia)	0.03	0.03	-0.02	0.08		
Fu:Face	P(I)	-0.01	0.02	-0.05	0.03		
Fu:Gfw	E(I)	0.25	0.04	0.18	0.32		
Fu:Gfw	G(Ia)	-0.00	0.04	-0.08	0.07		
Fu:Gfw	P(I)	0.16	0.02	0.12	0.19		
Fu:Yld	E(I)	-0.26	0.04	-0.33	-0.19		
Fu:Yld	G(Ia)	-0.43	0.03	-0.49	-0.37		
Fu:Yld	P(I)	-0.33	0.02	-0.37	-0.30		
Fu:Cww	E(I)	0.14	0.04	0.07	0.21		
Fu:Cww	G(Ia)	-0.23	0.04	-0.30	-0.15		
Fu:Cww	P(I)	0.01	0.02	-0.03	0.05		
Fu:Staladj	E(I)	-0.09	0.03	-0.16	-0.02		
Fu:Staladj	G(Ia)	-0.33	0.04	-0.41	-0.25		
Fu:Staladj	P(I)	-0.17	0.02	-0.21	-0.13		
Fu:Gfwadj	E(I)	0.20	0.04	0.13	0.27		
Fu:Gfwadj	G(Ia)	0.03	0.04	-0.04	0.11		
Fu:Gfwadj	P(I)	0.14	0.02	0.11	0.18		
Fu:Cwwadj	E(I)	0.11	0.04	0.04	0.18		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fu:Cwwadj	G(Ia)	-0.21	0.04	-0.29	-0.12		
Fu:Cwwadj	P(I)	0.00	0.02	-0.04	0.04		
Fu:Crimp	E(I)	-0.30	0.21	-0.71	0.10		
Fu:Crimp	G(Ia)	0.54	0.03	0.47	0.60		
Fu:Crimp	P(I)	0.24	0.02	0.19	0.28		
Fu:Crwvl	E(I)	0.20	0.08	0.04	0.36		
Fu:Crwvl	G(Ia)	-0.58	0.04	-0.66	-0.50		
Fu:Crwvl	P(I)	-0.19	0.03	-0.24	-0.13		
Fu:Crst	E(I)	-0.23	0.08	-0.39	-0.07		
Fu:Crst	G(Ia)	0.44	0.04	0.36	0.53		
Fu:Crst	P(I)	0.11	0.03	0.06	0.17		
Fu:Crstadj	E(I)	-0.25	0.08	-0.40	-0.09		
Fu:Crstadj	G(Ia)	0.45	0.04	0.37	0.54		
Fu:Crstadj	P(I)	0.10	0.03	0.05	0.16		
Fu:Crwvt	E(I)	0.22	0.06	0.10	0.35		
Fu:Crwvt	G(Ia)	-0.46	0.05	-0.55	-0.36		
Fu:Crwvt	P(I)	-0.08	0.03	-0.13	-0.02		
Fu:Dp	E(I)	0.30	0.11	0.08	0.51		
Fu:Dp	G(Ia)	-0.37	0.09	-0.55	-0.18		
Fu:Dp	P(I)	-0.02	0.04	-0.10	0.06		
Fu:Ds	E(I)	0.07	0.10	-0.12	0.26		
Fu:Ds	G(Ia)	0.67	0.09	0.50	0.84		
Fu:Ds	P(I)	0.34	0.04	0.26	0.41		
Fu:Dps	E(I)	0.08	0.10	-0.10	0.27		
Fu:Dps	G(Ia)	0.65	0.09	0.47	0.83		
Fu:Dps	P(I)	0.33	0.04	0.25	0.41		
Fu:DpovDs	E(I)	0.53	0.27	-0.01	1.06		
Fu:DpovDs	G(Ia)	-0.57	0.07	-0.70	-0.44		
Fu:DpovDs	P(I)	-0.23	0.04	-0.30	-0.15		
Fu:CVDp	E(I)	0.07	0.09	-0.10	0.24		
Fu:CVDp	G(Ia)	0.30	0.15	0.01	0.60		
Fu:CVDp	P(I)	0.14	0.04	0.05	0.22		
Fu:CVDs	E(I)	0.33	0.10	0.15	0.52		
Fu:CVDs	G(Ia)	-0.41	0.12	-0.65	-0.17		
Fu:CVDs	P(I)	0.05	0.04	-0.04	0.13		
Fu:MaxDp	E(I)	0.29	0.10	0.10	0.49		
Fu:MaxDp	G(Ia)	-0.30	0.11	-0.52	-0.08		
Fu:MaxDp	P(I)	0.05	0.04	-0.04	0.13		
Fu:MinDp	E(I)	0.09	0.08	-0.07	0.24		
Fu:MinDp	G(Ia)	0.14	0.27	-0.39	0.67		
Fu:MinDp	P(I)	0.09	0.04	0.00	0.17		
Fu:MaxDs	E(I)	0.24	0.08	0.09	0.40		
Fu:MaxDs	G(Ia)	0.33	0.16	0.01	0.65		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fu:MaxDs	P(I)	0.25	0.04	0.17	0.33		
Fu:MinDs	E(I)	0.08	0.08	-0.08	0.24		
Fu:MinDs	G(Ia)	0.08	0.15	-0.20	0.36		
Fu:MinDs	P(I)	0.08	0.04	-0.00	0.16		
Fu:SDDp	$\mid E(I) \mid$	0.22	0.09	0.04	0.40		
Fu:SDDp	G(Ia)	-0.13	0.13	-0.37	0.12		
Fu:SDDp	P(I)	0.09	0.04	0.01	0.18		
Fu:SDDs	E(I)	0.42	0.10	0.22	0.62		
Fu:SDDs	G(Ia)	0.03	0.09	-0.13	0.20		
Fu:SDDs	P(I)	0.24	0.04	0.16	0.32		
Fu:SDD	$\mid E(I) \mid$	0.44	0.10	0.25	0.64		
Fu:SDD	G(Ia)	0.03	0.08	-0.14	0.19		
Fu:SDD	P(I)	0.25	0.04	0.17	0.33		
Fu:CVD	E(I)	0.35	0.10	0.16	0.54		
Fu:CVD	G(Ia)	-0.39	0.12	-0.63	-0.16		
Fu:CVD	P(I)	0.06	0.04	-0.03	0.14		
Fu:Gt30Dp	E(I)	0.30	0.10	0.10	0.49		
Fu:Gt30Dp	G(Ia)	-0.30	0.12	-0.53	-0.07		
Fu:Gt30Dp	P(I)	0.06	0.04	-0.03	0.15		
Fu:Gt30Ds	E(I)	0.23	0.10	0.04	0.42		
Fu:Gt30Ds	G(Ia)	0.20	0.10	0.01	0.38		
Fu:Gt30Ds	P(I)	0.22	0.04	0.14	0.30		
Fu:Gt30D	E(I)	0.28	0.09	0.09	0.46		
Fu:Gt30D	G(Ia)	0.10	0.10	-0.09	0.29		
Fu:Gt30D	P(I)	0.20	0.04	0.12	0.28		
Fu:Fnua	E(I)	-0.08	0.03	-0.14	-0.01		
Fu:Fnua	G(Ia)	-0.38	0.04	-0.46	-0.30		
Fu:Fnua	P(I)	-0.18	0.02	-0.21	-0.14		
Fu:Fr	E(I)	-0.11	0.04	-0.18	-0.04		
Fu:Fr	G(Ia)	0.06	0.04	-0.02	0.14		
Fu:Fr	P(I)	-0.05	0.02	-0.09	-0.02		
Fu:Fnt	E(I)	-0.05	0.04	-0.12	0.02		
Fu:Fnt	G(Ia)	-0.37	0.04	-0.45	-0.30		
Fu:Fnt	P(I)	-0.16	0.02	-0.20	-0.13		
Fu:Sarea	E(I)	0.09	0.04	0.01	0.16		
Fu:Sarea	G(Ia)	-0.04	0.04	-0.11	0.03		
Fu:Sarea	P(I)	0.04	0.02	-0.00	0.08		
Fu:Fd	E(I)	0.29	0.03	0.23	0.35		
Fu:Fd	G(Ia)	0.18	0.05	0.08	0.28		
Fu:Fd	P(I)	0.25	0.02	0.22	0.29		
Fu:Fc	E(I)	0.67	0.03	0.61	0.73		
Fu:Fc	G(Ia)	0.82	0.02	0.79	0.85		
Fu:Fc	P(I)	0.72	0.01	0.69	0.74		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fu:Fu	E(I)	1.00	0.00	1.00	1.00	
Fu:Fu	G(Ia)	1.00	0.00	1.00	1.00	
Fu:Fu	P(I)	1.00	0.00	1.00	1.00	
Fu:Colour	E(I)	0.06	0.03	-0.01	0.12	
Fu:Colour	G(Ia)	-0.06	0.07	-0.19	0.07	
Fu:Colour	P(I)	0.03	0.02	-0.01	0.07	
Fu:Fly	E(I)	-0.07	0.03	-0.14	-0.01	
Fu:Fly	G(Ia)	0.30	0.08	0.14	0.46	
Fu:Fly	P(I)	0.00	0.02	-0.04	0.04	
Fu:Flcrot	E(I)	0.03	0.03	-0.03	0.09	
Fu:Flcrot	G(Ia)	-0.14	0.22	-0.58	0.30	
Fu:Flcrot	P(I)	0.01	0.02	-0.03	0.05	
Fu:Bactst	E(I)	0.06	0.05	-0.04	0.15	
Fu:Bactst	G(Ia)	-0.43	0.14	-0.71	-0.16	
Fu:Bactst	P(I)	-0.04	0.03	-0.09	0.01	
Fu:MycD	E(I)	-0.06	0.05	-0.15	0.04	
Fu:MycD	G(Ia)	0.19	0.15	-0.10	0.48	
Fu:MycD	P(I)	-0.01	0.03	-0.06	0.04	
Fu:Bcts	E(I)	0.15	0.05	0.05	0.25	
Fu:Bcts	G(Ia)	0.05	0.04	-0.02	0.12	
Fu:Bcts	P(I)	0.10	0.02	0.06	0.14	
Fu:Bctb	E(I)	0.15	0.05	0.05	0.25	
Fu:Bctb	G(Ia)	0.06	0.03	-0.01	0.13	
Fu:Bctb	P(I)	0.11	0.02	0.06	0.15	
Fu:Weanwt	E(I)	-0.11	0.04	-0.19	-0.03	
Fu:Weanwt	G(Ia)	0.16	0.05	0.06	0.26	
Fu:Weanwt	P(I)	-0.02	0.02	-0.06	0.02	
Fu:NLB	$\mid E(I) \mid$	-0.06	0.03	-0.13	0.00	
Fu:NLB	G(Ia)	0.17	0.05	0.07	0.27	
Fu:NLB	P(I)	0.00	0.02	-0.04	0.04	
Fu:NLW	E(I)	-0.05	0.03	-0.12	0.01	
Fu:NLW	G(Ia)	0.07	0.05	-0.03	0.16	
Fu:NLW	P(I)	-0.02	0.02	-0.06	0.02	
Fu:Fnpua	$\mid E(I) \mid$	0.02	0.03	-0.05	0.08	
Fu:Fnpua	G(Ia)	-0.42	0.05	-0.52	-0.32	
Fu:Fnpua	P(I)	-0.10	0.02	-0.14	-0.07	
Fu:Fnsua	E(I)	-0.08	0.03	-0.15	-0.01	
Fu:Fnsua	G(Ia)	-0.37	0.04	-0.45	-0.29	
Fu:Fnsua	P(I)	-0.18	0.02	-0.21	-0.14	
Fu:Fnpt	E(I)	0.05	0.03	-0.02	0.12	
Fu:Fnpt	G(Ia)	-0.41	0.05	-0.50	-0.32	
Fu:Fnpt	P(I)	-0.09	0.02	-0.13	-0.05	
Fu:Fnst	E(I)	-0.05	0.04	-0.12	0.02	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fu:Fnst	G(Ia)	-0.37	0.04	-0.44	-0.29	
Fu:Fnst	P(I)	-0.16	0.02	-0.20	-0.12	
Colour:Stal	E(I)	-0.10	0.03	-0.16	-0.05	
Colour:Stal	G(Ia)	0.02	0.05	-0.07	0.11	
Colour:Stal	P(I)	-0.07	0.02	-0.10	-0.04	
Colour:Diam	E(I)	0.03	0.03	-0.03	0.09	
Colour:Diam	G(Ia)	0.00	0.04	-0.08	0.08	
Colour:Diam	P(I)	0.02	0.02	-0.01	0.05	
Colour:Bwt	E(I)	-0.08	0.03	-0.13	-0.03	
Colour:Bwt	G(Ia)	-0.09	0.05	-0.18	0.00	
Colour:Bwt	P(I)	-0.08	0.02	-0.11	-0.05	
Colour:WrN	E(I)	0.08	0.03	0.02	0.13	
Colour:WrN	G(Ia)	-0.08	0.04	-0.16	0.01	
Colour:WrN	P(I)	0.03	0.02	-0.00	0.07	
Colour:WrB	E(I)	0.07	0.03	0.01	0.13	
Colour:WrB	G(Ia)	-0.09	0.04	-0.18	-0.01	
Colour:WrB	P(I)	0.02	0.02	-0.01	0.06	
Colour:WrT	E(I)	0.08	0.03	0.02	0.14	
Colour:WrT	G(Ia)	-0.09	0.04	-0.17	-0.01	
Colour:WrT	P(I)	0.03	0.02	-0.00	0.06	
Colour:Face	E(I)	0.15	0.04	0.07	0.23	
Colour:Face	G(Ia)	0.19	0.03	0.13	0.26	
Colour:Face	P(I)	0.14	0.02	0.11	0.17	
Colour:Gfw	E(I)	-0.03	0.03	-0.08	0.03	
Colour:Gfw	G(Ia)	0.24	0.04	0.15	0.32	
Colour:Gfw	P(I)	0.04	0.02	0.01	0.07	
Colour:Yld	E(I)	-0.09	0.03	-0.14	-0.03	
Colour:Yld	G(Ia)	-0.29	0.04	-0.37	-0.21	
Colour:Yld	P(I)	-0.14	0.02	-0.17	-0.11	
Colour:Cww	E(I)	-0.06	0.03	-0.12	-0.01	
Colour:Cww	G(Ia)	0.11	0.05	0.02	0.20	
Colour:Cww	P(I)	-0.02	0.02	-0.05	0.01	
Colour:Staladj	E(I)	-0.12	0.03	-0.17	-0.06	
Colour:Staladj	G(Ia)	0.02	0.05	-0.07	0.12	
Colour:Staladj	P(I)	-0.08	0.02	-0.11	-0.04	
Colour:Gfwadj	E(I)	-0.03	0.03	-0.08	0.03	
Colour:Gfwadj	G(Ia)	0.24	0.05	0.15	0.33	
Colour:Gfwadj	P(I)	0.04	0.02	0.01	0.08	
Colour:Cwwadj	E(I)	-0.06	0.03	-0.12	-0.01	
Colour:Cwwadj	G(Ia)	0.11	0.05	0.02	0.21	
Colour:Cwwadj	P(I)	-0.02	0.02	-0.05	0.01	
Colour:Crimp	E(I)	0.17	0.19	-0.20	0.53	
Colour:Crimp	G(Ia)	-0.33	0.07	-0.46	-0.19	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Colour:Crimp	P(I)	-0.06	0.02	-0.10	-0.02	
Colour:Crwvl	E(I)	-0.03	0.05	-0.13	0.07	
Colour:Crwvl	G(Ia)	0.25	0.08	0.09	0.42	
Colour:Crwvl	P(I)	0.04	0.02	-0.00	0.09	
Colour:Crst	E(I)	-0.02	0.05	-0.13	0.09	
Colour:Crst	G(Ia)	-0.33	0.08	-0.49	-0.17	
Colour:Crst	P(I)	-0.09	0.02	-0.13	-0.04	
Colour:Crstadj	E(I)	-0.04	0.05	-0.14	0.06	
Colour:Crstadj	G(Ia)	-0.35	0.08	-0.52	-0.18	
Colour:Crstadj	P(I)	-0.10	0.02	-0.15	-0.06	
Colour:Crwvt	E(I)	0.04	0.04	-0.03	0.12	
Colour:Crwvt	G(Ia)	0.29	0.09	0.10	0.47	
Colour:Crwvt	P(I)	0.09	0.02	0.04	0.13	
Colour:Dp	E(I)	-0.14	0.07	-0.28	-0.00	
Colour:Dp	G(Ia)	0.56	0.07	0.42	0.70	
Colour:Dp	P(I)	0.13	0.03	0.07	0.19	
Colour:Ds	E(I)	0.08	0.06	-0.04	0.21	
Colour:Ds	G(Ia)	-0.17	0.08	-0.33	-0.02	
Colour:Ds	P(I)	-0.00	0.03	-0.07	0.06	
Colour:Dps	E(I)	0.07	0.06	-0.05	0.19	
Colour:Dps	G(Ia)	-0.13	0.08	-0.29	0.04	
Colour:Dps	P(I)	0.01	0.03	-0.06	0.07	
Colour:DpovDs	E(I)	-0.36	0.12	-0.60	-0.11	
Colour:DpovDs	G(Ia)	0.53	0.06	0.42	0.65	
Colour:DpovDs	P(I)	0.13	0.03	0.06	0.19	
Colour:CVDp	E(I)	-0.08	0.06	-0.20	0.03	
Colour:CVDp	G(Ia)	0.25	0.09	0.07	0.42	
Colour:CVDp	P(I)	0.02	0.03	-0.05	0.08	
Colour:CVDs	E(I)	-0.10	0.06	-0.22	0.01	
Colour:CVDs	G(Ia)	0.73	0.10	0.54	0.93	
Colour:CVDs	P(I)	0.14	0.03	0.07	0.20	
Colour:MaxDp	E(I)	-0.19	0.07	-0.33	-0.05	
Colour:MaxDp	G(Ia)	0.58	0.08	0.43	0.73	
Colour:MaxDp	P(I)	0.10	0.03	0.04	0.17	
Colour:MinDp	E(I)	0.01	0.05	-0.08	0.11	
Colour:MinDp	G(Ia)	0.46	0.24	-0.02	0.94	
Colour:MinDp	P(I)	0.07	0.03	0.00	0.13	
Colour:MaxDs	E(I)	-0.02	0.06	-0.13	0.09	
Colour:MaxDs	G(Ia)	0.33	0.12	0.10	0.55	
Colour:MaxDs	P(I)	0.06	0.03	-0.00	0.13	
Colour:MinDs	E(I)	0.06	0.05	-0.04	0.16	
Colour:MinDs	G(Ia)	-0.58	0.24	-1.06	-0.11	
Colour:MinDs	P(I)	-0.03	0.03	-0.10	0.03	

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Colour:SDDp	E(I)	-0.15	0.07	-0.29	-0.02	
Colour:SDDp	G(Ia)	0.52	0.08	0.37	0.66	
Colour:SDDp	P(I)	0.10	0.03	0.04	0.17	
Colour:SDDs	E(I)	-0.05	0.06	-0.18	0.08	
Colour:SDDs	G(Ia)	0.51	0.08	0.35	0.67	
Colour:SDDs	P(I)	0.14	0.03	0.08	0.20	
Colour:SDD	E(I)	-0.07	0.07	-0.20	0.06	
Colour:SDD	G(Ia)	0.56	0.08	0.41	0.72	
Colour:SDD	P(I)	0.15	0.03	0.09	0.22	
Colour:CVD	E(I)	-0.11	0.06	-0.23	0.01	
Colour:CVD	G(Ia)	0.74	0.10	0.55	0.93	
Colour:CVD	P(I)	0.14	0.03	0.08	0.20	
Colour:Gt30Dp	E(I)	-0.12	0.07	-0.25	0.02	
Colour:Gt30Dp	G(Ia)	0.58	0.08	0.43	0.73	
Colour:Gt30Dp	P(I)	0.14	0.03	0.08	0.21	
Colour:Gt30Ds	E(I)	0.00	0.04	-0.08	0.09	
Colour:Gt30Ds	G(Ia)	0.37	0.10	0.18	0.56	
Colour:Gt30Ds	P(I)	0.11	0.03	0.04	0.17	
Colour:Gt30D	E(I)	-0.02	0.06	-0.14	0.10	
Colour:Gt30D	G(Ia)	0.50	0.09	0.32	0.68	
Colour:Gt30D	P(I)	0.13	0.03	0.07	0.19	
Colour:Fnua	E(I)	-0.02	0.03	-0.08	0.03	
Colour:Fnua	G(Ia)	0.23	0.06	0.12	0.34	
Colour:Fnua	P(I)	0.03	0.02	-0.00	0.07	
Colour:Fr	E(I)	-0.06	0.03	-0.12	-0.00	
Colour:Fr	G(Ia)	0.18	0.06	0.07	0.29	
Colour:Fr	P(I)	-0.00	0.02	-0.04	0.03	
Colour:Fnt	E(I)	-0.06	0.03	-0.12	-0.00	
Colour:Fnt	G(Ia)	0.18	0.05	0.07	0.29	
Colour:Fnt	P(I)	-0.00	0.02	-0.04	0.03	
Colour:Sarea	E(I)	-0.07	0.03	-0.13	-0.01	
Colour:Sarea	G(Ia)	-0.06	0.05	-0.16	0.04	
Colour:Sarea	P(I)	-0.07	0.02	-0.10	-0.03	
Colour:Fd	E(I)	-0.00	0.03	-0.06	0.06	
Colour:Fd	G(Ia)	-0.02	0.07	-0.16	0.13	
Colour:Fd	P(I)	-0.00	0.02	-0.04	0.03	
Colour:Fc	E(I)	0.12	0.04	0.04	0.21	
Colour:Fc	G(Ia)	-0.14	0.05	-0.24	-0.04	
Colour:Fc	P(I)	0.03	0.02	-0.01	0.07	
Colour:Fu	E(I)	0.06	0.03	-0.01	0.12	
Colour:Fu	G(Ia)	-0.06	0.07	-0.19	0.07	
Colour:Fu	P(I)	0.03	0.02	-0.01	0.07	
Colour:Colour	E(I)	1.00	0.00	1.00	1.00	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Colour:Colour	G(Ia)	1.00	0.00	1.00	1.00		
Colour:Colour	P(I)	1.00	0.00	1.00	1.00		
Colour:Fly	E(I)	-0.12	0.02	-0.17	-0.08		
Colour:Fly	G(Ia)	-0.09	0.09	-0.27	0.09		
Colour:Fly	P(I)	-0.12	0.02	-0.15	-0.09		
Colour:Flcrot	E(I)	0.03	0.02	-0.02	0.07		
Colour:Flcrot	G(Ia)	0.54	0.19	0.18	0.90		
Colour:Flcrot	P(I)	0.06	0.02	0.03	0.10		
Colour:Bactst	E(I)	0.19	0.03	0.13	0.24		
Colour:Bactst	G(Ia)	0.30	0.13	0.04	0.56		
Colour:Bactst	P(I)	0.20	0.02	0.16	0.23		
Colour:MycD	E(I)	0.19	0.03	0.13	0.24		
Colour:MycD	G(Ia)	0.29	0.16	-0.03	0.61		
Colour:MycD	P(I)	0.19	0.02	0.15	0.23		
Colour:Bcts	E(I)	-0.29	0.06	-0.40	-0.17		
Colour:Bcts	G(Ia)	0.37	0.04	0.30	0.44		
Colour:Bcts	P(I)	0.03	0.02	-0.00	0.07		
Colour:Bctb	E(I)	-0.28	0.05	-0.38	-0.17		
Colour:Bctb	G(Ia)	0.38	0.04	0.31	0.45		
Colour:Bctb	P(I)	0.03	0.02	-0.00	0.07		
Colour:Weanwt	E(I)	-0.02	0.03	-0.07	0.04		
Colour:Weanwt	G(Ia)	-0.17	0.06	-0.29	-0.05		
Colour:Weanwt	P(I)	-0.05	0.02	-0.09	-0.02		
Colour:NLB	E(I)	-0.01	0.02	-0.06	0.04		
Colour:NLB	G(Ia)	0.15	0.06	0.03	0.27		
Colour:NLB	P(I)	0.02	0.02	-0.01	0.05		
Colour:NLW	E(I)	-0.03	0.03	-0.08	0.02		
Colour:NLW	G(Ia)	0.22	0.06	0.10	0.34		
Colour:NLW	P(I)	0.02	0.02	-0.02	0.05		
Colour:Fnpua	E(I)	0.01	0.03	-0.04	0.06		
Colour:Fnpua	G(Ia)	0.03	0.06	-0.09	0.15		
Colour:Fnpua	P(I)	0.01	0.02	-0.02	0.05		
Colour:Fnsua	E(I)	-0.02	0.03	-0.08	0.03		
Colour:Fnsua	G(Ia)	0.23	0.06	0.12	0.34		
Colour:Fnsua	P(I)	0.03	0.02	-0.00	0.07		
Colour:Fnpt	E(I)	-0.01	0.03	-0.07	0.04		
Colour:Fnpt	G(Ia)	-0.01	0.06	-0.13	0.10		
Colour:Fnpt	P(I)	-0.01	0.02	-0.05	0.02		
Colour:Fnst	E(I)	-0.06	0.03	-0.12	-0.00		
Colour:Fnst	G(Ia)	0.19	0.05	0.08	0.29		
Colour:Fnst	P(I)	-0.00	0.02	-0.04	0.03		
Fly:Stal	E(I)	0.13	0.03	0.08	0.18		
Fly:Stal	G(Ia)	-0.52	0.07	-0.66	-0.38		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fly:Stal	P(I)	-0.00	0.02	-0.03	0.03		
Fly:Diam	E(I)	0.05	0.03	-0.00	0.11		
Fly:Diam	G(Ia)	-0.31	0.06	-0.43	-0.19		
Fly:Diam	P(I)	-0.03	0.02	-0.06	0.01		
Fly:Bwt	E(I)	-0.03	0.03	-0.08	0.03		
Fly:Bwt	G(Ia)	0.22	0.07	0.10	0.35		
Fly:Bwt	P(I)	0.02	0.02	-0.01	0.05		
Fly:WrN	E(I)	0.04	0.03	-0.02	0.09		
Fly:WrN	G(Ia)	-0.02	0.06	-0.15	0.10		
Fly:WrN	P(I)	0.02	0.02	-0.01	0.06		
Fly:WrB	E(I)	0.02	0.03	-0.04	0.07		
Fly:WrB	G(Ia)	0.10	0.06	-0.02	0.23		
Fly:WrB	P(I)	0.03	0.02	-0.00	0.07		
Fly:WrT	E(I)	0.03	0.03	-0.03	0.09		
Fly:WrT	G(Ia)	0.04	0.06	-0.07	0.16		
Fly:WrT	P(I)	0.03	0.02	-0.00	0.06		
Fly:Face	E(I)	-0.12	0.04	-0.20	-0.04		
Fly:Face	G(Ia)	0.30	0.05	0.20	0.41		
Fly:Face	P(I)	0.01	0.02	-0.02	0.04		
Fly:Gfw	E(I)	0.09	0.03	0.03	0.14		
Fly:Gfw	G(Ia)	-0.36	0.07	-0.49	-0.23		
Fly:Gfw	P(I)	-0.00	0.02	-0.04	0.03		
Fly:Yld	E(I)	0.01	0.03	-0.05	0.06		
Fly:Yld	G(Ia)	0.00	0.05	-0.10	0.11		
Fly:Yld	P(I)	0.00	0.02	-0.03	0.04		
Fly:Cww	E(I)	0.08	0.03	0.03	0.14		
Fly:Cww	G(Ia)	-0.36	0.07	-0.49	-0.22		
Fly:Cww	P(I)	-0.00	0.02	-0.03	0.03		
Fly:Staladj	E(I)	0.11	0.03	0.05	0.16		
Fly:Staladj	G(Ia)	-0.46	0.07	-0.60	-0.32		
Fly:Staladj	P(I)	-0.00	0.02	-0.04	0.03		
Fly:Gfwadj	E(I)	0.07	0.03	0.02	0.12		
Fly:Gfwadj	G(Ia)	-0.31	0.07	-0.44	-0.18		
Fly:Gfwadj	P(I)	-0.00	0.02	-0.04	0.03		
Fly:Cwwadj	E(I)	0.07	0.03	0.01	0.12		
Fly:Cwwadj	G(Ia)	-0.31	0.07	-0.45	-0.17		
Fly:Cwwadj	P(I)	-0.00	0.02	-0.04	0.03		
Fly:Crimp	E(I)	-0.86	0.36	-1.56	-0.15		
Fly:Crimp	G(Ia)	0.71	0.07	0.57	0.85		
Fly:Crimp	P(I)	0.10	0.02	0.06	0.14		
Fly:Crwvl	E(I)	0.22	0.05	0.12	0.33		
Fly:Crwvl	G(Ia)	-0.64	0.08	-0.79	-0.48		
Fly:Crwvl	P(I)	-0.06	0.02	-0.10	-0.01		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fly:Crst	E(I)	-0.15	0.06	-0.26	-0.04
Fly:Crst	G(Ia)	0.51	0.07	0.37	0.66
Fly:Crst	P(I)	0.07	0.02	0.03	0.12
Fly:Crstadj	E(I)	-0.15	0.05	-0.26	-0.04
Fly:Crstadj	G(Ia)	0.54	0.07	0.39	0.68
Fly:Crstadj	P(I)	0.07	0.02	0.03	0.11
Fly:Crwvt	E(I)	0.09	0.04	0.01	0.17
Fly:Crwvt	G(Ia)	-0.46	0.08	-0.62	-0.31
Fly:Crwvt	P(I)	-0.05	0.02	-0.09	-0.00
Fly:Dp	E(I)	-0.22	0.06	-0.35	-0.10
Fly:Dp	G(Ia)	0.29	0.11	0.07	0.51
Fly:Dp	P(I)	-0.07	0.03	-0.13	-0.01
Fly:Ds	E(I)	-0.15	0.06	-0.26	-0.04
Fly:Ds	G(Ia)	0.11	0.12	-0.13	0.35
Fly:Ds	P(I)	-0.08	0.03	-0.14	-0.02
Fly:Dps	E(I)	-0.15	0.06	-0.26	-0.05
Fly:Dps	G(Ia)	0.13	0.13	-0.11	0.38
Fly:Dps	P(I)	-0.08	0.03	-0.15	-0.02
Fly:DpovDs	E(I)	-0.17	0.10	-0.36	0.03
Fly:DpovDs	G(Ia)	0.18	0.09	0.01	0.34
Fly:DpovDs	P(I)	-0.01	0.03	-0.07	0.05
Fly:CVDp	E(I)	-0.02	0.05	-0.13	0.08
Fly:CVDp	G(Ia)	0.25	0.13	-0.01	0.51
Fly:CVDp	P(I)	0.03	0.03	-0.03	0.10
Fly:CVDs	E(I)	0.05	0.05	-0.05	0.15
Fly:CVDs	G(Ia)	0.50	0.14	0.21	0.78
Fly:CVDs	P(I)	0.13	0.03	0.07	0.20
Fly:MaxDp	E(I)	-0.19	0.06	-0.31	-0.07
Fly:MaxDp	G(Ia)	0.31	0.12	0.09	0.54
Fly:MaxDp	P(I)	-0.05	0.03	-0.11	0.01
Fly:MinDp	E(I)	-0.09	0.05	-0.18	-0.00
Fly:MinDp	G(Ia)	-0.01	0.19	-0.38	0.35
Fly:MinDp	P(I)	-0.08	0.03	-0.15	-0.02
Fly:MaxDs	E(I)	-0.05	0.05	-0.15	0.05
Fly:MaxDs	G(Ia)	0.37	0.18	0.02	0.71
Fly:MaxDs	P(I)	0.02	0.03	-0.05	0.08
Fly:MinDs	E(I)	0.02	0.05	-0.07	0.11
Fly:MinDs	G(Ia)	-0.66	0.34	-1.33	0.00
Fly:MinDs	P(I)	-0.04	0.03	-0.10	0.02
Fly:SDDp	E(I)	-0.15	0.06	-0.27	-0.02
Fly:SDDp	G(Ia)	0.38	0.12	0.15	0.61
Fly:SDDp	P(I)	-0.00	0.03	-0.06	0.06
Fly:SDDs	E(I)	-0.05	0.06	-0.17	0.06

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fly:SDDs	G(Ia)	0.46	0.12	0.22	0.71		
Fly:SDDs	P(I)	0.07	0.03	0.00	0.13		
Fly:SDD	E(I)	-0.07	0.06	-0.19	0.04		
Fly:SDD	G(Ia)	0.49	0.12	0.25	0.73		
Fly:SDD	P(I)	0.06	0.03	-0.00	0.13		
Fly:CVD	$\mid E(I) \mid$	0.04	0.05	-0.07	0.14		
Fly:CVD	G(Ia)	0.51	0.14	0.23	0.78		
Fly:CVD	P(I)	0.13	0.03	0.07	0.19		
Fly:Gt30Dp	E(I)	-0.16	0.06	-0.28	-0.04		
Fly:Gt30Dp	G(Ia)	0.35	0.12	0.12	0.58		
Fly:Gt30Dp	P(I)	-0.02	0.03	-0.08	0.04		
Fly:Gt30Ds	E(I)	-0.05	0.05	-0.16	0.05		
Fly:Gt30Ds	G(Ia)	0.40	0.15	0.11	0.69		
Fly:Gt30Ds	P(I)	0.03	0.03	-0.03	0.10		
Fly:Gt30D	E(I)	-0.08	0.05	-0.19	0.02		
Fly:Gt30D	G(Ia)	0.47	0.15	0.18	0.76		
Fly:Gt30D	P(I)	0.03	0.03	-0.04	0.09		
Fly:Fnua	E(I)	-0.01	0.03	-0.07	0.04		
Fly:Fnua	G(Ia)	0.20	0.08	0.05	0.35		
Fly:Fnua	P(I)	0.02	0.02	-0.01	0.06		
Fly:Fr	E(I)	0.02	0.03	-0.04	0.07		
Fly:Fr	G(Ia)	-0.01	0.08	-0.16	0.14		
Fly:Fr	P(I)	0.01	0.02	-0.02	0.05		
Fly:Fnt	E(I)	-0.02	0.03	-0.08	0.03		
Fly:Fnt	G(Ia)	0.28	0.08	0.13	0.43		
Fly:Fnt	P(I)	0.03	0.02	-0.01	0.07		
Fly:Sarea	E(I)	-0.04	0.03	-0.09	0.02		
Fly:Sarea	G(Ia)	0.24	0.07	0.10	0.38		
Fly:Sarea	P(I)	0.02	0.02	-0.02	0.05		
Fly:Fd	E(I)	0.07	0.03	0.01	0.12		
Fly:Fd	G(Ia)	-0.29	0.09	-0.47	-0.12		
Fly:Fd	P(I)	0.01	0.02	-0.03	0.04		
Fly:Fc	E(I)	-0.11	0.04	-0.19	-0.02		
Fly:Fc	G(Ia)	0.38	0.06	0.26	0.51		
Fly:Fc	P(I)	0.04	0.02	-0.00	0.08		
Fly:Fu	E(I)	-0.07	0.03	-0.14	-0.01		
Fly:Fu	G(Ia)	0.30	0.08	0.14	0.46		
Fly:Fu	P(I)	0.00	0.02	-0.04	0.04		
Fly:Colour	E(I)	-0.12	0.02	-0.17	-0.08		
Fly:Colour	G(Ia)	-0.09	0.09	-0.27	0.09		
Fly:Colour	P(I)	-0.12	0.02	-0.15	-0.09		
Fly:Fly	E(I)	1.00	0.00	1.00	1.00		
Fly:Fly	G(Ia)	1.00	0.00	1.00	1.00		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fly:Fly	P(I)	1.00	0.00	1.00	1.00
Fly:Flcrot	E(I)	0.01	0.02	-0.03	0.06
Fly:Flcrot	G(Ia)	-0.37	0.23	-0.82	0.09
Fly:Flcrot	P(I)	-0.01	0.02	-0.04	0.03
Fly:Bactst	E(I)	0.18	0.03	0.13	0.23
Fly:Bactst	G(Ia)	0.52	0.23	0.07	0.96
Fly:Bactst	P(I)	0.20	0.02	0.16	0.24
Fly:MycD	E(I)	0.25	0.03	0.20	0.30
Fly:MycD	G(Ia)	0.36	0.26	-0.16	0.87
Fly:MycD	P(I)	0.25	0.02	0.22	0.29
Fly:Bcts	E(I)	0.10	0.05	0.00	0.20
Fly:Bcts	G(Ia)	-0.12	0.09	-0.30	0.06
Fly:Bcts	P(I)	0.03	0.02	-0.01	0.06
Fly:Bctb	$\mid E(I) \mid$	0.07	0.05	-0.03	0.16
Fly:Bctb	G(Ia)	-0.10	0.09	-0.28	0.08
Fly:Bctb	P(I)	0.02	0.02	-0.02	0.05
Fly:Weanwt	E(I)	-0.01	0.03	-0.06	0.04
Fly:Weanwt	G(Ia)	0.07	0.17	-0.26	0.39
Fly:Weanwt	P(I)	-0.00	0.02	-0.04	0.03
Fly:NLB	E(I)	-0.02	0.02	-0.07	0.03
Fly:NLB	G(Ia)	-0.06	0.09	-0.23	0.11
Fly:NLB	P(I)	-0.03	0.02	-0.06	0.01
Fly:NLW	E(I)	-0.01	0.02	-0.06	0.04
Fly:NLW	G(Ia)	0.04	0.08	-0.12	0.21
Fly:NLW	P(I)	-0.00	0.02	-0.04	0.03
Fly:Fnpua	E(I)	-0.02	0.03	-0.08	0.03
Fly:Fnpua	G(Ia)	0.22	0.09	0.04	0.39
Fly:Fnpua	P(I)	0.01	0.02	-0.02	0.05
Fly:Fnsua	E(I)	-0.01	0.03	-0.07	0.04
Fly:Fnsua	G(Ia)	0.19	0.08	0.04	0.34
Fly:Fnsua	P(I)	0.02	0.02	-0.01	0.06
Fly:Fnpt	E(I)	-0.03	0.03	-0.08	0.02
Fly:Fnpt	G(Ia)	0.29	0.08	0.13	0.45
Fly:Fnpt	P(I)	0.02	0.02	-0.02	0.06
Fly:Fnst	E(I)	-0.02	0.03	-0.08	0.03
Fly:Fnst	G(Ia)	0.27	0.08	0.13	0.42
Fly:Fnst	P(I)	0.03	0.02	-0.01	0.07
Flcrot:Stal	E(I)	-0.01	0.03	-0.06	0.04
Flcrot:Stal	G(Ia)	-0.10	0.11	-0.32	0.11
Flcrot:Stal	P(I)	-0.02	0.02	-0.05	0.01
Flcrot:Diam	E(I)	0.02	0.03	-0.03	0.08
Flcrot:Diam	G(Ia)	-0.20	0.10	-0.41	0.00
Flcrot:Diam	P(I)	-0.01	0.02	-0.04	0.03

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Flcrot:Bwt	E(I)	-0.04	0.03	-0.09	0.01		
Flcrot:Bwt	G(Ia)	-0.12	0.11	-0.34	0.10		
Flcrot:Bwt	P(I)	-0.04	0.02	-0.08	-0.01		
Flcrot:WrN	E(I)	0.04	0.03	-0.02	0.09		
Flcrot:WrN	G(Ia)	-0.30	0.11	-0.52	-0.08		
Flcrot:WrN	P(I)	-0.01	0.02	-0.04	0.03		
Flcrot:WrB	E(I)	0.03	0.03	-0.02	0.09		
Flcrot:WrB	G(Ia)	-0.25	0.11	-0.46	-0.03		
Flcrot:WrB	P(I)	-0.00	0.02	-0.04	0.03		
Flcrot:WrT	E(I)	0.04	0.03	-0.01	0.10		
Flcrot:WrT	G(Ia)	-0.28	0.11	-0.48	-0.07		
Flcrot:WrT	P(I)	-0.01	0.02	-0.04	0.03		
Flcrot:Face	E(I)	0.07	0.04	-0.01	0.15		
Flcrot:Face	G(Ia)	-0.33	0.10	-0.52	-0.15		
Flcrot:Face	P(I)	-0.01	0.02	-0.05	0.02		
Flcrot:Gfw	E(I)	0.01	0.03	-0.04	0.06		
Flcrot:Gfw	G(Ia)	-0.20	0.12	-0.43	0.03		
Flcrot:Gfw	P(I)	-0.01	0.02	-0.05	0.02		
Flcrot:Yld	E(I)	-0.02	0.03	-0.07	0.04		
Flcrot:Yld	G(Ia)	0.35	0.12	0.12	0.58		
Flcrot:Yld	P(I)	0.03	0.02	-0.00	0.06		
Flcrot:Cww	E(I)	0.01	0.03	-0.04	0.06		
Flcrot:Cww	G(Ia)	-0.04	0.12	-0.27	0.18		
Flcrot:Cww	P(I)	0.00	0.02	-0.03	0.03		
Flcrot:Staladj	E(I)	0.00	0.03	-0.05	0.06		
Flcrot:Staladj	G(Ia)	-0.14	0.10	-0.34	0.07		
Flcrot:Staladj	P(I)	-0.01	0.02	-0.05	0.02		
Flcrot:Gfwadj	E(I)	0.01	0.03	-0.04	0.06		
Flcrot:Gfwadj	G(Ia)	-0.15	0.10	-0.35	0.06		
Flcrot:Gfwadj	P(I)	-0.01	0.02	-0.04	0.02		
Flcrot:Cwwadj	E(I)	0.01	0.03	-0.04	0.06		
Flcrot:Cwwadj	G(Ia)	-0.00	0.11	-0.22	0.21		
Flcrot:Cwwadj	P(I)	0.00	0.02	-0.03	0.04		
Flcrot:Crimp	E(I)	0.10	0.18	-0.25	0.45		
Flcrot:Crimp	G(Ia)	-0.55	0.19	-0.93	-0.17		
Flcrot:Crimp	P(I)	-0.07	0.02	-0.11	-0.03		
Flcrot:Crwvl	E(I)	-0.01	0.05	-0.11	0.09		
Flcrot:Crwvl	G(Ia)	0.44	0.19	0.07	0.81		
Flcrot:Crwvl	P(I)	0.05	0.02	0.01	0.10		
Flcrot:Crst	E(I)	0.05	0.05	-0.06	0.15		
Flcrot:Crst	G(Ia)	-0.67	0.24	-1.13	-0.20		
Flcrot:Crst	P(I)	-0.07	0.02	-0.11	-0.02		
Flcrot:Crstadj	E(I)	0.04	0.05	-0.06	0.14		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Flcrot:Crstadj	G(Ia)	-0.64	0.23	-1.10	-0.18		
Flcrot:Crstadj	P(I)	-0.06	0.02	-0.11	-0.02		
Flcrot:Crwvt	E(I)	-0.03	0.04	-0.10	0.05		
Flcrot:Crwvt	G(Ia)	0.61	0.24	0.14	1.08		
Flcrot:Crwvt	P(I)	0.05	0.02	0.01	0.09		
Flcrot:Dp	E(I)	-0.09	0.07	-0.22	0.04		
Flcrot:Dp	G(Ia)	0.05	0.08	-0.10	0.21		
Flcrot:Dp	P(I)	-0.04	0.03	-0.10	0.03		
Flcrot:Ds	E(I)	-0.09	0.06	-0.21	0.03		
Flcrot:Ds	G(Ia)	-0.17	0.09	-0.34	0.01		
Flcrot:Ds	P(I)	-0.11	0.03	-0.17	-0.05		
Flcrot:Dps	E(I)	-0.09	0.06	-0.20	0.03		
Flcrot:Dps	G(Ia)	-0.17	0.09	-0.35	0.01		
Flcrot:Dps	P(I)	-0.11	0.03	-0.17	-0.04		
Flcrot:DpovDs	E(I)	-0.03	0.11	-0.24	0.19		
Flcrot:DpovDs	G(Ia)	0.11	0.06	-0.01	0.24		
Flcrot:DpovDs	P(I)	0.04	0.03	-0.03	0.10		
Flcrot:CVDp	E(I)	0.11	0.06	-0.01	0.22		
Flcrot:CVDp	G(Ia)	-0.04	0.10	-0.24	0.16		
Flcrot:CVDp	P(I)	0.06	0.03	-0.00	0.13		
Flcrot:CVDs	E(I)	0.08	0.06	-0.03	0.19		
Flcrot:CVDs	G(Ia)	0.16	0.11	-0.05	0.37		
Flcrot:CVDs	P(I)	0.10	0.03	0.04	0.17		
Flcrot:MaxDp	E(I)	-0.03	0.07	-0.16	0.10		
Flcrot:MaxDp	G(Ia)	0.10	0.08	-0.07	0.26		
Flcrot:MaxDp	P(I)	0.01	0.03	-0.05	0.08		
Flcrot:MinDp	E(I)	-0.01	0.05	-0.11	0.09		
Flcrot:MinDp	G(Ia)	-0.24	0.26	-0.75	0.26		
Flcrot:MinDp	P(I)	-0.04	0.03	-0.10	0.03		
Flcrot:MaxDs	E(I)	0.07	0.05	-0.04	0.17		
Flcrot:MaxDs	G(Ia)	-0.08	0.13	-0.33	0.18		
Flcrot:MaxDs	P(I)	0.04	0.03	-0.03	0.10		
Flcrot:MinDs	E(I)	0.04	0.05	-0.06	0.13		
Flcrot:MinDs	G(Ia)	-0.69	0.27	-1.22	-0.15		
Flcrot:MinDs	P(I)	-0.05	0.03	-0.12	0.01		
Flcrot:SDDp	E(I)	0.03	0.07	-0.10	0.16		
Flcrot:SDDp	G(Ia)	0.05	0.08	-0.11	0.21		
Flcrot:SDDp	P(I)	0.03	0.03	-0.03	0.10		
Flcrot:SDDs	E(I)	0.00	0.06	-0.12	0.12		
Flcrot:SDDs	G(Ia)	0.06	0.09	-0.11	0.24		
Flcrot:SDDs	P(I)	0.02	0.03	-0.04	0.09		
Flcrot:SDD	E(I)	0.01	0.06	-0.11	0.13		
Flcrot:SDD	G(Ia)	0.05	0.09	-0.12	0.23		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Flcrot:SDD	P(I)	0.02	0.03	-0.04	0.09		
Flcrot:CVD	E(I)	0.09	0.06	-0.02	0.20		
Flcrot:CVD	G(Ia)	0.14	0.10	-0.06	0.34		
Flcrot:CVD	P(I)	0.10	0.03	0.04	0.17		
Flcrot:Gt30Dp	E(I)	-0.01	0.07	-0.14	0.12		
Flcrot:Gt30Dp	G(Ia)	0.00	0.08	-0.16	0.17		
Flcrot:Gt30Dp	P(I)	-0.01	0.03	-0.07	0.06		
Flcrot:Gt30Ds	E(I)	-0.04	0.06	-0.16	0.07		
Flcrot:Gt30Ds	G(Ia)	0.03	0.11	-0.19	0.24		
Flcrot:Gt30Ds	P(I)	-0.03	0.03	-0.09	0.04		
Flcrot:Gt30D	E(I)	-0.04	0.06	-0.15	0.07		
Flcrot:Gt30D	G(Ia)	0.02	0.11	-0.20	0.23		
Flcrot:Gt30D	P(I)	-0.03	0.03	-0.09	0.04		
Flcrot:Fnua	E(I)	-0.00	0.03	-0.06	0.05		
Flcrot:Fnua	G(Ia)	0.46	0.19	0.08	0.84		
Flcrot:Fnua	P(I)	0.04	0.02	-0.00	0.07		
Flcrot:Fr	E(I)	-0.00	0.03	-0.06	0.05		
Flcrot:Fr	G(Ia)	0.20	0.16	-0.12	0.52		
Flcrot:Fr	P(I)	0.01	0.02	-0.02	0.05		
Flcrot:Fnt	E(I)	-0.02	0.03	-0.07	0.03		
Flcrot:Fnt	G(Ia)	0.37	0.18	0.02	0.71		
Flcrot:Fnt	P(I)	0.02	0.02	-0.02	0.05		
Flcrot:Sarea	E(I)	-0.04	0.03	-0.09	0.02		
Flcrot:Sarea	G(Ia)	-0.17	0.15	-0.45	0.12		
Flcrot:Sarea	P(I)	-0.04	0.02	-0.08	-0.01		
Flcrot:Fd	E(I)	0.00	0.03	-0.05	0.06		
Flcrot:Fd	G(Ia)	0.07	0.24	-0.40	0.55		
Flcrot:Fd	P(I)	0.01	0.02	-0.03	0.05		
Flcrot:Fc	E(I)	0.08	0.04	-0.00	0.16		
Flcrot:Fc	G(Ia)	-0.62	0.30	-1.22	-0.03		
Flcrot:Fc	P(I)	-0.01	0.02	-0.05	0.02		
Flcrot:Fu	E(I)	0.03	0.03	-0.03	0.09		
Flcrot:Fu	G(Ia)	-0.14	0.22	-0.58	0.30		
Flcrot:Fu	P(I)	0.01	0.02	-0.03	0.05		
Flcrot:Colour	E(I)	0.03	0.02	-0.02	0.07		
Flcrot:Colour	G(Ia)	0.54	0.19	0.18	0.90		
Flcrot:Colour	P(I)	0.06	0.02	0.03	0.10		
Flcrot:Fly	E(I)	0.01	0.02	-0.03	0.06		
Flcrot:Fly	G(Ia)	-0.37	0.23	-0.82	0.09		
Flcrot:Fly	P(I)	-0.01	0.02	-0.04	0.03		
Flcrot:Flcrot	E(I)	1.00	0.00	1.00	1.00		
Flcrot:Flcrot	G(Ia)	1.00	0.00	1.00	1.00		
Flcrot:Flcrot	P(I)	1.00	0.00	1.00	1.00		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Flcrot:Bactst	E(I)	0.27	0.03	0.22	0.32		
Flcrot:Bactst	G(Ia)	0.77	0.14	0.49	1.05		
Flcrot:Bactst	P(I)	0.32	0.02	0.28	0.35		
Flcrot:MycD	E(I)	0.40	0.03	0.35	0.44		
Flcrot:MycD	G(Ia)	0.32	0.15	0.02	0.62		
Flcrot:MycD	P(I)	0.38	0.02	0.34	0.41		
Flcrot:Bcts	E(I)	-0.04	0.05	-0.14	0.06		
Flcrot:Bcts	G(Ia)	0.12	0.05	0.02	0.21		
Flcrot:Bcts	P(I)	0.01	0.02	-0.02	0.05		
Flcrot:Bctb	E(I)	-0.05	0.05	-0.15	0.04		
Flcrot:Bctb	G(Ia)	0.13	0.05	0.03	0.23		
Flcrot:Bctb	P(I)	0.01	0.02	-0.02	0.05		
Flcrot:Weanwt	E(I)	-0.00	0.03	-0.06	0.05		
Flcrot:Weanwt	G(Ia)	-0.17	0.09	-0.35	0.01		
Flcrot:Weanwt	P(I)	-0.03	0.02	-0.06	0.01		
Flcrot:NLB	E(I)	-0.00	0.02	-0.05	0.04		
Flcrot:NLB	G(Ia)	0.09	0.15	-0.20	0.38		
Flcrot:NLB	P(I)	0.00	0.02	-0.03	0.04		
Flcrot:NLW	E(I)	0.00	0.02	-0.04	0.05		
Flcrot:NLW	G(Ia)	0.12	0.15	-0.17	0.40		
Flcrot:NLW	P(I)	0.01	0.02	-0.02	0.04		
Flcrot:Fnpua	E(I)	-0.00	0.03	-0.05	0.05		
Flcrot:Fnpua	G(Ia)	0.36	0.20	-0.03	0.74		
Flcrot:Fnpua	P(I)	0.03	0.02	-0.01	0.06		
Flcrot:Fnsua	E(I)	-0.00	0.03	-0.06	0.05		
Flcrot:Fnsua	G(Ia)	0.45	0.19	0.07	0.83		
Flcrot:Fnsua	P(I)	0.04	0.02	-0.00	0.07		
Flcrot:Fnpt	E(I)	-0.01	0.03	-0.06	0.04		
Flcrot:Fnpt	G(Ia)	0.22	0.18	-0.13	0.57		
Flcrot:Fnpt	P(I)	0.01	0.02	-0.03	0.04		
Flcrot:Fnst	E(I)	-0.02	0.03	-0.07	0.03		
Flcrot:Fnst	G(Ia)	0.37	0.18	0.02	0.71		
Flcrot:Fnst	P(I)	0.02	0.02	-0.02	0.05		
Bactst:Stal	E(I)	-0.05	0.03	-0.11	0.02		
Bactst:Stal	G(Ia)	-0.55	0.14	-0.82	-0.29		
Bactst:Stal	P(I)	-0.11	0.02	-0.15	-0.07		
Bactst:Diam	E(I)	0.02	0.04	-0.06	0.10		
Bactst:Diam	G(Ia)	0.01	0.09	-0.17	0.19		
Bactst:Diam	P(I)	0.01	0.02	-0.03	0.05		
Bactst:Bwt	E(I)	-0.12	0.03	-0.19	-0.06		
Bactst:Bwt	G(Ia)	0.33	0.14	0.04	0.61		
Bactst:Bwt	P(I)	-0.06	0.02	-0.10	-0.02		
Bactst:WrN	E(I)	-0.01	0.04	-0.08	0.06		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bactst:WrN	G(Ia)	-0.19	0.10	-0.39	0.00		
Bactst:WrN	P(I)	-0.04	0.02	-0.08	0.00		
Bactst:WrB	E(I)	-0.02	0.03	-0.09	0.05		
Bactst:WrB	G(Ia)	-0.13	0.10	-0.33	0.08		
Bactst:WrB	P(I)	-0.03	0.02	-0.07	0.01		
Bactst:WrT	E(I)	-0.02	0.04	-0.09	0.05		
Bactst:WrT	G(Ia)	-0.16	0.10	-0.35	0.02		
Bactst:WrT	P(I)	-0.04	0.02	-0.08	0.00		
Bactst:Face	E(I)	-0.02	0.04	-0.10	0.06		
Bactst:Face	G(Ia)	0.24	0.09	0.05	0.42		
Bactst:Face	P(I)	0.03	0.02	-0.01	0.07		
Bactst:Gfw	E(I)	-0.00	0.03	-0.07	0.06		
Bactst:Gfw	G(Ia)	-0.25	0.11	-0.47	-0.03		
Bactst:Gfw	P(I)	-0.04	0.02	-0.08	0.00		
Bactst:Yld	E(I)	0.03	0.04	-0.04	0.11		
Bactst:Yld	G(Ia)	0.33	0.10	0.13	0.53		
Bactst:Yld	P(I)	0.07	0.02	0.03	0.11		
Bactst:Cww	E(I)	0.01	0.03	-0.05	0.07		
Bactst:Cww	G(Ia)	-0.09	0.12	-0.31	0.14		
Bactst:Cww	P(I)	-0.00	0.02	-0.04	0.04		
Bactst:Staladj	E(I)	-0.05	0.03	-0.12	0.01		
Bactst:Staladj	G(Ia)	-0.51	0.11	-0.74	-0.29		
Bactst:Staladj	P(I)	-0.12	0.02	-0.16	-0.08		
Bactst:Gfwadj	E(I)	-0.01	0.03	-0.08	0.05		
Bactst:Gfwadj	G(Ia)	-0.24	0.11	-0.44	-0.03		
Bactst:Gfwadj	P(I)	-0.05	0.02	-0.09	-0.00		
Bactst:Cwwadj	E(I)	-0.00	0.03	-0.07	0.06		
Bactst:Cwwadj	G(Ia)	-0.08	0.11	-0.30	0.14		
Bactst:Cwwadj	P(I)	-0.01	0.02	-0.06	0.03		
Bactst:Crimp	E(I)	-0.17	0.07	-0.30	-0.04		
Bactst:Crimp	G(Ia)	-0.21	0.21	-0.63	0.20		
Bactst:Crimp	P(I)	-0.16	0.03	-0.22	-0.09		
Bactst:Crwvl	E(I)	0.19	0.07	0.06	0.32		
Bactst:Crwvl	G(Ia)	0.26	0.21	-0.16	0.67		
Bactst:Crwvl	P(I)	0.18	0.03	0.11	0.25		
Bactst:Crst	E(I)	-0.12	0.07	-0.25	0.01		
Bactst:Crst	G(Ia)	-0.56	0.24	-1.03	-0.08		
Bactst:Crst	P(I)	-0.18	0.03	-0.25	-0.11		
Bactst:Crstadj	E(I)	-0.12	0.07	-0.25	0.01		
Bactst:Crstadj	G(Ia)	-0.56	0.24	-1.03	-0.08		
Bactst:Crstadj	P(I)	-0.18	0.03	-0.25	-0.12		
Bactst:Crwvt	E(I)	0.17	0.06	0.04	0.29		
Bactst:Crwvt	G(Ia)	0.59	0.25	0.10	1.08		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bactst:Crwvt	P(I)	0.22	0.03	0.16	0.29		
Bactst:Dp	E(I)	0.00	0.06	-0.11	0.11		
Bactst:Dp	G(Ia)	0.34	0.12	0.10	0.57		
Bactst:Dp	P(I)	0.08	0.03	0.02	0.15		
Bactst:Ds	E(I)	-0.02	0.06	-0.13	0.10		
Bactst:Ds	G(Ia)	-0.06	0.13	-0.31	0.19		
Bactst:Ds	P(I)	-0.02	0.03	-0.09	0.04		
Bactst:Dps	E(I)	-0.01	0.06	-0.12	0.10		
Bactst:Dps	G(Ia)	-0.04	0.13	-0.30	0.22		
Bactst:Dps	P(I)	-0.02	0.03	-0.08	0.05		
Bactst:DpovDs	E(I)	0.03	0.10	-0.16	0.22		
Bactst:DpovDs	G(Ia)	0.31	0.09	0.12	0.49		
Bactst:DpovDs	P(I)	0.11	0.03	0.04	0.17		
Bactst:CVDp	E(I)	-0.06	0.05	-0.16	0.05		
Bactst:CVDp	G(Ia)	0.07	0.15	-0.22	0.36		
Bactst:CVDp	P(I)	-0.03	0.03	-0.10	0.03		
Bactst:CVDs	E(I)	0.06	0.05	-0.04	0.16		
Bactst:CVDs	G(Ia)	-0.19	0.16	-0.51	0.13		
Bactst:CVDs	P(I)	0.01	0.03	-0.05	0.08		
Bactst:MaxDp	E(I)	-0.03	0.06	-0.16	0.09		
Bactst:MaxDp	G(Ia)	0.33	0.12	0.09	0.58		
Bactst:MaxDp	P(I)	0.05	0.03	-0.01	0.12		
Bactst:MinDp	E(I)	-0.02	0.05	-0.11	0.07		
Bactst:MinDp	G(Ia)	0.50	0.40	-0.27	1.28		
Bactst:MinDp	P(I)	0.02	0.03	-0.04	0.09		
Bactst:MaxDs	E(I)	-0.02	0.05	-0.11	0.08		
Bactst:MaxDs	G(Ia)	-0.06	0.19	-0.42	0.31		
Bactst:MaxDs	P(I)	-0.02	0.03	-0.09	0.04		
Bactst:MinDs	E(I)	-0.04	0.05	-0.13	0.05		
Bactst:MinDs	G(Ia)	0.09	0.38	-0.65	0.83		
Bactst:MinDs	P(I)	-0.03	0.03	-0.10	0.04		
Bactst:SDDp	E(I)	-0.05	0.06	-0.17	0.08		
Bactst:SDDp	G(Ia)	0.23	0.12	-0.01	0.47		
Bactst:SDDp	P(I)	0.02	0.03	-0.04	0.09		
Bactst:SDDs	E(I)	0.05	0.06	-0.07	0.16		
Bactst:SDDs	G(Ia)	-0.16	0.13	-0.42	0.10		
Bactst:SDDs	P(I)	0.00	0.04	-0.07	0.07		
Bactst:SDD	E(I)	0.04	0.06	-0.07	0.16		
Bactst:SDD	G(Ia)	-0.12	0.13	-0.37	0.13		
Bactst:SDD	P(I)	0.00	0.03	-0.06	0.07		
Bactst:CVD	E(I)	0.05	0.05	-0.05	0.16		
Bactst:CVD	G(Ia)	-0.16	0.15	-0.46	0.14		
Bactst:CVD	P(I)	0.01	0.03	-0.05	0.08		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bactst:Gt30Dp	E(I)	-0.02	0.06	-0.15	0.10		
Bactst:Gt30Dp	G(Ia)	0.26	0.12	0.02	0.50		
Bactst:Gt30Dp	P(I)	0.04	0.03	-0.02	0.11		
Bactst:Gt30Ds	E(I)	0.00	0.05	-0.10	0.11		
Bactst:Gt30Ds	G(Ia)	-0.04	0.16	-0.34	0.27		
Bactst:Gt30Ds	P(I)	-0.00	0.03	-0.07	0.06		
Bactst:Gt30D	E(I)	-0.00	0.05	-0.11	0.10		
Bactst:Gt30D	G(Ia)	0.03	0.15	-0.27	0.33		
Bactst:Gt30D	P(I)	0.00	0.03	-0.06	0.07		
Bactst:Fnua	$\mid E(I) \mid$	0.02	0.04	-0.05	0.09		
Bactst:Fnua	G(Ia)	0.19	0.13	-0.06	0.43		
Bactst:Fnua	P(I)	0.04	0.02	-0.00	0.09		
Bactst:Fr	$\mid E(I) \mid$	-0.00	0.04	-0.08	0.07		
Bactst:Fr	G(Ia)	0.29	0.12	0.05	0.53		
Bactst:Fr	P(I)	0.04	0.02	-0.00	0.09		
Bactst:Fnt	E(I)	-0.03	0.04	-0.10	0.04		
Bactst:Fnt	G(Ia)	0.33	0.13	0.07	0.59		
Bactst:Fnt	P(I)	0.02	0.02	-0.02	0.07		
Bactst:Sarea	E(I)	-0.11	0.04	-0.18	-0.04		
Bactst:Sarea	G(Ia)	0.33	0.13	0.07	0.59		
Bactst:Sarea	P(I)	-0.04	0.02	-0.09	0.00		
Bactst:Fd	E(I)	-0.01	0.04	-0.09	0.07		
Bactst:Fd	G(Ia)	-0.34	0.19	-0.72	0.04		
Bactst:Fd	P(I)	-0.05	0.03	-0.10	0.00		
Bactst:Fc	$\mid E(I) \mid$	0.00	0.05	-0.10	0.11		
Bactst:Fc	G(Ia)	-0.29	0.12	-0.52	-0.05		
Bactst:Fc	P(I)	-0.05	0.03	-0.11	-0.00		
Bactst:Fu	E(I)	0.06	0.05	-0.04	0.15		
Bactst:Fu	G(Ia)	-0.43	0.14	-0.71	-0.16		
Bactst:Fu	P(I)	-0.04	0.03	-0.09	0.01		
Bactst:Colour	E(I)	0.19	0.03	0.13	0.24		
Bactst:Colour	G(Ia)	0.30	0.13	0.04	0.56		
Bactst:Colour	P(I)	0.20	0.02	0.16	0.23		
Bactst:Fly	E(I)	0.18	0.03	0.13	0.23		
Bactst:Fly	G(Ia)	0.52	0.23	0.07	0.96		
Bactst:Fly	P(I)	0.20	0.02	0.16	0.24		
Bactst:Flcrot	E(I)	0.27	0.03	0.22	0.32		
Bactst:Flcrot	G(Ia)	0.77	0.14	0.49	1.05		
Bactst:Flcrot	P(I)	0.32	0.02	0.28	0.35		
Bactst:Bactst	E(I)	1.00	0.00	1.00	1.00		
Bactst:Bactst	G(Ia)	1.00	0.00	1.00	1.00		
Bactst:Bactst	P(I)	1.00	0.00	1.00	1.00		
Bactst:MycD	E(I)	0.28	0.02	0.23	0.33		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bactst:MycD	G(Ia)	0.92	0.33	0.27	1.58		
Bactst:MycD	P(I)	0.31	0.02	0.27	0.35		
Bactst:Bcts	E(I)	-0.32	0.10	-0.51	-0.12		
Bactst:Bcts	G(Ia)	0.59	0.09	0.40	0.77		
Bactst:Bcts	P(I)	0.05	0.02	0.01	0.09		
Bactst:Bctb	E(I)	-0.32	0.08	-0.48	-0.15		
Bactst:Bctb	G(Ia)	0.56	0.09	0.38	0.75		
Bactst:Bctb	P(I)	0.03	0.02	-0.01	0.07		
Bactst:Weanwt	E(I)	-0.02	0.03	-0.08	0.04		
Bactst:Weanwt	G(Ia)	-0.17	0.13	-0.42	0.09		
Bactst:Weanwt	P(I)	-0.04	0.02	-0.08	0.00		
Bactst:NLB	E(I)	0.02	0.03	-0.04	0.08		
Bactst:NLB	G(Ia)	0.21	0.14	-0.07	0.49		
Bactst:NLB	P(I)	0.04	0.02	-0.00	0.08		
Bactst:NLW	E(I)	0.01	0.03	-0.05	0.06		
Bactst:NLW	G(Ia)	0.14	0.14	-0.12	0.41		
Bactst:NLW	P(I)	0.02	0.02	-0.02	0.06		
Bactst:Fnpua	E(I)	0.02	0.03	-0.05	0.08		
Bactst:Fnpua	G(Ia)	-0.10	0.15	-0.40	0.20		
Bactst:Fnpua	P(I)	0.00	0.02	-0.04	0.05		
Bactst:Fnsua	E(I)	0.02	0.04	-0.05	0.09		
Bactst:Fnsua	G(Ia)	0.19	0.12	-0.05	0.44		
Bactst:Fnsua	P(I)	0.04	0.02	-0.00	0.09		
Bactst:Fnpt	E(I)	-0.01	0.03	-0.08	0.05		
Bactst:Fnpt	G(Ia)	0.02	0.14	-0.26	0.29		
Bactst:Fnpt	P(I)	-0.01	0.02	-0.06	0.04		
Bactst:Fnst	E(I)	-0.03	0.04	-0.10	0.04		
Bactst:Fnst	G(Ia)	0.34	0.13	0.08	0.60		
Bactst:Fnst	P(I)	0.02	0.02	-0.02	0.07		
MycD:Stal	E(I)	0.01	0.03	-0.05	0.08		
MycD:Stal	G(Ia)	-0.27	0.12	-0.51	-0.03		
MycD:Stal	P(I)	-0.03	0.02	-0.07	0.01		
MycD:Diam	E(I)	-0.03	0.04	-0.11	0.04		
MycD:Diam	G(Ia)	0.03	0.10	-0.17	0.22		
MycD:Diam	P(I)	-0.02	0.02	-0.06	0.02		
MycD:Bwt	E(I)	-0.09	0.03	-0.15	-0.03		
MycD:Bwt	G(Ia)	0.01	0.17	-0.31	0.34		
MycD:Bwt	P(I)	-0.07	0.02	-0.11	-0.03		
MycD:WrN	E(I)	-0.08	0.04	-0.15	-0.01		
MycD:WrN	G(Ia)	0.33	0.12	0.10	0.56		
MycD:WrN	P(I)	-0.01	0.02	-0.05	0.03		
MycD:WrB	E(I)	-0.09	0.03	-0.16	-0.02		
MycD:WrB	G(Ia)	0.41	0.13	0.16	0.66		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MycD:WrB	P(I)	-0.01	0.02	-0.05	0.03		
MycD:WrT	E(I)	-0.10	0.04	-0.17	-0.03		
MycD:WrT	G(Ia)	0.37	0.12	0.14	0.60		
MycD:WrT	P(I)	-0.01	0.02	-0.05	0.03		
MycD:Face	E(I)	0.04	0.04	-0.04	0.12		
MycD:Face	G(Ia)	0.12	0.09	-0.06	0.30		
MycD:Face	P(I)	0.04	0.02	0.00	0.08		
MycD:Gfw	E(I)	0.01	0.03	-0.05	0.08		
MycD:Gfw	G(Ia)	0.31	0.12	0.07	0.55		
MycD:Gfw	P(I)	0.05	0.02	0.01	0.09		
MycD:Yld	E(I)	0.11	0.04	0.04	0.18		
MycD:Yld	G(Ia)	-0.41	0.12	-0.65	-0.17		
MycD:Yld	P(I)	0.01	0.02	-0.03	0.05		
MycD:Cww	E(I)	0.06	0.03	-0.00	0.12		
MycD:Cww	G(Ia)	0.10	0.12	-0.14	0.34		
MycD:Cww	P(I)	0.06	0.02	0.02	0.10		
MycD:Staladj	E(I)	0.03	0.03	-0.03	0.10		
MycD:Staladj	G(Ia)	-0.29	0.14	-0.56	-0.01		
MycD:Staladj	P(I)	-0.01	0.02	-0.05	0.03		
MycD:Gfwadj	E(I)	0.02	0.03	-0.04	0.09		
MycD:Gfwadj	G(Ia)	0.36	0.15	0.07	0.65		
MycD:Gfwadj	P(I)	0.06	0.02	0.02	0.10		
MycD:Cwwadj	E(I)	0.06	0.03	0.00	0.13		
MycD:Cwwadj	G(Ia)	0.16	0.14	-0.12	0.43		
MycD:Cwwadj	P(I)	0.07	0.02	0.03	0.11		
MycD:Crimp	E(I)	-0.15	0.07	-0.29	-0.02		
MycD:Crimp	G(Ia)	0.04	0.22	-0.38	0.47		
MycD:Crimp	P(I)	-0.10	0.03	-0.17	-0.03		
MycD:Crwvl	E(I)	0.11	0.07	-0.02	0.25		
MycD:Crwvl	G(Ia)	0.04	0.17	-0.30	0.37		
MycD:Crwvl	P(I)	0.09	0.03	0.02	0.16		
MycD:Crst	E(I)	-0.06	0.07	-0.19	0.08		
MycD:Crst	G(Ia)	-0.34	0.19	-0.72	0.04		
MycD:Crst	P(I)	-0.11	0.03	-0.18	-0.04		
MycD:Crstadj	E(I)	-0.06	0.07	-0.19	0.08		
MycD:Crstadj	G(Ia)	-0.35	0.19	-0.73	0.03		
MycD:Crstadj	P(I)	-0.11	0.03	-0.18	-0.04		
MycD:Crwvt	E(I)	0.03	0.07	-0.10	0.16		
MycD:Crwvt	G(Ia)	0.38	0.21	-0.02	0.79		
MycD:Crwvt	P(I)	0.10	0.03	0.03	0.16		
MycD:Dp	E(I)	-0.03	0.06	-0.15	0.09		
MycD:Dp	G(Ia)	0.05	0.18	-0.30	0.39		
MycD:Dp	P(I)	-0.01	0.03	-0.07	0.05		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
MycD:Ds	E(I)	-0.03	0.06	-0.14	0.07	
MycD:Ds	G(Ia)	0.11	0.20	-0.28	0.49	
MycD:Ds	P(I)	-0.01	0.03	-0.07	0.05	
MycD:Dps	E(I)	-0.03	0.05	-0.14	0.07	
MycD:Dps	G(Ia)	0.10	0.21	-0.30	0.50	
MycD:Dps	P(I)	-0.01	0.03	-0.08	0.05	
MycD:DpovDs	E(I)	0.00	0.11	-0.21	0.21	
MycD:DpovDs	G(Ia)	-0.01	0.14	-0.27	0.26	
MycD:DpovDs	P(I)	-0.00	0.03	-0.06	0.06	
MycD:CVDp	E(I)	0.02	0.05	-0.08	0.13	
MycD:CVDp	G(Ia)	-0.23	0.22	-0.66	0.21	
MycD:CVDp	P(I)	-0.01	0.03	-0.08	0.05	
MycD:CVDs	E(I)	0.05	0.05	-0.05	0.15	
MycD:CVDs	G(Ia)	-0.16	0.24	-0.64	0.32	
MycD:CVDs	P(I)	0.02	0.03	-0.04	0.09	
MycD:MaxDp	E(I)	-0.02	0.06	-0.13	0.10	
MycD:MaxDp	G(Ia)	0.01	0.19	-0.37	0.38	
MycD:MaxDp	P(I)	-0.01	0.03	-0.07	0.05	
MycD:MinDp	$\mid E(I) \mid$	-0.02	0.04	-0.11	0.07	
MycD:MinDp	G(Ia)	0.34	0.57	-0.78	1.46	
MycD:MinDp	P(I)	-0.00	0.03	-0.07	0.06	
MycD:MaxDs	$\mid E(I) \mid$	0.02	0.05	-0.08	0.11	
MycD:MaxDs	G(Ia)	-0.08	0.29	-0.63	0.48	
MycD:MaxDs	P(I)	0.01	0.03	-0.06	0.07	
MycD:MinDs	$\mid E(I) \mid$	-0.01	0.04	-0.10	0.08	
MycD:MinDs	G(Ia)	-0.10	0.48	-1.05	0.86	
MycD:MinDs	P(I)	-0.02	0.03	-0.08	0.05	
MycD:SDDp	$\mid E(I) \mid$	0.02	0.06	-0.10	0.13	
MycD:SDDp	G(Ia)	-0.02	0.18	-0.36	0.33	
MycD:SDDp	P(I)	0.01	0.03	-0.06	0.07	
MycD:SDDs	E(I)	0.03	0.06	-0.08	0.14	
MycD:SDDs	G(Ia)	-0.03	0.20	-0.43	0.36	
MycD:SDDs	P(I)	0.02	0.03	-0.04	0.08	
MycD:SDD	E(I)	0.03	0.06	-0.08	0.14	
MycD:SDD	G(Ia)	-0.03	0.20	-0.42	0.35	
MycD:SDD	P(I)	0.02	0.03	-0.04	0.09	
MycD:CVD	E(I)	0.06	0.05	-0.04	0.16	
MycD:CVD	G(Ia)	-0.16	0.23	-0.62	0.30	
MycD:CVD	P(I)	0.03	0.03	-0.04	0.09	
MycD:Gt30Dp	E(I)	-0.03	0.06	-0.15	0.08	
MycD:Gt30Dp	G(Ia)	0.05	0.18	-0.32	0.41	
MycD:Gt30Dp	P(I)	-0.02	0.03	-0.08	0.05	
MycD:Gt30Ds	E(I)	-0.00	0.05	-0.10	0.10	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MycD:Gt30Ds	G(Ia)	0.05	0.23	-0.41	0.51		
MycD:Gt30Ds	P(I)	0.01	0.03	-0.06	0.07		
MycD:Gt30D	E(I)	-0.01	0.05	-0.11	0.09		
MycD:Gt30D	G(Ia)	0.05	0.23	-0.40	0.50		
MycD:Gt30D	P(I)	0.00	0.03	-0.06	0.07		
MycD:Fnua	E(I)	0.02	0.03	-0.05	0.09		
MycD:Fnua	G(Ia)	0.08	0.25	-0.42	0.57		
MycD:Fnua	P(I)	0.02	0.02	-0.02	0.07		
MycD:Fr	E(I)	0.02	0.04	-0.05	0.09		
MycD:Fr	G(Ia)	0.43	0.30	-0.16	1.03		
MycD:Fr	P(I)	0.05	0.02	0.01	0.10		
MycD:Fnt	E(I)	-0.01	0.03	-0.07	0.06		
MycD:Fnt	G(Ia)	0.15	0.27	-0.39	0.68		
MycD:Fnt	P(I)	0.00	0.02	-0.04	0.05		
MycD:Sarea	E(I)	-0.07	0.03	-0.14	-0.00		
MycD:Sarea	G(Ia)	0.17	0.28	-0.38	0.73		
MycD:Sarea	P(I)	-0.05	0.02	-0.09	-0.00		
MycD:Fd	E(I)	-0.01	0.04	-0.09	0.07		
MycD:Fd	G(Ia)	0.00	0.24	-0.47	0.48		
MycD:Fd	P(I)	-0.01	0.03	-0.06	0.04		
MycD:Fc	E(I)	-0.07	0.05	-0.17	0.03		
MycD:Fc	G(Ia)	0.23	0.14	-0.03	0.50		
MycD:Fc	P(I)	-0.00	0.03	-0.06	0.05		
MycD:Fu	E(I)	-0.06	0.05	-0.15	0.04		
MycD:Fu	G(Ia)	0.19	0.15	-0.10	0.48		
MycD:Fu	P(I)	-0.01	0.03	-0.06	0.04		
MycD:Colour	E(I)	0.19	0.03	0.13	0.24		
MycD:Colour	G(Ia)	0.29	0.16	-0.03	0.61		
MycD:Colour	P(I)	0.19	0.02	0.15	0.23		
MycD:Fly	E(I)	0.25	0.03	0.20	0.30		
MycD:Fly	G(Ia)	0.36	0.26	-0.16	0.87		
MycD:Fly	P(I)	0.25	0.02	0.22	0.29		
MycD:Flcrot	E(I)	0.40	0.03	0.35	0.44		
MycD:Flcrot	G(Ia)	0.32	0.15	0.02	0.62		
MycD:Flcrot	P(I)	0.38	0.02	0.34	0.41		
MycD:Bactst	E(I)	0.28	0.02	0.23	0.33		
MycD:Bactst	G(Ia)	0.92	0.33	0.27	1.58		
MycD:Bactst	P(I)	0.31	0.02	0.27	0.35		
MycD:MycD	E(I)	1.00	0.00	1.00	1.00		
MycD:MycD	G(Ia)	1.00	0.00	1.00	1.00		
MycD:MycD	P(I)	1.00	0.00	1.00	1.00		
MycD:Bcts	E(I)	-0.02	0.08	-0.18	0.15		
MycD:Bcts	G(Ia)	-0.02	0.08	-0.17	0.13		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
MycD:Bcts	P(I)	-0.01	0.02	-0.05	0.03		
MycD:Bctb	E(I)	-0.06	0.07	-0.20	0.09		
MycD:Bctb	G(Ia)	-0.02	0.08	-0.18	0.13		
MycD:Bctb	P(I)	-0.02	0.02	-0.06	0.02		
MycD:Weanwt	E(I)	-0.07	0.03	-0.13	-0.02		
MycD:Weanwt	G(Ia)	0.17	0.17	-0.16	0.50		
MycD:Weanwt	P(I)	-0.05	0.02	-0.09	-0.01		
MycD:NLB	E(I)	0.04	0.03	-0.02	0.10		
MycD:NLB	G(Ia)	-0.31	0.17	-0.65	0.03		
MycD:NLB	P(I)	0.01	0.02	-0.03	0.05		
MycD:NLW	E(I)	0.05	0.03	-0.01	0.10		
MycD:NLW	G(Ia)	-0.35	0.17	-0.68	-0.02		
MycD:NLW	P(I)	0.00	0.02	-0.04	0.04		
MycD:Fnpua	E(I)	-0.03	0.03	-0.09	0.04		
MycD:Fnpua	G(Ia)	-0.19	0.32	-0.81	0.44		
MycD:Fnpua	P(I)	-0.03	0.02	-0.08	0.01		
MycD:Fnsua	E(I)	0.02	0.03	-0.04	0.09		
MycD:Fnsua	G(Ia)	0.09	0.25	-0.41	0.59		
MycD:Fnsua	P(I)	0.03	0.02	-0.02	0.07		
MycD:Fnpt	E(I)	-0.05	0.03	-0.11	0.02		
MycD:Fnpt	G(Ia)	-0.11	0.28	-0.65	0.43		
MycD:Fnpt	P(I)	-0.05	0.02	-0.09	-0.00		
MycD:Fnst	E(I)	-0.00	0.03	-0.07	0.06		
MycD:Fnst	G(Ia)	0.16	0.27	-0.38	0.69		
MycD:Fnst	P(I)	0.01	0.02	-0.04	0.05		
Bcts:Stal	E(I)	0.33	0.06	0.21	0.45		
Bcts:Stal	G(Ia)	-0.16	0.02	-0.20	-0.11		
Bcts:Stal	P(I)	0.03	0.02	-0.00	0.07		
Bcts:Diam	E(I)	0.17	0.07	0.04	0.30		
Bcts:Diam	G(Ia)	0.09	0.02	0.06	0.13		
Bcts:Diam	P(I)	0.11	0.02	0.08	0.15		
Bcts:Bwt	E(I)	-0.04	0.06	-0.15	0.07		
Bcts:Bwt	G(Ia)	0.03	0.02	-0.02	0.08		
Bcts:Bwt	P(I)	-0.00	0.02	-0.04	0.03		
Bcts:WrN	E(I)	0.49	0.06	0.36	0.61		
Bcts:WrN	G(Ia)	-0.20	0.02	-0.25	-0.16		
Bcts:WrN	P(I)	0.05	0.02	0.01	0.08		
Bcts:WrB	E(I)	0.44	0.06	0.32	0.56		
Bcts:WrB	G(Ia)	-0.21	0.02	-0.26	-0.17		
Bcts:WrB	P(I)	0.04	0.02	0.00	0.07		
Bcts:WrT	E(I)	0.51	0.07	0.38	0.64		
Bcts:WrT	G(Ia)	-0.19	0.02	-0.24	-0.15		
Bcts:WrT	P(I)	0.05	0.02	0.02	0.09		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bcts:Face	E(I)	-0.74	0.09	-0.91	-0.57		
Bcts:Face	G(Ia)	0.25	0.02	0.22	0.29		
Bcts:Face	P(I)	-0.02	0.02	-0.06	0.01		
Bcts:Gfw	E(I)	0.29	0.06	0.18	0.40		
Bcts:Gfw	G(Ia)	-0.08	0.02	-0.12	-0.03		
Bcts:Gfw	P(I)	0.07	0.02	0.03	0.10		
Bcts:Yld	E(I)	0.01	0.07	-0.13	0.14		
Bcts:Yld	G(Ia)	-0.05	0.02	-0.09	-0.02		
Bcts:Yld	P(I)	-0.03	0.02	-0.07	-0.00		
Bcts:Cww	$\mid E(I) \mid$	0.27	0.06	0.16	0.38		
Bcts:Cww	G(Ia)	-0.10	0.03	-0.15	-0.05		
Bcts:Cww	P(I)	0.05	0.02	0.02	0.09		
Bcts:Staladj	$\mid E(I) \mid$	0.40	0.06	0.28	0.52		
Bcts:Staladj	G(Ia)	-0.19	0.02	-0.23	-0.14		
Bcts:Staladj	P(I)	0.04	0.02	0.00	0.07		
Bcts:Gfwadj	E(I)	0.30	0.06	0.18	0.41		
Bcts:Gfwadj	G(Ia)	-0.08	0.02	-0.12	-0.03		
Bcts:Gfwadj	P(I)	0.07	0.02	0.03	0.10		
Bcts:Cwwadj	E(I)	0.30	0.06	0.18	0.41		
Bcts:Cwwadj	G(Ia)	-0.11	0.03	-0.16	-0.06		
Bcts:Cwwadj	P(I)	0.06	0.02	0.02	0.09		
Bcts:Crimp	E(I)	0.08	0.10	-0.12	0.28		
Bcts:Crimp	G(Ia)	-0.26	0.04	-0.34	-0.19		
Bcts:Crimp	P(I)	-0.14	0.02	-0.19	-0.10		
Bcts:Crwvl	E(I)	-0.03	0.09	-0.21	0.15		
Bcts:Crwvl	G(Ia)	0.29	0.04	0.20	0.38		
Bcts:Crwvl	P(I)	0.15	0.02	0.10	0.19		
Bcts:Crst	E(I)	0.07	0.09	-0.11	0.25		
Bcts:Crst	G(Ia)	-0.21	0.04	-0.30	-0.13		
Bcts:Crst	P(I)	-0.10	0.02	-0.15	-0.05		
Bcts:Crstadj	E(I)	0.08	0.09	-0.10	0.26		
Bcts:Crstadj	G(Ia)	-0.23	0.04	-0.31	-0.14		
Bcts:Crstadj	P(I)	-0.10	0.02	-0.14	-0.05		
Bcts:Crwvt	E(I)	-0.06	0.09	-0.23	0.12		
Bcts:Crwvt	G(Ia)	0.27	0.05	0.18	0.36		
Bcts:Crwvt	P(I)	0.12	0.02	0.08	0.17		
Bcts:Dp	E(I)	-0.32	0.18	-0.67	0.02		
Bcts:Dp	G(Ia)	0.77	0.03	0.72	0.83		
Bcts:Dp	P(I)	0.44	0.02	0.39	0.48		
Bcts:Ds	E(I)	0.06	0.13	-0.19	0.32		
Bcts:Ds	G(Ia)	-0.15	0.04	-0.23	-0.07		
Bcts:Ds	P(I)	-0.07	0.03	-0.13	-0.02		
Bcts:Dps	E(I)	0.04	0.13	-0.21	0.28		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bcts:Dps	G(Ia)	-0.08	0.04	-0.16	-0.00		
Bcts:Dps	P(I)	-0.04	0.03	-0.09	0.02		
Bcts:DpovDs	E(I)	-0.53	0.29	-1.11	0.05		
Bcts:DpovDs	G(Ia)	0.71	0.02	0.66	0.75		
Bcts:DpovDs	P(I)	0.51	0.02	0.46	0.55		
Bcts:CVDp	E(I)	-0.35	0.15	-0.64	-0.06		
Bcts:CVDp	G(Ia)	0.70	0.04	0.61	0.78		
Bcts:CVDp	P(I)	0.28	0.03	0.23	0.33		
Bcts:CVDs	$\mid E(I) \mid$	-0.29	0.13	-0.55	-0.03		
Bcts:CVDs	G(Ia)	0.51	0.05	0.41	0.61		
Bcts:CVDs	P(I)	0.17	0.03	0.11	0.22		
Bcts:MaxDp	$\mid E(I) \mid$	-0.45	0.19	-0.82	-0.09		
Bcts:MaxDp	G(Ia)	0.85	0.03	0.79	0.91		
Bcts:MaxDp	P(I)	0.44	0.02	0.39	0.48		
Bcts:MinDp	E(I)	0.08	0.10	-0.12	0.28		
Bcts:MinDp	G(Ia)	0.36	0.13	0.12	0.61		
Bcts:MinDp	P(I)	0.11	0.03	0.05	0.16		
Bcts:MaxDs	E(I)	-0.10	0.12	-0.33	0.13		
Bcts:MaxDs	G(Ia)	0.32	0.06	0.21	0.44		
Bcts:MaxDs	P(I)	0.10	0.03	0.05	0.16		
Bcts:MinDs	$\mid E(I) \mid$	0.21	0.11	-0.00	0.41		
Bcts:MinDs	G(Ia)	-0.45	0.15	-0.74	-0.15		
Bcts:MinDs	P(I)	-0.03	0.03	-0.09	0.03		
Bcts:SDDp	E(I)	-0.46	0.18	-0.82	-0.10		
Bcts:SDDp	G(Ia)	0.85	0.03	0.79	0.91		
Bcts:SDDp	P(I)	0.44	0.02	0.39	0.49		
Bcts:SDDs	E(I)	-0.29	0.14	-0.57	-0.01		
Bcts:SDDs	G(Ia)	0.30	0.04	0.23	0.38		
Bcts:SDDs	P(I)	0.10	0.03	0.05	0.16		
Bcts:SDD	$\mid E(I) \mid$	-0.34	0.15	-0.64	-0.05		
Bcts:SDD	G(Ia)	0.43	0.04	0.35	0.50		
Bcts:SDD	P(I)	0.17	0.03	0.11	0.22		
Bcts:CVD	E(I)	-0.34	0.14	-0.61	-0.06		
Bcts:CVD	G(Ia)	0.60	0.05	0.51	0.69		
Bcts:CVD	P(I)	0.21	0.03	0.16	0.27		
Bcts:Gt30Dp	$\mid E(I) \mid$	-0.41	0.18	-0.76	-0.06		
Bcts:Gt30Dp	G(Ia)	0.82	0.03	0.76	0.88		
Bcts:Gt30Dp	P(I)	0.42	0.02	0.37	0.47		
Bcts:Gt30Ds	E(I)	-0.08	0.12	-0.33	0.16		
Bcts:Gt30Ds	G(Ia)	0.25	0.05	0.16	0.34		
Bcts:Gt30Ds	P(I)	0.10	0.03	0.05	0.16		
Bcts:Gt30D	E(I)	-0.16	0.13	-0.42	0.09		
Bcts:Gt30D	G(Ia)	0.47	0.05	0.38	0.55		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Bcts:Gt30D	P(I)	0.19	0.03	0.14	0.24
Bcts:Fnua	E(I)	-0.11	0.05	-0.21	-0.00
Bcts:Fnua	G(Ia)	0.04	0.03	-0.01	0.10
Bcts:Fnua	P(I)	-0.03	0.02	-0.06	0.01
Bcts:Fr	E(I)	-0.05	0.05	-0.16	0.06
Bcts:Fr	G(Ia)	-0.02	0.03	-0.07	0.04
Bcts:Fr	P(I)	-0.03	0.02	-0.07	0.01
Bcts:Fnt	E(I)	-0.08	0.05	-0.18	0.03
Bcts:Fnt	G(Ia)	0.03	0.03	-0.03	0.09
Bcts:Fnt	P(I)	-0.02	0.02	-0.06	0.02
Bcts:Sarea	E(I)	0.02	0.05	-0.08	0.12
Bcts:Sarea	G(Ia)	-0.01	0.03	-0.07	0.05
Bcts:Sarea	P(I)	0.00	0.02	-0.03	0.04
Bcts:Fd	E(I)	0.10	0.05	0.01	0.19
Bcts:Fd	G(Ia)	0.02	0.05	-0.07	0.12
Bcts:Fd	P(I)	0.07	0.02	0.03	0.11
Bcts:Fc	E(I)	0.16	0.06	0.04	0.27
Bcts:Fc	G(Ia)	-0.01	0.03	-0.07	0.05
Bcts:Fc	P(I)	0.06	0.02	0.02	0.10
Bcts:Fu	E(I)	0.15	0.05	0.05	0.25
Bcts:Fu	G(Ia)	0.05	0.04	-0.02	0.12
Bcts:Fu	P(I)	0.10	0.02	0.06	0.14
Bcts:Colour	E(I)	-0.29	0.06	-0.40	-0.17
Bcts:Colour	G(Ia)	0.37	0.04	0.30	0.44
Bcts:Colour	P(I)	0.03	0.02	-0.00	0.07
Bcts:Fly	E(I)	0.10	0.05	0.00	0.20
Bcts:Fly	G(Ia)	-0.12	0.09	-0.30	0.06
Bcts:Fly	P(I)	0.03	0.02	-0.01	0.06
Bcts:Flcrot	$\mid E(I) \mid$	-0.04	0.05	-0.14	0.06
Bcts:Flcrot	G(Ia)	0.12	0.05	0.02	0.21
Bcts:Flcrot	P(I)	0.01	0.02	-0.02	0.05
Bcts:Bactst	E(I)	-0.32	0.10	-0.51	-0.12
Bcts:Bactst	G(Ia)	0.59	0.09	0.40	0.77
Bcts:Bactst	P(I)	0.05	0.02	0.01	0.09
Bcts:MycD	E(I)	-0.02	0.08	-0.18	0.15
Bcts:MycD	G(Ia)	-0.02	0.08	-0.17	0.13
Bcts:MycD	P(I)	-0.01	0.02	-0.05	0.03
Bcts:Bcts	E(I)	1.00	0.00	1.00	1.00
Bcts:Bcts	G(Ia)	1.00	0.00	1.00	1.00
Bcts:Bcts	P(I)	1.00	0.00	1.00	1.00
Bcts:Bctb	E(I)	0.54	0.05	0.44	0.64
Bcts:Bctb	G(Ia)	0.99	0.01	0.98	1.00
Bcts:Bctb	P(I)	0.89	0.01	0.88	0.90

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bcts:Weanwt	E(I)	0.18	0.05	0.08	0.29		
Bcts:Weanwt	G(Ia)	-0.05	0.03	-0.11	0.01		
Bcts:Weanwt	P(I)	0.05	0.02	0.02	0.08		
Bcts:NLB	$\mid E(I) \mid$	-0.15	0.05	-0.25	-0.05		
Bcts:NLB	G(Ia)	0.08	0.03	0.03	0.14		
Bcts:NLB	P(I)	-0.02	0.02	-0.06	0.01		
Bcts:NLW	E(I)	-0.26	0.05	-0.36	-0.15		
Bcts:NLW	G(Ia)	0.18	0.03	0.13	0.24		
Bcts:NLW	P(I)	-0.02	0.02	-0.05	0.02		
Bcts:Fnpua	E(I)	0.03	0.05	-0.07	0.13		
Bcts:Fnpua	G(Ia)	-0.02	0.04	-0.09	0.05		
Bcts:Fnpua	P(I)	0.01	0.02	-0.03	0.04		
Bcts:Fnsua	E(I)	-0.11	0.05	-0.22	-0.01		
Bcts:Fnsua	G(Ia)	0.04	0.03	-0.01	0.10		
Bcts:Fnsua	P(I)	-0.03	0.02	-0.06	0.01		
Bcts:Fnpt	E(I)	0.06	0.05	-0.04	0.16		
Bcts:Fnpt	G(Ia)	-0.03	0.03	-0.10	0.03		
Bcts:Fnpt	P(I)	0.01	0.02	-0.02	0.05		
Bcts:Fnst	E(I)	-0.08	0.05	-0.19	0.02		
Bcts:Fnst	G(Ia)	0.03	0.03	-0.03	0.09		
Bcts:Fnst	P(I)	-0.02	0.02	-0.06	0.02		
Bctb:Stal	E(I)	0.32	0.06	0.21	0.43		
Bctb:Stal	G(Ia)	-0.19	0.02	-0.24	-0.14		
Bctb:Stal	P(I)	0.02	0.02	-0.01	0.06		
Bctb:Diam	E(I)	0.17	0.06	0.05	0.28		
Bctb:Diam	G(Ia)	0.08	0.02	0.04	0.12		
Bctb:Diam	P(I)	0.11	0.02	0.07	0.14		
Bctb:Bwt	E(I)	0.03	0.05	-0.08	0.13		
Bctb:Bwt	G(Ia)	-0.02	0.03	-0.07	0.03		
Bctb:Bwt	P(I)	-0.00	0.02	-0.03	0.03		
Bctb:WrN	E(I)	0.44	0.06	0.33	0.56		
Bctb:WrN	G(Ia)	-0.19	0.02	-0.23	-0.14		
Bctb:WrN	P(I)	0.05	0.02	0.02	0.09		
Bctb:WrB	E(I)	0.44	0.06	0.33	0.55		
Bctb:WrB	G(Ia)	-0.23	0.02	-0.28	-0.19		
Bctb:WrB	P(I)	0.04	0.02	0.01	0.08		
Bctb:WrT	E(I)	0.50	0.06	0.38	0.61		
Bctb:WrT	G(Ia)	-0.20	0.02	-0.25	-0.16		
Bctb:WrT	P(I)	0.06	0.02	0.03	0.09		
Bctb:Face	E(I)	-0.67	0.08	-0.82	-0.52		
Bctb:Face	G(Ia)	0.24	0.02	0.20	0.28		
Bctb:Face	P(I)	-0.03	0.02	-0.06	0.00		
Bctb:Gfw	E(I)	0.31	0.05	0.20	0.41		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bctb:Gfw	G(Ia)	-0.10	0.02	-0.15	-0.05		
Bctb:Gfw	P(I)	0.07	0.02	0.04	0.10		
Bctb:Yld	E(I)	-0.02	0.06	-0.15	0.10		
Bctb:Yld	G(Ia)	-0.04	0.02	-0.08	-0.00		
Bctb:Yld	P(I)	-0.04	0.02	-0.07	-0.00		
Bctb:Cww	E(I)	0.28	0.05	0.18	0.38		
Bctb:Cww	G(Ia)	-0.12	0.03	-0.18	-0.07		
Bctb:Cww	P(I)	0.06	0.02	0.02	0.09		
Bctb:Staladj	E(I)	0.40	0.06	0.29	0.51		
Bctb:Staladj	G(Ia)	-0.22	0.02	-0.27	-0.18		
Bctb:Staladj	P(I)	0.03	0.02	-0.00	0.06		
Bctb:Gfwadj	E(I)	0.33	0.05	0.22	0.43		
Bctb:Gfwadj	G(Ia)	-0.11	0.02	-0.15	-0.06		
Bctb:Gfwadj	P(I)	0.07	0.02	0.04	0.11		
Bctb:Cwwadj	E(I)	0.31	0.05	0.21	0.42		
Bctb:Cwwadj	G(Ia)	-0.13	0.03	-0.19	-0.08		
Bctb:Cwwadj	P(I)	0.06	0.02	0.03	0.10		
Bctb:Crimp	E(I)	0.12	0.09	-0.05	0.29		
Bctb:Crimp	G(Ia)	-0.30	0.04	-0.38	-0.22		
Bctb:Crimp	P(I)	-0.13	0.02	-0.18	-0.09		
Bctb:Crwvl	E(I)	-0.05	0.08	-0.20	0.10		
Bctb:Crwvl	G(Ia)	0.31	0.05	0.22	0.41		
Bctb:Crwvl	P(I)	0.14	0.02	0.09	0.18		
Bctb:Crst	E(I)	0.10	0.08	-0.05	0.26		
Bctb:Crst	G(Ia)	-0.27	0.04	-0.35	-0.18		
Bctb:Crst	P(I)	-0.10	0.02	-0.15	-0.06		
Bctb:Crstadj	E(I)	0.12	0.08	-0.03	0.28		
Bctb:Crstadj	G(Ia)	-0.28	0.05	-0.37	-0.19		
Bctb:Crstadj	P(I)	-0.10	0.02	-0.14	-0.05		
Bctb:Crwvt	E(I)	-0.08	0.07	-0.22	0.07		
Bctb:Crwvt	G(Ia)	0.31	0.05	0.21	0.40		
Bctb:Crwvt	P(I)	0.12	0.02	0.07	0.17		
Bctb:Dp	E(I)	-0.18	0.15	-0.48	0.11		
Bctb:Dp	G(Ia)	0.70	0.03	0.65	0.76		
Bctb:Dp	P(I)	0.42	0.02	0.37	0.47		
Bctb:Ds	E(I)	0.12	0.12	-0.12	0.35		
Bctb:Ds	G(Ia)	-0.14	0.04	-0.22	-0.07		
Bctb:Ds	P(I)	-0.05	0.03	-0.10	0.00		
Bctb:Dps	E(I)	0.09	0.12	-0.13	0.32		
Bctb:Dps	G(Ia)	-0.08	0.04	-0.16	-0.00		
Bctb:Dps	P(I)	-0.02	0.03	-0.07	0.03		
Bctb:DpovDs	E(I)	-0.38	0.25	-0.86	0.11		
Bctb:DpovDs	G(Ia)	0.65	0.02	0.61	0.69		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bctb:DpovDs	P(I)	0.48	0.02	0.43	0.52		
Bctb:CVDp	E(I)	-0.50	0.14	-0.78	-0.22		
Bctb:CVDp	G(Ia)	0.75	0.04	0.66	0.84		
Bctb:CVDp	P(I)	0.25	0.03	0.20	0.30		
Bctb:CVDs	E(I)	-0.36	0.12	-0.60	-0.12		
Bctb:CVDs	G(Ia)	0.52	0.05	0.42	0.62		
Bctb:CVDs	P(I)	0.14	0.03	0.09	0.19		
Bctb:MaxDp	E(I)	-0.41	0.16	-0.73	-0.09		
Bctb:MaxDp	G(Ia)	0.82	0.03	0.76	0.87		
Bctb:MaxDp	P(I)	0.42	0.02	0.37	0.46		
Bctb:MinDp	E(I)	0.11	0.09	-0.08	0.29		
Bctb:MinDp	G(Ia)	0.29	0.11	0.06	0.51		
Bctb:MinDp	P(I)	0.10	0.03	0.05	0.16		
Bctb:MaxDs	E(I)	-0.10	0.11	-0.31	0.11		
Bctb:MaxDs	G(Ia)	0.33	0.06	0.22	0.44		
Bctb:MaxDs	P(I)	0.11	0.03	0.05	0.16		
Bctb:MinDs	E(I)	0.26	0.10	0.06	0.45		
Bctb:MinDs	G(Ia)	-0.52	0.16	-0.84	-0.20		
Bctb:MinDs	P(I)	-0.02	0.03	-0.08	0.03		
Bctb:SDDp	E(I)	-0.52	0.17	-0.85	-0.19		
Bctb:SDDp	G(Ia)	0.85	0.03	0.79	0.91		
Bctb:SDDp	P(I)	0.41	0.02	0.37	0.46		
Bctb:SDDs	E(I)	-0.32	0.13	-0.58	-0.06		
Bctb:SDDs	G(Ia)	0.31	0.04	0.24	0.38		
Bctb:SDDs	P(I)	0.09	0.03	0.04	0.14		
Bctb:SDD	E(I)	-0.39	0.14	-0.66	-0.11		
Bctb:SDD	G(Ia)	0.43	0.04	0.36	0.50		
Bctb:SDD	P(I)	0.15	0.03	0.10	0.20		
Bctb:CVD	E(I)	-0.42	0.13	-0.68	-0.17		
Bctb:CVD	G(Ia)	0.61	0.05	0.52	0.70		
Bctb:CVD	P(I)	0.18	0.03	0.13	0.24		
Bctb:Gt30Dp	E(I)	-0.41	0.16	-0.72	-0.10		
Bctb:Gt30Dp	G(Ia)	0.78	0.03	0.72	0.84		
Bctb:Gt30Dp	P(I)	0.39	0.02	0.34	0.43		
Bctb:Gt30Ds	E(I)	-0.03	0.12	-0.26	0.19		
Bctb:Gt30Ds	G(Ia)	0.25	0.05	0.16	0.34		
Bctb:Gt30Ds	P(I)	0.11	0.03	0.06	0.17		
Bctb:Gt30D	E(I)	-0.13	0.12	-0.36	0.10		
Bctb:Gt30D	G(Ia)	0.45	0.04	0.37	0.54		
Bctb:Gt30D	P(I)	0.19	0.03	0.14	0.24		
Bctb:Fnua	E(I)	-0.14	0.05	-0.25	-0.04		
Bctb:Fnua	G(Ia)	0.07	0.03	0.02	0.13		
Bctb:Fnua	P(I)	-0.03	0.02	-0.06	0.01		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Bctb:Fr	E(I)	-0.08	0.05	-0.19	0.02	
Bctb:Fr	G(Ia)	0.02	0.03	-0.04	0.07	
Bctb:Fr	P(I)	-0.03	0.02	-0.06	0.01	
Bctb:Fnt	E(I)	-0.10	0.05	-0.20	0.00	
Bctb:Fnt	G(Ia)	0.04	0.03	-0.02	0.10	
Bctb:Fnt	P(I)	-0.02	0.02	-0.06	0.01	
Bctb:Sarea	E(I)	0.06	0.05	-0.04	0.16	
Bctb:Sarea	G(Ia)	-0.06	0.03	-0.12	0.00	
Bctb:Sarea	P(I)	-0.00	0.02	-0.04	0.04	
Bctb:Fd	E(I)	0.12	0.05	0.03	0.21	
Bctb:Fd	G(Ia)	0.01	0.05	-0.08	0.11	
Bctb:Fd	P(I)	0.08	0.02	0.03	0.12	
Bctb:Fc	E(I)	0.18	0.06	0.06	0.30	
Bctb:Fc	G(Ia)	-0.02	0.03	-0.08	0.04	
Bctb:Fc	P(I)	0.07	0.02	0.03	0.11	
Bctb:Fu	E(I)	0.15	0.05	0.05	0.25	
Bctb:Fu	G(Ia)	0.06	0.03	-0.01	0.13	
Bctb:Fu	P(I)	0.11	0.02	0.06	0.15	
Bctb:Colour	E(I)	-0.28	0.05	-0.38	-0.17	
Bctb:Colour	G(Ia)	0.38	0.04	0.31	0.45	
Bctb:Colour	P(I)	0.03	0.02	-0.00	0.07	
Bctb:Fly	E(I)	0.07	0.05	-0.03	0.16	
Bctb:Fly	G(Ia)	-0.10	0.09	-0.28	0.08	
Bctb:Fly	P(I)	0.02	0.02	-0.02	0.05	
Bctb:Flcrot	E(I)	-0.05	0.05	-0.15	0.04	
Bctb:Flcrot	G(Ia)	0.13	0.05	0.03	0.23	
Bctb:Flcrot	P(I)	0.01	0.02	-0.02	0.05	
Bctb:Bactst	E(I)	-0.32	0.08	-0.48	-0.15	
Bctb:Bactst	G(Ia)	0.56	0.09	0.38	0.75	
Bctb:Bactst	P(I)	0.03	0.02	-0.01	0.07	
Bctb:MycD	E(I)	-0.06	0.07	-0.20	0.09	
Bctb:MycD	G(Ia)	-0.02	0.08	-0.18	0.13	
Bctb:MycD	P(I)	-0.02	0.02	-0.06	0.02	
Bctb:Bcts	E(I)	0.54	0.05	0.44	0.64	
Bctb:Bcts	G(Ia)	0.99	0.01	0.98	1.00	
Bctb:Bcts	P(I)	0.89	0.01	0.88	0.90	
Bctb:Bctb	E(I)	1.00	0.00	1.00	1.00	
Bctb:Bctb	G(Ia)	1.00	0.00	1.00	1.00	
Bctb:Bctb	P(I)	1.00	0.00	1.00	1.00	
Bctb:Weanwt	E(I)	0.21	0.05	0.11	0.30	
Bctb:Weanwt	G(Ia)	-0.09	0.03	-0.15	-0.04	
Bctb:Weanwt	P(I)	0.05	0.02	0.02	0.08	
Bctb:NLB	E(I)	-0.14	0.05	-0.23	-0.04	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Bctb:NLB	G(Ia)	0.06	0.03	0.00	0.12		
Bctb:NLB	P(I)	-0.03	0.02	-0.07	0.00		
Bctb:NLW	E(I)	-0.27	0.05	-0.37	-0.17		
Bctb:NLW	G(Ia)	0.17	0.03	0.12	0.23		
Bctb:NLW	P(I)	-0.04	0.02	-0.07	-0.00		
Bctb:Fnpua	E(I)	0.03	0.05	-0.07	0.12		
Bctb:Fnpua	G(Ia)	-0.03	0.04	-0.10	0.04		
Bctb:Fnpua	P(I)	0.00	0.02	-0.04	0.04		
Bctb:Fnsua	E(I)	-0.15	0.05	-0.25	-0.05		
Bctb:Fnsua	G(Ia)	0.08	0.03	0.02	0.13		
Bctb:Fnsua	P(I)	-0.03	0.02	-0.06	0.01		
Bctb:Fnpt	E(I)	0.07	0.05	-0.03	0.16		
Bctb:Fnpt	G(Ia)	-0.06	0.03	-0.13	0.00		
Bctb:Fnpt	P(I)	0.00	0.02	-0.03	0.04		
Bctb:Fnst	E(I)	-0.10	0.05	-0.20	-0.00		
Bctb:Fnst	G(Ia)	0.04	0.03	-0.01	0.10		
Bctb:Fnst	P(I)	-0.03	0.02	-0.06	0.01		
Weanwt:Stal	E(I)	0.11	0.03	0.05	0.17		
Weanwt:Stal	G(Ia)	-0.02	0.04	-0.11	0.06		
Weanwt:Stal	P(I)	0.07	0.02	0.04	0.10		
Weanwt:Diam	E(I)	-0.10	0.04	-0.17	-0.03		
Weanwt:Diam	G(Ia)	0.30	0.04	0.22	0.37		
Weanwt:Diam	P(I)	0.04	0.02	0.01	0.08		
Weanwt:Bwt	E(I)	0.51	0.02	0.46	0.55		
Weanwt:Bwt	G(Ia)	0.73	0.03	0.67	0.80		
Weanwt:Bwt	P(I)	0.57	0.01	0.54	0.59		
Weanwt:WrN	E(I)	0.13	0.03	0.07	0.20		
Weanwt:WrN	G(Ia)	-0.20	0.04	-0.28	-0.13		
Weanwt:WrN	P(I)	0.02	0.02	-0.01	0.06		
Weanwt:WrB	E(I)	0.10	0.03	0.04	0.16		
Weanwt:WrB	G(Ia)	-0.11	0.04	-0.19	-0.02		
Weanwt:WrB	P(I)	0.03	0.02	-0.00	0.07		
Weanwt:WrT	E(I)	0.12	0.03	0.06	0.19		
Weanwt:WrT	G(Ia)	-0.15	0.04	-0.22	-0.07		
Weanwt:WrT	P(I)	0.03	0.02	-0.00	0.07		
Weanwt:Face	E(I)	0.12	0.04	0.04	0.20		
Weanwt:Face	G(Ia)	-0.42	0.03	-0.49	-0.36		
Weanwt:Face	P(I)	-0.10	0.02	-0.14	-0.07		
Weanwt:Gfw	E(I)	0.47	0.03	0.42	0.52		
Weanwt:Gfw	G(Ia)	0.14	0.04	0.06	0.23		
Weanwt:Gfw	P(I)	0.37	0.02	0.34	0.40		
Weanwt:Yld	E(I)	0.06	0.04	-0.01	0.13		
Weanwt:Yld	G(Ia)	-0.05	0.04	-0.12	0.02		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Weanwt:Yld	P(I)	0.02	0.02	-0.01	0.05	
Weanwt:Cww	E(I)	0.48	0.03	0.43	0.53	
Weanwt:Cww	G(Ia)	0.11	0.05	0.03	0.20	
Weanwt:Cww	P(I)	0.38	0.02	0.35	0.41	
Weanwt:Staladj	E(I)	0.10	0.03	0.03	0.16	
Weanwt:Staladj	G(Ia)	0.00	0.03	-0.07	0.07	
Weanwt:Staladj	P(I)	0.06	0.02	0.03	0.10	
Weanwt:Gfwadj	E(I)	0.45	0.03	0.39	0.50	
Weanwt:Gfwadj	G(Ia)	0.14	0.04	0.06	0.23	
Weanwt:Gfwadj	P(I)	0.35	0.02	0.32	0.39	
Weanwt:Cwwadj	E(I)	0.46	0.03	0.41	0.51	
Weanwt:Cwwadj	G(Ia)	0.12	0.04	0.03	0.21	
Weanwt:Cwwadj	P(I)	0.36	0.02	0.33	0.40	
Weanwt:Crimp	E(I)	0.07	0.06	-0.04	0.18	
Weanwt:Crimp	G(Ia)	0.08	0.07	-0.06	0.22	
Weanwt:Crimp	P(I)	0.07	0.02	0.02	0.11	
Weanwt:Crwvl	E(I)	-0.05	0.05	-0.15	0.05	
Weanwt:Crwvl	G(Ia)	-0.08	0.09	-0.24	0.09	
Weanwt:Crwvl	P(I)	-0.06	0.02	-0.10	-0.01	
Weanwt:Crst	E(I)	0.15	0.05	0.05	0.25	
Weanwt:Crst	G(Ia)	0.04	0.08	-0.12	0.19	
Weanwt:Crst	P(I)	0.11	0.02	0.06	0.15	
Weanwt:Crstadj	E(I)	0.11	0.05	0.01	0.20	
Weanwt:Crstadj	G(Ia)	0.07	0.08	-0.09	0.23	
Weanwt:Crstadj	P(I)	0.09	0.02	0.05	0.14	
Weanwt:Crwvt	E(I)	-0.11	0.05	-0.21	-0.02	
Weanwt:Crwvt	G(Ia)	-0.01	0.08	-0.17	0.15	
Weanwt:Crwvt	P(I)	-0.08	0.02	-0.13	-0.03	
Weanwt:Dp	E(I)	-0.00	0.06	-0.12	0.11	
Weanwt:Dp	G(Ia)	-0.33	0.07	-0.48	-0.19	
Weanwt:Dp	P(I)	-0.13	0.03	-0.19	-0.06	
Weanwt:Ds	E(I)	-0.01	0.06	-0.14	0.11	
Weanwt:Ds	G(Ia)	0.04	0.08	-0.12	0.20	
Weanwt:Ds	P(I)	0.00	0.03	-0.06	0.07	
Weanwt:Dps	E(I)	-0.02	0.06	-0.14	0.11	
Weanwt:Dps	G(Ia)	0.01	0.09	-0.16	0.18	
Weanwt:Dps	P(I)	-0.01	0.03	-0.07	0.06	
Weanwt:DpovDs	E(I)	0.04	0.11	-0.18	0.26	
Weanwt:DpovDs	G(Ia)	-0.32	0.06	-0.44	-0.21	
Weanwt:DpovDs	P(I)	-0.14	0.03	-0.20	-0.07	
Weanwt:CVDp	E(I)	0.08	0.06	-0.04	0.20	
Weanwt:CVDp	G(Ia)	-0.43	0.09	-0.61	-0.24	
Weanwt:CVDp	P(I)	-0.07	0.03	-0.14	-0.01	

Table 24 – Continued from previous page

Traitpair	$\frac{\text{le } 24 - Contin}{\text{Component}}$	Estimate	StdErr	CI95lo	CI95hi
Weanwt:CVDs	E(I)	-0.04	0.06	-0.16	0.07
Weanwt:CVDs	G(Ia)	-0.10	0.00	-0.10	0.07
Weanwt:CVDs	P(I)	-0.10	0.10	-0.30	0.10
Weanwt:MaxDp	E(I)	0.02	0.03	-0.13	0.01
Weanwt:MaxDp	G(Ia)	-0.39	0.07	-0.12	-0.24
Weanwt:MaxDp	P(I)	-0.13	0.03	-0.34	-0.24
Weanwt:MinDp	E(I)	-0.13	0.05	-0.20	0.07
Weanwt:MinDp	G(Ia)	-0.57	$0.05 \\ 0.25$	-0.15	-0.08
Weanwt:MinDp	P(I)	-0.09	0.23	-0.16	-0.03
Weanwt:MaxDs	E(I)	-0.03	0.05	-0.10	0.08
Weanwt:MaxDs Weanwt:MaxDs	G(Ia)	-0.09	0.00	-0.14	0.08
Weanwt:MaxDs Weanwt:MaxDs	P(I)	-0.05	0.12	-0.32	0.13
Weanwt:MinDs	E(I)	0.02	0.05	-0.11	0.02
Weanwt:MinDs	G(Ia)	0.02	0.03	-0.34	0.12
Weanwt:MinDs Weanwt:MinDs	P(I)	0.03	0.23	-0.03	0.33
Weanwt:SDDp	E(I)	0.03	0.03	-0.06	0.10
Weanwt:SDDp	G(Ia)	-0.44	0.07	-0.59	-0.29
Weanwt:SDDp Weanwt:SDDp	P(I)	-0.12	0.03	-0.33	-0.25
Weanwt:SDDs	E(I)	-0.07	0.06	-0.10	0.05
Weanwt:SDDs Weanwt:SDDs	G(Ia)	-0.01	0.00	-0.20	0.03
Weanwt:SDDs Weanwt:SDDs	P(I)	-0.05	0.03	-0.12	0.14
Weanwt:SDD	E(I)	-0.06	0.06	-0.19	0.01
Weanwt:SDD	G(Ia)	-0.08	0.08	-0.24	0.08
Weanwt:SDD	P(I)	-0.07	0.03	-0.13	-0.00
Weanwt:CVD	E(I)	-0.03	0.06	-0.15	0.08
Weanwt:CVD	G(Ia)	-0.16	0.10	-0.35	0.03
Weanwt:CVD	P(I)	-0.07	0.03	-0.13	-0.00
Weanwt:Gt30Dp	E(I)	0.04	0.07	-0.10	0.17
Weanwt:Gt30Dp	G(Ia)	-0.42	0.08	-0.57	-0.27
Weanwt:Gt30Dp	P(I)	-0.13	0.03	-0.19	-0.06
Weanwt:Gt30Ds	E(I)	-0.03	0.06	-0.14	0.08
Weanwt:Gt30Ds	G(Ia)	-0.01	0.10	-0.21	0.18
Weanwt:Gt30Ds	P(I)	-0.02	0.03	-0.09	0.04
Weanwt:Gt30D	E(I)	-0.02	0.06	-0.14	0.09
Weanwt:Gt30D	G(Ia)	-0.13	0.10	-0.32	0.06
Weanwt:Gt30D	P(I)	-0.05	0.03	-0.12	0.01
Weanwt:Fnua	E(I)	0.09	0.03	0.03	0.16
Weanwt:Fnua	G(Ia)	-0.48	0.05	-0.58	-0.37
Weanwt:Fnua	P(I)	-0.07	0.02	-0.11	-0.03
Weanwt:Fr	E(I)	0.26	0.03	0.20	0.33
Weanwt:Fr	G(Ia)	-0.49	0.05	-0.59	-0.38
Weanwt:Fr	P(I)	0.04	0.02	0.00	0.08
Weanwt:Fnt	E(I)	0.31	0.03	0.25	0.37

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Weanwt:Fnt	G(Ia)	-0.19	0.05	-0.29	-0.08	
Weanwt:Fnt	P(I)	0.17	0.02	0.14	0.21	
Weanwt:Sarea	E(I)	0.50	0.03	0.45	0.55	
Weanwt:Sarea	G(Ia)	0.73	0.04	0.65	0.80	
Weanwt:Sarea	P(I)	0.56	0.01	0.53	0.59	
Weanwt:Fd	E(I)	-0.05	0.03	-0.11	0.02	
Weanwt:Fd	G(Ia)	0.08	0.07	-0.07	0.22	
Weanwt:Fd	P(I)	-0.02	0.02	-0.06	0.02	
Weanwt:Fc	E(I)	-0.17	0.05	-0.26	-0.08	
Weanwt:Fc	G(Ia)	0.21	0.04	0.13	0.30	
Weanwt:Fc	P(I)	-0.01	0.02	-0.06	0.03	
Weanwt:Fu	E(I)	-0.11	0.04	-0.19	-0.03	
Weanwt:Fu	G(Ia)	0.16	0.05	0.06	0.26	
Weanwt:Fu	P(I)	-0.02	0.02	-0.06	0.02	
Weanwt:Colour	E(I)	-0.02	0.03	-0.07	0.04	
Weanwt:Colour	G(Ia)	-0.17	0.06	-0.29	-0.05	
Weanwt:Colour	P(I)	-0.05	0.02	-0.09	-0.02	
Weanwt:Fly	$\mid E(I) \mid$	-0.01	0.03	-0.06	0.04	
Weanwt:Fly	G(Ia)	0.07	0.17	-0.26	0.39	
Weanwt:Fly	P(I)	-0.00	0.02	-0.04	0.03	
Weanwt:Flcrot	$\mid E(I) \mid$	-0.00	0.03	-0.06	0.05	
Weanwt:Flcrot	G(Ia)	-0.17	0.09	-0.35	0.01	
Weanwt:Flcrot	P(I)	-0.03	0.02	-0.06	0.01	
Weanwt:Bactst	E(I)	-0.02	0.03	-0.08	0.04	
Weanwt:Bactst	G(Ia)	-0.17	0.13	-0.42	0.09	
Weanwt:Bactst	P(I)	-0.04	0.02	-0.08	0.00	
Weanwt:MycD	E(I)	-0.07	0.03	-0.13	-0.02	
Weanwt:MycD	G(Ia)	0.17	0.17	-0.16	0.50	
Weanwt:MycD	P(I)	-0.05	0.02	-0.09	-0.01	
Weanwt:Bcts	E(I)	0.18	0.05	0.08	0.29	
Weanwt:Bcts	G(Ia)	-0.05	0.03	-0.11	0.01	
Weanwt:Bcts	P(I)	0.05	0.02	0.02	0.08	
Weanwt:Bctb	E(I)	0.21	0.05	0.11	0.30	
Weanwt:Bctb	G(Ia)	-0.09	0.03	-0.15	-0.04	
Weanwt:Bctb	P(I)	0.05	0.02	0.02	0.08	
Weanwt:Weanwt	E(I)	1.00	0.00	1.00	1.00	
Weanwt:Weanwt	G(Ia)	1.00	0.00	1.00	1.00	
Weanwt:Weanwt	P(I)	1.00	0.00	1.00	1.00	
Weanwt:NLB	E(I)	-0.38	0.02	-0.43	-0.33	
Weanwt:NLB	G(Ia)	-0.46	0.05	-0.55	-0.36	
Weanwt:NLB	P(I)	-0.40	0.02	-0.43	-0.37	
Weanwt:NLW	E(I)	-0.41	0.02	-0.45	-0.36	
Weanwt:NLW	G(Ia)	-0.46	0.04	-0.54	-0.37	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Weanwt:NLW	P(I)	-0.42	0.02	-0.45	-0.39		
Weanwt:Fnpua	$\mid E(I) \mid$	-0.17	0.03	-0.23	-0.11		
Weanwt:Fnpua	G(Ia)	0.06	0.06	-0.07	0.18		
Weanwt:Fnpua	P(I)	-0.11	0.02	-0.15	-0.08		
Weanwt:Fnsua	$\mid E(I) \mid$	0.11	0.03	0.04	0.17		
Weanwt:Fnsua	G(Ia)	-0.49	0.05	-0.59	-0.39		
Weanwt:Fnsua	P(I)	-0.06	0.02	-0.10	-0.03		
Weanwt:Fnpt	E(I)	0.03	0.03	-0.03	0.09		
Weanwt:Fnpt	G(Ia)	0.36	0.06	0.25	0.47		
Weanwt:Fnpt	P(I)	0.11	0.02	0.08	0.15		
Weanwt:Fnst	E(I)	0.32	0.03	0.25	0.38		
Weanwt:Fnst	G(Ia)	-0.21	0.05	-0.32	-0.10		
Weanwt:Fnst	P(I)	0.17	0.02	0.13	0.21		
NLB:Stal	E(I)	-0.04	0.03	-0.10	0.01		
NLB:Stal	G(Ia)	0.27	0.04	0.19	0.36		
NLB:Stal	P(I)	0.04	0.02	0.01	0.07		
NLB:Diam	E(I)	0.15	0.03	0.09	0.21		
NLB:Diam	G(Ia)	-0.03	0.04	-0.10	0.05		
NLB:Diam	P(I)	0.09	0.02	0.06	0.12		
NLB:Bwt	E(I)	-0.13	0.03	-0.19	-0.08		
NLB:Bwt	G(Ia)	-0.23	0.04	-0.31	-0.15		
NLB:Bwt	P(I)	-0.16	0.02	-0.19	-0.12		
NLB:WrN	E(I)	-0.18	0.03	-0.24	-0.13		
NLB:WrN	G(Ia)	0.10	0.04	0.02	0.18		
NLB:WrN	P(I)	-0.10	0.02	-0.13	-0.07		
NLB:WrB	E(I)	-0.24	0.03	-0.29	-0.18		
NLB:WrB	G(Ia)	0.17	0.04	0.09	0.25		
NLB:WrB	P(I)	-0.12	0.02	-0.15	-0.09		
NLB:WrT	E(I)	-0.23	0.03	-0.29	-0.18		
NLB:WrT	G(Ia)	0.14	0.04	0.06	0.21		
NLB:WrT	P(I)	-0.12	0.02	-0.15	-0.08		
NLB:Face	E(I)	-0.13	0.04	-0.21	-0.05		
NLB:Face	G(Ia)	0.10	0.03	0.04	0.16		
NLB:Face	P(I)	-0.02	0.02	-0.06	0.01		
NLB:Gfw	E(I)	-0.25	0.03	-0.30	-0.20		
NLB:Gfw	G(Ia)	0.13	0.04	0.05	0.21		
NLB:Gfw	P(I)	-0.14	0.02	-0.17	-0.11		
NLB:Yld	E(I)	-0.05	0.03	-0.10	0.01		
NLB:Yld	G(Ia)	0.05	0.04	-0.02	0.12		
NLB:Yld	P(I)	-0.02	0.02	-0.05	0.02		
NLB:Cww	E(I)	-0.26	0.03	-0.31	-0.21		
NLB:Cww	G(Ia)	0.15	0.04	0.07	0.24		
NLB:Cww	P(I)	-0.15	0.02	-0.18	-0.12		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLB:Staladj	E(I)	-0.04	0.03	-0.10	0.01		
NLB:Staladj	G(Ia)	0.29	0.04	0.20	0.37		
NLB:Staladj	P(I)	0.05	0.02	0.01	0.08		
NLB:Gfwadj	$\mid E(I) \mid$	-0.24	0.03	-0.29	-0.19		
NLB:Gfwadj	G(Ia)	0.13	0.04	0.04	0.21		
NLB:Gfwadj	P(I)	-0.14	0.02	-0.17	-0.11		
NLB:Cwwadj	E(I)	-0.25	0.03	-0.30	-0.20		
NLB:Cwwadj	G(Ia)	0.15	0.04	0.06	0.24		
NLB:Cwwadj	P(I)	-0.14	0.02	-0.18	-0.11		
NLB:Crimp	$\mid E(I) \mid$	-0.06	0.16	-0.38	0.26		
NLB:Crimp	G(Ia)	-0.12	0.03	-0.19	-0.06		
NLB:Crimp	P(I)	-0.07	0.02	-0.11	-0.03		
NLB:Crwvl	E(I)	0.08	0.04	-0.01	0.17		
NLB:Crwvl	G(Ia)	0.10	0.04	0.02	0.19		
NLB:Crwvl	P(I)	0.08	0.02	0.04	0.12		
NLB:Crst	E(I)	-0.09	0.05	-0.19	0.02		
NLB:Crst	G(Ia)	-0.01	0.04	-0.09	0.07		
NLB:Crst	P(I)	-0.05	0.02	-0.09	-0.01		
NLB:Crstadj	E(I)	-0.07	0.05	-0.17	0.03		
NLB:Crstadj	G(Ia)	-0.03	0.04	-0.12	0.05		
NLB:Crstadj	P(I)	-0.05	0.02	-0.09	-0.01		
NLB:Crwvt	E(I)	0.08	0.04	0.00	0.17		
NLB:Crwvt	G(Ia)	-0.00	0.06	-0.12	0.12		
NLB:Crwvt	P(I)	0.05	0.02	0.01	0.09		
NLB:Dp	E(I)	0.04	0.07	-0.09	0.18		
NLB:Dp	G(Ia)	0.41	0.08	0.26	0.55		
NLB:Dp	P(I)	0.17	0.03	0.11	0.24		
NLB:Ds	$\mid E(I) \mid$	0.17	0.06	0.05	0.30		
NLB:Ds	G(Ia)	-0.16	0.09	-0.33	0.02		
NLB:Ds	P(I)	0.07	0.03	0.00	0.13		
NLB:Dps	E(I)	0.17	0.06	0.05	0.29		
NLB:Dps	G(Ia)	-0.12	0.09	-0.30	0.06		
NLB:Dps	P(I)	0.08	0.03	0.01	0.14		
NLB:DpovDs	$\mid E(I) \mid$	-0.15	0.12	-0.37	0.08		
NLB:DpovDs	G(Ia)	0.42	0.06	0.30	0.54		
NLB:DpovDs	P(I)	0.14	0.03	0.07	0.20		
NLB:CVDp	E(I)	-0.12	0.06	-0.24	-0.00		
NLB:CVDp	G(Ia)	0.27	0.10	0.08	0.46		
NLB:CVDp	P(I)	-0.01	0.03	-0.07	0.06		
NLB:CVDs	E(I)	-0.04	0.06	-0.15	0.07		
NLB:CVDs	G(Ia)	0.22	0.11	0.01	0.43		
NLB:CVDs	P(I)	0.03	0.03	-0.04	0.10		
NLB:MaxDp	E(I)	0.01	0.06	-0.11	0.13		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLB:MaxDp	G(Ia)	0.43	0.08	0.27	0.58		
NLB:MaxDp	P(I)	0.16	0.03	0.09	0.22		
NLB:MinDp	E(I)	0.07	0.05	-0.03	0.17		
NLB:MinDp	G(Ia)	0.52	0.26	0.01	1.03		
NLB:MinDp	P(I)	0.12	0.03	0.06	0.19		
NLB:MaxDs	E(I)	0.00	0.05	-0.10	0.11		
NLB:MaxDs	G(Ia)	0.09	0.13	-0.16	0.33		
NLB:MaxDs	P(I)	0.02	0.03	-0.04	0.09		
NLB:MinDs	E(I)	-0.00	0.05	-0.10	0.10		
NLB:MinDs	G(Ia)	0.12	0.25	-0.36	0.61		
NLB:MinDs	P(I)	0.01	0.03	-0.05	0.08		
NLB:SDDp	E(I)	-0.09	0.07	-0.22	0.04		
NLB:SDDp	G(Ia)	0.38	0.08	0.22	0.54		
NLB:SDDp	P(I)	0.08	0.03	0.01	0.14		
NLB:SDDs	E(I)	0.07	0.06	-0.05	0.19		
NLB:SDDs	G(Ia)	0.06	0.09	-0.10	0.23		
NLB:SDDs	P(I)	0.07	0.03	0.00	0.13		
NLB:SDD	E(I)	0.06	0.06	-0.07	0.18		
NLB:SDD	G(Ia)	0.14	0.08	-0.03	0.30		
NLB:SDD	P(I)	0.08	0.03	0.02	0.15		
NLB:CVD	E(I)	-0.05	0.06	-0.17	0.06		
NLB:CVD	G(Ia)	0.26	0.10	0.07	0.46		
NLB:CVD	P(I)	0.04	0.03	-0.03	0.10		
NLB:Gt30Dp	E(I)	-0.03	0.07	-0.17	0.10		
NLB:Gt30Dp	G(Ia)	0.43	0.08	0.27	0.58		
NLB:Gt30Dp	P(I)	0.13	0.03	0.06	0.19		
NLB:Gt30Ds	$\mid E(I) \mid$	0.07	0.06	-0.04	0.18		
NLB:Gt30Ds	G(Ia)	-0.03	0.11	-0.24	0.18		
NLB:Gt30Ds	P(I)	0.04	0.03	-0.02	0.11		
NLB:Gt30D	$\mid E(I) \mid$	0.06	0.06	-0.06	0.17		
NLB:Gt30D	G(Ia)	0.11	0.10	-0.08	0.31		
NLB:Gt30D	P(I)	0.07	0.03	0.01	0.14		
NLB:Fnua	E(I)	-0.16	0.03	-0.22	-0.11		
NLB:Fnua	G(Ia)	0.15	0.05	0.05	0.25		
NLB:Fnua	P(I)	-0.08	0.02	-0.12	-0.05		
NLB:Fr	$\mid E(I) \mid$	-0.17	0.03	-0.22	-0.11		
NLB:Fr	G(Ia)	0.08	0.05	-0.02	0.18		
NLB:Fr	P(I)	-0.10	0.02	-0.14	-0.07		
NLB:Fnt	E(I)	-0.22	0.03	-0.27	-0.16		
NLB:Fnt	G(Ia)	0.05	0.05	-0.05	0.15		
NLB:Fnt	P(I)	-0.15	0.02	-0.18	-0.11		
NLB:Sarea	E(I)	-0.13	0.03	-0.18	-0.07		
NLB:Sarea	G(Ia)	-0.22	0.04	-0.31	-0.14		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLB:Sarea	P(I)	-0.15	0.02	-0.18	-0.12		
NLB:Fd	$\mid E(I) \mid$	-0.05	0.03	-0.11	0.01		
NLB:Fd	G(Ia)	0.28	0.07	0.14	0.42		
NLB:Fd	P(I)	0.01	0.02	-0.02	0.05		
NLB:Fc	$\mid E(I) \mid$	0.00	0.04	-0.08	0.09		
NLB:Fc	G(Ia)	0.03	0.04	-0.05	0.10		
NLB:Fc	P(I)	0.01	0.02	-0.03	0.05		
NLB:Fu	$\mid E(I) \mid$	-0.06	0.03	-0.13	0.00		
NLB:Fu	G(Ia)	0.17	0.05	0.07	0.27		
NLB:Fu	P(I)	0.00	0.02	-0.04	0.04		
NLB:Colour	E(I)	-0.01	0.02	-0.06	0.04		
NLB:Colour	G(Ia)	0.15	0.06	0.03	0.27		
NLB:Colour	P(I)	0.02	0.02	-0.01	0.05		
NLB:Fly	E(I)	-0.02	0.02	-0.07	0.03		
NLB:Fly	G(Ia)	-0.06	0.09	-0.23	0.11		
NLB:Fly	P(I)	-0.03	0.02	-0.06	0.01		
NLB:Flcrot	E(I)	-0.00	0.02	-0.05	0.04		
NLB:Flcrot	G(Ia)	0.09	0.15	-0.20	0.38		
NLB:Flcrot	P(I)	0.00	0.02	-0.03	0.04		
NLB:Bactst	E(I)	0.02	0.03	-0.04	0.08		
NLB:Bactst	G(Ia)	0.21	0.14	-0.07	0.49		
NLB:Bactst	P(I)	0.04	0.02	-0.00	0.08		
NLB:MycD	E(I)	0.04	0.03	-0.02	0.10		
NLB:MycD	G(Ia)	-0.31	0.17	-0.65	0.03		
NLB:MycD	P(I)	0.01	0.02	-0.03	0.05		
NLB:Bcts	E(I)	-0.15	0.05	-0.25	-0.05		
NLB:Bcts	G(Ia)	0.08	0.03	0.03	0.14		
NLB:Bcts	P(I)	-0.02	0.02	-0.06	0.01		
NLB:Bctb	E(I)	-0.14	0.05	-0.23	-0.04		
NLB:Bctb	G(Ia)	0.06	0.03	0.00	0.12		
NLB:Bctb	P(I)	-0.03	0.02	-0.07	0.00		
NLB:Weanwt	E(I)	-0.38	0.02	-0.43	-0.33		
NLB:Weanwt	G(Ia)	-0.46	0.05	-0.55	-0.36		
NLB:Weanwt	P(I)	-0.40	0.02	-0.43	-0.37		
NLB:NLB	E(I)	1.00	0.00	1.00	1.00		
NLB:NLB	G(Ia)	1.00	0.00	1.00	1.00		
NLB:NLB	P(I)	1.00	0.00	1.00	1.00		
NLB:NLW	E(I)	0.74	0.01	0.72	0.77		
NLB:NLW	G(Ia)	0.98	0.03	0.93	1.03		
NLB:NLW	P(I)	0.79	0.01	0.77	0.81		
NLB:Fnpua	E(I)	0.03	0.03	-0.02	0.09		
NLB:Fnpua	G(Ia)	0.00	0.06	-0.11	0.12		
NLB:Fnpua	P(I)	0.03	0.02	-0.01	0.06		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLB:Fnsua	E(I)	-0.17	0.03	-0.22	-0.11		
NLB:Fnsua	G(Ia)	0.16	0.05	0.05	0.26		
NLB:Fnsua	P(I)	-0.09	0.02	-0.12	-0.05		
NLB:Fnpt	$\mid E(I) \mid$	-0.02	0.03	-0.08	0.03		
NLB:Fnpt	G(Ia)	-0.11	0.05	-0.22	-0.01		
NLB:Fnpt	P(I)	-0.04	0.02	-0.08	-0.01		
NLB:Fnst	E(I)	-0.22	0.03	-0.27	-0.16		
NLB:Fnst	G(Ia)	0.06	0.05	-0.04	0.16		
NLB:Fnst	P(I)	-0.15	0.02	-0.18	-0.12		
NLW:Stal	$\mid E(I) \mid$	0.03	0.03	-0.03	0.08		
NLW:Stal	G(Ia)	0.14	0.04	0.06	0.22		
NLW:Stal	P(I)	0.06	0.02	0.03	0.09		
NLW:Diam	E(I)	0.15	0.03	0.09	0.20		
NLW:Diam	G(Ia)	-0.05	0.04	-0.12	0.02		
NLW:Diam	P(I)	0.08	0.02	0.05	0.11		
NLW:Bwt	E(I)	-0.13	0.03	-0.18	-0.08		
NLW:Bwt	G(Ia)	-0.20	0.04	-0.28	-0.12		
NLW:Bwt	P(I)	-0.15	0.02	-0.18	-0.12		
NLW:WrN	E(I)	-0.16	0.03	-0.21	-0.10		
NLW:WrN	G(Ia)	0.01	0.04	-0.06	0.09		
NLW:WrN	P(I)	-0.10	0.02	-0.14	-0.07		
NLW:WrB	E(I)	-0.18	0.03	-0.24	-0.13		
NLW:WrB	G(Ia)	0.02	0.04	-0.06	0.10		
NLW:WrB	P(I)	-0.12	0.02	-0.15	-0.09		
NLW:WrT	$\mid E(I) \mid$	-0.19	0.03	-0.25	-0.14		
NLW:WrT	G(Ia)	0.02	0.04	-0.05	0.09		
NLW:WrT	P(I)	-0.12	0.02	-0.15	-0.09		
NLW:Face	$\mid E(I) \mid$	-0.18	0.04	-0.26	-0.10		
NLW:Face	G(Ia)	0.21	0.03	0.15	0.27		
NLW:Face	P(I)	-0.01	0.02	-0.04	0.02		
NLW:Gfw	E(I)	-0.21	0.03	-0.26	-0.16		
NLW:Gfw	G(Ia)	0.09	0.04	0.01	0.17		
NLW:Gfw	P(I)	-0.13	0.02	-0.16	-0.10		
NLW:Yld	E(I)	-0.03	0.03	-0.09	0.02		
NLW:Yld	G(Ia)	0.03	0.04	-0.04	0.10		
NLW:Yld	P(I)	-0.01	0.02	-0.05	0.02		
NLW:Cww	$\mid E(I) \mid$	-0.22	0.03	-0.27	-0.16		
NLW:Cww	G(Ia)	0.10	0.04	0.02	0.18		
NLW:Cww	P(I)	-0.13	0.02	-0.16	-0.10		
NLW:Staladj	E(I)	0.03	0.03	-0.03	0.08		
NLW:Staladj	G(Ia)	0.14	0.04	0.06	0.22		
NLW:Staladj	P(I)	0.06	0.02	0.03	0.09		
NLW:Gfwadj	E(I)	-0.22	0.03	-0.27	-0.16		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLW:Gfwadj	G(Ia)	0.08	0.04	-0.00	0.16		
NLW:Gfwadj	P(I)	-0.13	0.02	-0.16	-0.10		
NLW:Cwwadj	E(I)	-0.22	0.03	-0.27	-0.17		
NLW:Cwwadj	G(Ia)	0.09	0.04	0.01	0.18		
NLW:Cwwadj	P(I)	-0.14	0.02	-0.17	-0.10		
NLW:Crimp	E(I)	-0.08	0.17	-0.41	0.24		
NLW:Crimp	G(Ia)	-0.11	0.03	-0.17	-0.04		
NLW:Crimp	P(I)	-0.07	0.02	-0.11	-0.03		
NLW:Crwvl	E(I)	0.11	0.04	0.02	0.19		
NLW:Crwvl	G(Ia)	0.11	0.04	0.03	0.19		
NLW:Crwvl	P(I)	0.10	0.02	0.06	0.14		
NLW:Crst	E(I)	-0.02	0.05	-0.12	0.09		
NLW:Crst	G(Ia)	-0.08	0.04	-0.16	0.00		
NLW:Crst	P(I)	-0.04	0.02	-0.08	0.00		
NLW:Crstadj	E(I)	-0.01	0.05	-0.11	0.09		
NLW:Crstadj	G(Ia)	-0.10	0.04	-0.19	-0.02		
NLW:Crstadj	P(I)	-0.05	0.02	-0.09	-0.00		
NLW:Crwvt	E(I)	0.04	0.04	-0.04	0.13		
NLW:Crwvt	G(Ia)	0.08	0.05	-0.01	0.18		
NLW:Crwvt	P(I)	0.06	0.02	0.02	0.10		
NLW:Dp	E(I)	0.02	0.07	-0.11	0.16		
NLW:Dp	G(Ia)	0.42	0.07	0.28	0.57		
NLW:Dp	P(I)	0.17	0.03	0.11	0.24		
NLW:Ds	E(I)	0.18	0.06	0.06	0.31		
NLW:Ds	G(Ia)	-0.23	0.09	-0.40	-0.06		
NLW:Ds	P(I)	0.04	0.03	-0.02	0.11		
NLW:Dps	E(I)	0.18	0.06	0.05	0.30		
NLW:Dps	G(Ia)	-0.19	0.09	-0.36	-0.02		
NLW:Dps	P(I)	0.06	0.03	-0.01	0.12		
NLW:DpovDs	E(I)	-0.20	0.12	-0.43	0.04		
NLW:DpovDs	G(Ia)	0.47	0.06	0.36	0.59		
NLW:DpovDs	P(I)	0.15	0.03	0.09	0.21		
NLW:CVDp	E(I)	-0.15	0.06	-0.27	-0.03		
NLW:CVDp	G(Ia)	0.29	0.10	0.11	0.48		
NLW:CVDp	P(I)	-0.02	0.03	-0.08	0.05		
NLW:CVDs	E(I)	-0.07	0.06	-0.19	0.04		
NLW:CVDs	G(Ia)	0.47	0.10	0.27	0.67		
NLW:CVDs	P(I)	0.08	0.03	0.01	0.14		
NLW:MaxDp	E(I)	-0.02	0.07	-0.15	0.12		
NLW:MaxDp	G(Ia)	0.43	0.08	0.28	0.58		
NLW:MaxDp	P(I)	0.15	0.03	0.08	0.21		
NLW:MinDp	E(I)	0.09	0.05	-0.01	0.19		
NLW:MinDp	G(Ia)	0.55	0.25	0.06	1.04		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLW:MinDp	P(I)	0.14	0.03	0.08	0.21		
NLW:MaxDs	$\mid E(I) \mid$	0.02	0.05	-0.08	0.13		
NLW:MaxDs	G(Ia)	0.18	0.12	-0.06	0.41		
NLW:MaxDs	P(I)	0.06	0.03	-0.01	0.12		
NLW:MinDs	E(I)	0.02	0.05	-0.08	0.12		
NLW:MinDs	G(Ia)	0.06	0.23	-0.40	0.52		
NLW:MinDs	P(I)	0.02	0.03	-0.04	0.09		
NLW:SDDp	E(I)	-0.14	0.07	-0.27	-0.00		
NLW:SDDp	G(Ia)	0.42	0.08	0.27	0.57		
NLW:SDDp	P(I)	0.07	0.03	0.00	0.13		
NLW:SDDs	E(I)	0.04	0.06	-0.08	0.16		
NLW:SDDs	G(Ia)	0.22	0.08	0.06	0.38		
NLW:SDDs	P(I)	0.10	0.03	0.03	0.16		
NLW:SDD	E(I)	0.02	0.06	-0.10	0.14		
NLW:SDD	G(Ia)	0.28	0.08	0.12	0.44		
NLW:SDD	P(I)	0.11	0.03	0.04	0.17		
NLW:CVD	E(I)	-0.09	0.06	-0.21	0.02		
NLW:CVD	G(Ia)	0.50	0.10	0.31	0.69		
NLW:CVD	P(I)	0.08	0.03	0.01	0.14		
NLW:Gt30Dp	E(I)	-0.07	0.07	-0.21	0.06		
NLW:Gt30Dp	G(Ia)	0.50	0.08	0.35	0.65		
NLW:Gt30Dp	P(I)	0.13	0.03	0.07	0.20		
NLW:Gt30Ds	E(I)	0.02	0.06	-0.09	0.14		
NLW:Gt30Ds	G(Ia)	0.09	0.10	-0.10	0.29		
NLW:Gt30Ds	P(I)	0.04	0.03	-0.02	0.11		
NLW:Gt30D	E(I)	0.01	0.06	-0.10	0.12		
NLW:Gt30D	G(Ia)	0.25	0.10	0.06	0.44		
NLW:Gt30D	P(I)	0.08	0.03	0.01	0.14		
NLW:Fnua	E(I)	-0.14	0.03	-0.20	-0.09		
NLW:Fnua	G(Ia)	0.22	0.05	0.11	0.32		
NLW:Fnua	P(I)	-0.06	0.02	-0.09	-0.02		
NLW:Fr	E(I)	-0.15	0.03	-0.21	-0.10		
NLW:Fr	G(Ia)	0.12	0.05	0.02	0.22		
NLW:Fr	P(I)	-0.08	0.02	-0.12	-0.05		
NLW:Fnt	E(I)	-0.20	0.03	-0.25	-0.14		
NLW:Fnt	G(Ia)	0.13	0.05	0.04	0.23		
NLW:Fnt	P(I)	-0.12	0.02	-0.15	-0.08		
NLW:Sarea	E(I)	-0.13	0.03	-0.19	-0.07		
NLW:Sarea	G(Ia)	-0.18	0.05	-0.26	-0.09		
NLW:Sarea	P(I)	-0.14	0.02	-0.17	-0.10		
NLW:Fd	E(I)	-0.03	0.03	-0.09	0.03		
NLW:Fd	G(Ia)	0.21	0.07	0.07	0.35		
NLW:Fd	P(I)	0.02	0.02	-0.02	0.06		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLW:Fc	E(I)	-0.00	0.04	-0.08	0.08		
NLW:Fc	G(Ia)	-0.07	0.04	-0.15	-0.00		
NLW:Fc	P(I)	-0.03	0.02	-0.07	0.01		
NLW:Fu	E(I)	-0.05	0.03	-0.12	0.01		
NLW:Fu	G(Ia)	0.07	0.05	-0.03	0.16		
NLW:Fu	P(I)	-0.02	0.02	-0.06	0.02		
NLW:Colour	E(I)	-0.03	0.03	-0.08	0.02		
NLW:Colour	G(Ia)	0.22	0.06	0.10	0.34		
NLW:Colour	P(I)	0.02	0.02	-0.02	0.05		
NLW:Fly	E(I)	-0.01	0.02	-0.06	0.04		
NLW:Fly	G(Ia)	0.04	0.08	-0.12	0.21		
NLW:Fly	P(I)	-0.00	0.02	-0.04	0.03		
NLW:Flcrot	E(I)	0.00	0.02	-0.04	0.05		
NLW:Flcrot	G(Ia)	0.12	0.15	-0.17	0.40		
NLW:Flcrot	P(I)	0.01	0.02	-0.02	0.04		
NLW:Bactst	E(I)	0.01	0.03	-0.05	0.06		
NLW:Bactst	G(Ia)	0.14	0.14	-0.12	0.41		
NLW:Bactst	P(I)	0.02	0.02	-0.02	0.06		
NLW:MycD	E(I)	0.05	0.03	-0.01	0.10		
NLW:MycD	G(Ia)	-0.35	0.17	-0.68	-0.02		
NLW:MycD	P(I)	0.00	0.02	-0.04	0.04		
NLW:Bcts	E(I)	-0.26	0.05	-0.36	-0.15		
NLW:Bcts	G(Ia)	0.18	0.03	0.13	0.24		
NLW:Bcts	P(I)	-0.02	0.02	-0.05	0.02		
NLW:Bctb	E(I)	-0.27	0.05	-0.37	-0.17		
NLW:Bctb	G(Ia)	0.17	0.03	0.12	0.23		
NLW:Bctb	P(I)	-0.04	0.02	-0.07	-0.00		
NLW:Weanwt	E(I)	-0.41	0.02	-0.45	-0.36		
NLW:Weanwt	G(Ia)	-0.46	0.04	-0.54	-0.37		
NLW:Weanwt	P(I)	-0.42	0.02	-0.45	-0.39		
NLW:NLB	E(I)	0.74	0.01	0.72	0.77		
NLW:NLB	G(Ia)	0.98	0.03	0.93	1.03		
NLW:NLB	P(I)	0.79	0.01	0.77	0.81		
NLW:NLW	E(I)	1.00	0.00	1.00	1.00		
NLW:NLW	G(Ia)	1.00	0.00	1.00	1.00		
NLW:NLW	P(I)	1.00	0.00	1.00	1.00		
NLW:Fnpua	E(I)	0.04	0.03	-0.01	0.09		
NLW:Fnpua	G(Ia)	0.02	0.06	-0.10	0.13		
NLW:Fnpua	P(I)	0.04	0.02	0.00	0.07		
NLW:Fnsua	E(I)	-0.15	0.03	-0.20	-0.09		
NLW:Fnsua	G(Ia)	0.22	0.05	0.12	0.32		
NLW:Fnsua	P(I)	-0.06	0.02	-0.09	-0.02		
NLW:Fnpt	E(I)	-0.01	0.03	-0.07	0.04		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
NLW:Fnpt	G(Ia)	-0.08	0.05	-0.18	0.03		
NLW:Fnpt	P(I)	-0.03	0.02	-0.06	0.01		
NLW:Fnst	E(I)	-0.20	0.03	-0.26	-0.15		
NLW:Fnst	G(Ia)	0.14	0.05	0.04	0.24		
NLW:Fnst	P(I)	-0.12	0.02	-0.15	-0.08		
Fnpua:Stal	E(I)	-0.11	0.03	-0.16	-0.05		
Fnpua:Stal	G(Ia)	0.12	0.04	0.03	0.20		
Fnpua:Stal	P(I)	-0.04	0.02	-0.08	-0.01		
Fnpua:Diam	E(I)	-0.09	0.03	-0.15	-0.03		
Fnpua:Diam	G(Ia)	-0.35	0.04	-0.43	-0.28		
Fnpua:Diam	P(I)	-0.17	0.02	-0.20	-0.14		
Fnpua:Bwt	E(I)	-0.28	0.03	-0.33	-0.22		
Fnpua:Bwt	G(Ia)	-0.07	0.04	-0.15	0.01		
Fnpua:Bwt	P(I)	-0.22	0.02	-0.25	-0.18		
Fnpua:WrN	E(I)	-0.03	0.03	-0.08	0.03		
Fnpua:WrN	G(Ia)	-0.42	0.04	-0.50	-0.33		
Fnpua:WrN	P(I)	-0.14	0.02	-0.17	-0.10		
Fnpua:WrB	E(I)	-0.06	0.03	-0.12	0.00		
Fnpua:WrB	G(Ia)	-0.30	0.04	-0.38	-0.22		
Fnpua:WrB	P(I)	-0.13	0.02	-0.16	-0.09		
Fnpua:WrT	E(I)	-0.04	0.03	-0.10	0.02		
Fnpua:WrT	G(Ia)	-0.37	0.04	-0.44	-0.29		
Fnpua:WrT	P(I)	-0.14	0.02	-0.17	-0.11		
Fnpua:Face	E(I)	0.09	0.05	-0.00	0.18		
Fnpua:Face	G(Ia)	-0.00	0.03	-0.06	0.06		
Fnpua:Face	P(I)	0.04	0.02	0.01	0.07		
Fnpua:Gfw	E(I)	-0.23	0.03	-0.28	-0.17		
Fnpua:Gfw	G(Ia)	-0.18	0.04	-0.26	-0.10		
Fnpua:Gfw	P(I)	-0.21	0.02	-0.25	-0.18		
Fnpua:Yld	E(I)	-0.05	0.03	-0.11	0.01		
Fnpua:Yld	G(Ia)	0.31	0.04	0.24	0.39		
Fnpua:Yld	P(I)	0.07	0.02	0.03	0.10		
Fnpua:Cww	E(I)	-0.24	0.03	-0.30	-0.18		
Fnpua:Cww	G(Ia)	-0.02	0.04	-0.11	0.06		
Fnpua:Cww	P(I)	-0.18	0.02	-0.21	-0.14		
Fnpua:Staladj	E(I)	-0.09	0.03	-0.15	-0.03		
Fnpua:Staladj	G(Ia)	0.09	0.05	0.00	0.18		
Fnpua:Staladj	P(I)	-0.04	0.02	-0.07	-0.01		
Fnpua:Gfwadj	E(I)	-0.21	0.03	-0.27	-0.16		
Fnpua:Gfwadj	G(Ia)	-0.20	0.04	-0.28	-0.11		
Fnpua:Gfwadj	P(I)	-0.21	0.02	-0.24	-0.17		
Fnpua:Cwwadj	E(I)	-0.22	0.03	-0.28	-0.17		
Fnpua:Cwwadj	G(Ia)	-0.05	0.04	-0.13	0.04		

Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnpua:Cwwadj	P(I)	-0.17	0.02	-0.21	-0.14	
Fnpua:Crimp	E(I)	0.13	0.11	-0.08	0.34	
Fnpua:Crimp	G(Ia)	-0.17	0.03	-0.24	-0.10	
Fnpua:Crimp	P(I)	-0.05	0.02	-0.09	-0.01	
Fnpua:Crwvl	$\mid E(I) \mid$	-0.12	0.06	-0.24	0.01	
Fnpua:Crwvl	G(Ia)	0.18	0.04	0.10	0.27	
Fnpua:Crwvl	P(I)	0.03	0.02	-0.02	0.07	
Fnpua:Crst	E(I)	0.14	0.07	0.01	0.28	
Fnpua:Crst	G(Ia)	-0.35	0.04	-0.43	-0.27	
Fnpua:Crst	P(I)	-0.10	0.02	-0.14	-0.05	
Fnpua:Crstadj	$\mid E(I) \mid$	0.15	0.06	0.02	0.27	
Fnpua:Crstadj	G(Ia)	-0.35	0.04	-0.44	-0.27	
Fnpua:Crstadj	P(I)	-0.09	0.02	-0.13	-0.04	
Fnpua:Crwvt	E(I)	-0.10	0.05	-0.20	0.00	
Fnpua:Crwvt	G(Ia)	0.35	0.05	0.26	0.44	
Fnpua:Crwvt	P(I)	0.08	0.02	0.04	0.13	
Fnpua:Dp	E(I)	-0.21	0.07	-0.34	-0.08	
Fnpua:Dp	G(Ia)	-0.03	0.08	-0.18	0.13	
Fnpua:Dp	P(I)	-0.14	0.03	-0.20	-0.07	
Fnpua:Ds	E(I)	-0.15	0.06	-0.26	-0.03	
Fnpua:Ds	G(Ia)	-0.46	0.09	-0.63	-0.28	
Fnpua:Ds	P(I)	-0.24	0.03	-0.30	-0.18	
Fnpua:Dps	E(I)	-0.15	0.06	-0.26	-0.03	
Fnpua:Dps	G(Ia)	-0.45	0.09	-0.63	-0.28	
Fnpua:Dps	P(I)	-0.23	0.03	-0.29	-0.17	
Fnpua:DpovDs	E(I)	-0.16	0.11	-0.37	0.06	
Fnpua:DpovDs	G(Ia)	0.19	0.07	0.06	0.32	
Fnpua:DpovDs	P(I)	0.02	0.03	-0.05	0.08	
Fnpua:CVDp	E(I)	0.10	0.06	-0.02	0.21	
Fnpua:CVDp	G(Ia)	-0.10	0.11	-0.31	0.11	
Fnpua:CVDp	P(I)	0.04	0.03	-0.02	0.11	
Fnpua:CVDs	E(I)	-0.01	0.06	-0.13	0.10	
Fnpua:CVDs	G(Ia)	0.34	0.11	0.11	0.56	
Fnpua:CVDs	P(I)	0.07	0.03	0.01	0.14	
Fnpua:MaxDp	E(I)	-0.04	0.07	-0.17	0.09	
Fnpua:MaxDp	G(Ia)	-0.08	0.08	-0.24	0.09	
Fnpua:MaxDp	P(I)	-0.05	0.03	-0.11	0.01	
Fnpua:MinDp	E(I)	-0.16	0.05	-0.26	-0.07	
Fnpua:MinDp	G(Ia)	-0.33	0.22	-0.76	0.09	
Fnpua:MinDp	P(I)	-0.18	0.03	-0.25	-0.12	
Fnpua:MaxDs	E(I)	-0.13	0.05	-0.23	-0.03	
Fnpua:MaxDs	G(Ia)	-0.18	0.13	-0.44	0.08	
Fnpua:MaxDs	P(I)	-0.14	0.03	-0.21	-0.08	

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnpua:MinDs	E(I)	-0.09	0.05	-0.19	0.00		
Fnpua:MinDs	G(Ia)	0.13	0.25	-0.36	0.61		
Fnpua:MinDs	P(I)	-0.06	0.03	-0.13	-0.00		
Fnpua:SDDp	E(I)	-0.02	0.06	-0.14	0.11		
Fnpua:SDDp	G(Ia)	-0.11	0.09	-0.28	0.05		
Fnpua:SDDp	P(I)	-0.05	0.03	-0.11	0.02		
Fnpua:SDDs	E(I)	-0.10	0.06	-0.21	0.02		
Fnpua:SDDs	G(Ia)	-0.01	0.09	-0.18	0.16		
Fnpua:SDDs	P(I)	-0.07	0.03	-0.13	-0.00		
Fnpua:SDD	E(I)	-0.06	0.06	-0.18	0.06		
Fnpua:SDD	G(Ia)	-0.03	0.09	-0.20	0.15		
Fnpua:SDD	P(I)	-0.05	0.03	-0.12	0.01		
Fnpua:CVD	E(I)	0.02	0.06	-0.09	0.13		
Fnpua:CVD	G(Ia)	0.29	0.11	0.08	0.51		
Fnpua:CVD	P(I)	0.09	0.03	0.02	0.15		
Fnpua:Gt30Dp	E(I)	-0.12	0.06	-0.24	0.01		
Fnpua:Gt30Dp	G(Ia)	-0.04	0.08	-0.21	0.12		
Fnpua:Gt30Dp	P(I)	-0.09	0.03	-0.15	-0.02		
Fnpua:Gt30Ds	E(I)	-0.09	0.05	-0.20	0.02		
Fnpua:Gt30Ds	G(Ia)	-0.21	0.11	-0.43	0.01		
Fnpua:Gt30Ds	P(I)	-0.12	0.03	-0.18	-0.06		
Fnpua:Gt30D	E(I)	-0.09	0.06	-0.20	0.02		
Fnpua:Gt30D	G(Ia)	-0.19	0.11	-0.40	0.02		
Fnpua:Gt30D	P(I)	-0.11	0.03	-0.18	-0.05		
Fnpua:Fnua	E(I)	0.45	0.02	0.40	0.49		
Fnpua:Fnua	G(Ia)	0.48	0.04	0.40	0.56		
Fnpua:Fnua	P(I)	0.45	0.01	0.42	0.48		
Fnpua:Fr	E(I)	-0.43	0.02	-0.48	-0.38		
Fnpua:Fr	G(Ia)	-0.52	0.04	-0.60	-0.45		
Fnpua:Fr	P(I)	-0.45	0.01	-0.48	-0.42		
Fnpua:Fnt	E(I)	0.32	0.03	0.27	0.37		
Fnpua:Fnt	G(Ia)	0.45	0.04	0.37	0.53		
Fnpua:Fnt	P(I)	0.35	0.02	0.32	0.38		
Fnpua:Sarea	E(I)	-0.29	0.03	-0.35	-0.23		
Fnpua:Sarea	G(Ia)	-0.07	0.04	-0.15	0.01		
Fnpua:Sarea	P(I)	-0.22	0.02	-0.25	-0.19		
Fnpua:Fd	E(I)	-0.02	0.03	-0.08	0.03		
Fnpua:Fd	G(Ia)	-0.30	0.07	-0.43	-0.16		
Fnpua:Fd	P(I)	-0.08	0.02	-0.12	-0.04		
Fnpua:Fc	E(I)	0.03	0.04	-0.06	0.11		
Fnpua:Fc	G(Ia)	-0.44	0.04	-0.52	-0.37		
Fnpua:Fc	P(I)	-0.15	0.02	-0.19	-0.11		
Fnpua:Fu	E(I)	0.02	0.03	-0.05	0.08		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fnpua:Fu	G(Ia)	-0.42	0.05	-0.52	-0.32
Fnpua:Fu	P(I)	-0.10	0.02	-0.14	-0.07
Fnpua:Colour	E(I)	0.01	0.03	-0.04	0.06
Fnpua:Colour	G(Ia)	0.03	0.06	-0.09	0.15
Fnpua:Colour	P(I)	0.01	0.02	-0.02	0.05
Fnpua:Fly	E(I)	-0.02	0.03	-0.08	0.03
Fnpua:Fly	G(Ia)	0.22	0.09	0.04	0.39
Fnpua:Fly	P(I)	0.01	0.02	-0.02	0.05
Fnpua:Flcrot	E(I)	-0.00	0.03	-0.05	0.05
Fnpua:Flcrot	G(Ia)	0.36	0.20	-0.03	0.74
Fnpua:Flcrot	P(I)	0.03	0.02	-0.01	0.06
Fnpua:Bactst	E(I)	0.02	0.03	-0.05	0.08
Fnpua:Bactst	G(Ia)	-0.10	0.15	-0.40	0.20
Fnpua:Bactst	P(I)	0.00	0.02	-0.04	0.05
Fnpua:MycD	E(I)	-0.03	0.03	-0.09	0.04
Fnpua:MycD	G(Ia)	-0.19	0.32	-0.81	0.44
Fnpua:MycD	P(I)	-0.03	0.02	-0.08	0.01
Fnpua:Bcts	E(I)	0.03	0.05	-0.07	0.13
Fnpua:Bcts	G(Ia)	-0.02	0.04	-0.09	0.05
Fnpua:Bcts	P(I)	0.01	0.02	-0.03	0.04
Fnpua:Bctb	E(I)	0.03	0.05	-0.07	0.12
Fnpua:Bctb	G(Ia)	-0.03	0.04	-0.10	0.04
Fnpua:Bctb	P(I)	0.00	0.02	-0.04	0.04
Fnpua:Weanwt	E(I)	-0.17	0.03	-0.23	-0.11
Fnpua:Weanwt	G(Ia)	0.06	0.06	-0.07	0.18
Fnpua:Weanwt	P(I)	-0.11	0.02	-0.15	-0.08
Fnpua:NLB	E(I)	0.03	0.03	-0.02	0.09
Fnpua:NLB	G(Ia)	0.00	0.06	-0.11	0.12
Fnpua:NLB	P(I)	0.03	0.02	-0.01	0.06
Fnpua:NLW	E(I)	0.04	0.03	-0.01	0.09
Fnpua:NLW	G(Ia)	0.02	0.06	-0.10	0.13
Fnpua:NLW	P(I)	0.04	0.02	0.00	0.07
Fnpua:Fnpua	E(I)	1.00	0.00	1.00	1.00
Fnpua:Fnpua	G(Ia)	1.00	0.00	1.00	1.00
Fnpua:Fnpua	P(I)	1.00	0.00	1.00	1.00
Fnpua:Fnsua	E(I)	0.40	0.02	0.35	0.45
Fnpua:Fnsua	G(Ia)	0.45	0.04	0.37	0.53
Fnpua:Fnsua	P(I)	0.41	0.02	0.38	0.44
Fnpua:Fnpt	E(I)	0.91	0.01	0.89	0.93
Fnpua:Fnpt	G(Ia)	0.88	0.02	0.85	0.91
Fnpua:Fnpt	P(I)	0.90	0.01	0.89	0.91
Fnpua:Fnst	E(I)	0.28	0.03	0.23	0.33
Fnpua:Fnst	G(Ia)	0.42	0.04	0.34	0.50

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnpua:Fnst	P(I)	0.31	0.02	0.28	0.35		
Fnsua:Stal	E(I)	-0.19	0.03	-0.25	-0.13		
Fnsua:Stal	G(Ia)	-0.14	0.04	-0.21	-0.06		
Fnsua:Stal	P(I)	-0.17	0.02	-0.21	-0.14		
Fnsua:Diam	E(I)	-0.48	0.03	-0.53	-0.43		
Fnsua:Diam	G(Ia)	-0.57	0.03	-0.62	-0.52		
Fnsua:Diam	P(I)	-0.51	0.01	-0.54	-0.48		
Fnsua:Bwt	E(I)	-0.22	0.03	-0.28	-0.16		
Fnsua:Bwt	G(Ia)	-0.22	0.04	-0.29	-0.15		
Fnsua:Bwt	P(I)	-0.22	0.02	-0.25	-0.19		
Fnsua:WrN	E(I)	0.04	0.03	-0.02	0.10		
Fnsua:WrN	G(Ia)	-0.08	0.04	-0.15	-0.00		
Fnsua:WrN	P(I)	-0.00	0.02	-0.03	0.03		
Fnsua:WrB	E(I)	0.07	0.03	0.01	0.13		
Fnsua:WrB	G(Ia)	-0.13	0.04	-0.20	-0.06		
Fnsua:WrB	P(I)	0.00	0.02	-0.03	0.04		
Fnsua:WrT	E(I)	0.07	0.03	0.00	0.13		
Fnsua:WrT	G(Ia)	-0.12	0.03	-0.19	-0.05		
Fnsua:WrT	P(I)	0.00	0.02	-0.03	0.03		
Fnsua:Face	E(I)	0.13	0.05	0.04	0.23		
Fnsua:Face	G(Ia)	0.09	0.03	0.04	0.14		
Fnsua:Face	P(I)	0.10	0.02	0.06	0.13		
Fnsua:Gfw	E(I)	-0.02	0.03	-0.09	0.04		
Fnsua:Gfw	G(Ia)	-0.19	0.04	-0.26	-0.12		
Fnsua:Gfw	P(I)	-0.08	0.02	-0.11	-0.04		
Fnsua:Yld	E(I)	-0.05	0.03	-0.12	0.01		
Fnsua:Yld	G(Ia)	0.42	0.03	0.35	0.48		
Fnsua:Yld	P(I)	0.12	0.02	0.09	0.15		
Fnsua:Cww	E(I)	-0.04	0.03	-0.10	0.02		
Fnsua:Cww	G(Ia)	0.01	0.04	-0.07	0.08		
Fnsua:Cww	P(I)	-0.02	0.02	-0.06	0.01		
Fnsua:Staladj	E(I)	-0.17	0.03	-0.23	-0.12		
Fnsua:Staladj	G(Ia)	-0.16	0.04	-0.23	-0.08		
Fnsua:Staladj	P(I)	-0.17	0.02	-0.20	-0.13		
Fnsua:Gfwadj	E(I)	-0.02	0.03	-0.08	0.04		
Fnsua:Gfwadj	G(Ia)	-0.20	0.04	-0.28	-0.13		
Fnsua:Gfwadj	P(I)	-0.08	0.02	-0.11	-0.04		
Fnsua:Cwwadj	E(I)	-0.03	0.03	-0.09	0.03		
Fnsua:Cwwadj	G(Ia)	-0.01	0.04	-0.09	0.06		
Fnsua:Cwwadj	P(I)	-0.02	0.02	-0.06	0.01		
Fnsua:Crimp	E(I)	0.62	0.13	0.36	0.87		
Fnsua:Crimp	G(Ia)	-0.40	0.04	-0.48	-0.33		
Fnsua:Crimp	P(I)	-0.03	0.02	-0.07	0.02		

Table 24 – Continued from previous page

Tab	$\frac{\text{le } 24 - Contin}{\text{Component}}$	Estimate	StdErr	CI95lo	CI95hi
Fnsua:Crwvl	E(I)	-0.37	0.06	-0.50	-0.25
Fnsua:Crwvl		0.40	0.06	0.31	
Fnsua:Crwvl	G(Ia)	-0.01	0.03	-0.06	0.50
	P(I)				0.03
Fnsua:Crst	$\begin{array}{ c c } E(I) \\ G(Ia) \end{array}$	0.20	0.07 0.04	0.07	0.34
Fnsua:Crst Fnsua:Crst		-0.56 -0.15	0.04	-0.05	-0.47 -0.10
Fnsua:Crstadj	P(I)	0.18	0.02	0.06	
_	E(I)		0.06		0.31 -0.47
Fnsua:Crstadj	G(Ia)	-0.56	0.05	-0.65	
Fnsua:Crstadj	P(I)	-0.14	0.02	-0.19	-0.10
Fnsua:Crwvt	E(I)	-0.16		-0.26	-0.06
Fnsua:Crwvt	G(Ia)	0.58	0.05	0.48	0.68
Fnsua:Crwvt	P(I)	0.12	0.02	0.07	0.16
Fnsua:Dp	E(I)	-0.41	0.07	-0.55	-0.28
Fnsua:Dp	G(Ia)	0.00	0.18	-0.35	0.35
Fnsua:Dp	P(I)	-0.23	0.03	-0.30	-0.17
Fnsua:Ds	E(I)	-0.40	0.06	-0.51	-0.29
Fnsua:Ds	G(Ia)	-0.72	0.06	-0.84	-0.60
Fnsua:Ds	P(I)	-0.51	0.03	-0.57	-0.46
Fnsua:Dps	E(I)	-0.41	0.05	-0.52	-0.31
Fnsua:Dps	G(Ia)	-0.73	0.06	-0.85	-0.61
Fnsua:Dps	P(I)	-0.52	0.03	-0.57	-0.47
Fnsua:DpovDs	E(I)	-0.20	0.12	-0.44	0.04
Fnsua:DpovDs	G(Ia)	0.36	0.05	0.25	0.47
Fnsua:DpovDs	P(I)	0.11	0.03	0.05	0.18
Fnsua:CVDp	E(I)	-0.03	0.06	-0.15	0.09
Fnsua:CVDp	G(Ia)	-0.16	0.09	-0.33	0.01
Fnsua:CVDp	P(I)	-0.07	0.03	-0.14	-0.01
Fnsua:CVDs	E(I)	0.12	0.06	0.00	0.24
Fnsua:CVDs	G(Ia)	0.03	0.09	-0.15	0.21
Fnsua:CVDs	P(I)	0.09	0.03	0.03	0.16
Fnsua:MaxDp	E(I)	-0.31	0.07	-0.44	-0.17
Fnsua:MaxDp	G(Ia)	0.01	0.08	-0.15	0.17
Fnsua:MaxDp	P(I)	-0.18	0.03	-0.24	-0.11
Fnsua:MinDp	E(I)	-0.15	0.05	-0.26	-0.05
Fnsua:MinDp	G(Ia)	0.07	0.21	-0.35	0.49
Fnsua:MinDp	P(I)	-0.11	0.03	-0.18	-0.05
Fnsua:MaxDs	E(I)	-0.17	0.06	-0.28	-0.06
Fnsua:MaxDs	G(Ia)	-0.49	0.11	-0.70	-0.28
Fnsua:MaxDs	P(I)	-0.25	0.03	-0.31	-0.18
Fnsua:MinDs	E(I)	-0.12	0.05	-0.23	-0.02
Fnsua:MinDs	G(Ia)	-0.01	0.14	-0.29	0.27
Fnsua:MinDs	P(I)	-0.10	0.03	-0.16	-0.03
Fnsua:SDDp	E(I)	-0.24	0.07	-0.38	-0.10

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnsua:SDDp	G(Ia)	-0.05	0.07	-0.19	0.09		
Fnsua:SDDp	P(I)	-0.16	0.03	-0.23	-0.10		
Fnsua:SDDs	E(I)	-0.11	0.07	-0.23	0.02		
Fnsua:SDDs	G(Ia)	-0.38	0.07	-0.53	-0.23		
Fnsua:SDDs	P(I)	-0.21	0.03	-0.27	-0.14		
Fnsua:SDD	E(I)	-0.15	0.07	-0.27	-0.02		
Fnsua:SDD	G(Ia)	-0.37	0.07	-0.51	-0.22		
Fnsua:SDD	P(I)	-0.23	0.03	-0.29	-0.16		
Fnsua:CVD	E(I)	0.10	0.06	-0.02	0.22		
Fnsua:CVD	G(Ia)	0.03	0.09	-0.15	0.20		
Fnsua:CVD	P(I)	0.08	0.03	0.01	0.14		
Fnsua:Gt30Dp	E(I)	-0.28	0.07	-0.42	-0.15		
Fnsua:Gt30Dp	G(Ia)	-0.05	0.07	-0.18	0.09		
Fnsua:Gt30Dp	P(I)	-0.18	0.03	-0.25	-0.12		
Fnsua:Gt30Ds	E(I)	-0.25	0.06	-0.36	-0.14		
Fnsua:Gt30Ds	G(Ia)	-0.50	0.09	-0.66	-0.33		
Fnsua:Gt30Ds	P(I)	-0.32	0.03	-0.38	-0.26		
Fnsua:Gt30D	E(I)	-0.30	0.06	-0.41	-0.18		
Fnsua:Gt30D	G(Ia)	-0.46	0.08	-0.62	-0.30		
Fnsua:Gt30D	P(I)	-0.35	0.03	-0.41	-0.29		
Fnsua:Fnua	E(I)	1.00	0.00	1.00	1.00		
Fnsua:Fnua	G(Ia)	1.00	0.00	1.00	1.00		
Fnsua:Fnua	P(I)	1.00	0.00	1.00	1.00		
Fnsua:Fr	E(I)	0.55	0.02	0.51	0.60		
Fnsua:Fr	G(Ia)	0.53	0.03	0.47	0.59		
Fnsua:Fr	P(I)	0.55	0.01	0.52	0.57		
Fnsua:Fnt	E(I)	0.90	0.01	0.88	0.92		
Fnsua:Fnt	G(Ia)	0.88	0.01	0.85	0.91		
Fnsua:Fnt	P(I)	0.89	0.01	0.88	0.90		
Fnsua:Sarea	E(I)	-0.23	0.03	-0.29	-0.17		
Fnsua:Sarea	G(Ia)	-0.22	0.04	-0.29	-0.14		
Fnsua:Sarea	P(I)	-0.22	0.02	-0.26	-0.19		
Fnsua:Fd	E(I)	0.05	0.03	-0.01	0.11		
Fnsua:Fd	G(Ia)	-0.15	0.06	-0.26	-0.04		
Fnsua:Fd	P(I)	0.00	0.02	-0.04	0.04		
Fnsua:Fc	E(I)	-0.09	0.05	-0.17	0.00		
Fnsua:Fc	G(Ia)	-0.50	0.03	-0.56	-0.45		
Fnsua:Fc	P(I)	-0.27	0.02	-0.30	-0.23		
Fnsua:Fu	E(I)	-0.08	0.03	-0.15	-0.01		
Fnsua:Fu	G(Ia)	-0.37	0.04	-0.45	-0.29		
Fnsua:Fu	P(I)	-0.18	0.02	-0.21	-0.14		
Fnsua:Colour	E(I)	-0.02	0.03	-0.08	0.03		
Fnsua:Colour	G(Ia)	0.23	0.06	0.12	0.34		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fnsua:Colour	P(I)	0.03	0.02	-0.00	0.07
Fnsua:Fly	E(I)	-0.01	0.03	-0.07	0.04
Fnsua:Fly	G(Ia)	0.19	0.08	0.04	0.34
Fnsua:Fly	P(I)	0.02	0.02	-0.01	0.06
Fnsua:Flcrot	E(I)	-0.00	0.03	-0.06	0.05
Fnsua:Flcrot	G(Ia)	0.45	0.19	0.07	0.83
Fnsua:Flcrot	P(I)	0.04	0.02	-0.00	0.07
Fnsua:Bactst	E(I)	0.02	0.04	-0.05	0.09
Fnsua:Bactst	G(Ia)	0.19	0.12	-0.05	0.44
Fnsua:Bactst	P(I)	0.04	0.02	-0.00	0.09
Fnsua:MycD	E(I)	0.02	0.03	-0.04	0.09
Fnsua:MycD	G(Ia)	0.09	0.25	-0.41	0.59
Fnsua:MycD	P(I)	0.03	0.02	-0.02	0.07
Fnsua:Bcts	E(I)	-0.11	0.05	-0.22	-0.01
Fnsua:Bcts	G(Ia)	0.04	0.03	-0.22	0.10
Fnsua:Bets	P(I)	-0.03	0.02	-0.06	0.01
Fnsua:Bctb	E(I)	-0.15	0.05	-0.25	-0.05
Fnsua:Bctb	G(Ia)	0.08	0.03	0.02	0.13
Fnsua:Bctb	P(I)	-0.03	0.02	-0.06	0.01
Fnsua:Weanwt	E(I)	0.11	0.03	0.04	0.17
Fnsua:Weanwt	G(Ia)	-0.49	0.05	-0.59	-0.39
Fnsua:Weanwt	P(I)	-0.06	0.02	-0.10	-0.03
Fnsua:NLB	E(I)	-0.17	0.03	-0.22	-0.11
Fnsua:NLB	G(Ia)	0.16	0.05	0.05	0.26
Fnsua:NLB	P(I)	-0.09	0.02	-0.12	-0.05
Fnsua:NLW	E(I)	-0.15	0.03	-0.20	-0.09
Fnsua:NLW	G(Ia)	0.22	0.05	0.12	0.32
Fnsua:NLW	P(I)	-0.06	0.02	-0.09	-0.02
Fnsua:Fnpua	E(I)	0.40	0.02	0.35	0.45
Fnsua:Fnpua	G(Ia)	0.45	0.04	0.37	0.53
Fnsua:Fnpua	P(I)	0.41	0.02	0.38	0.44
Fnsua:Fnsua	E(I)	1.00	0.00	1.00	1.00
Fnsua:Fnsua	G(Ia)	1.00	0.00	1.00	1.00
Fnsua:Fnsua	P(I)	1.00	0.00	1.00	1.00
Fnsua:Fnpt	E(I)	0.32	0.03	0.27	0.38
Fnsua:Fnpt	G(Ia)	0.30	0.04	0.22	0.38
Fnsua:Fnpt	P(I)	0.32	0.02	0.28	0.35
Fnsua:Fnst	E(I)	0.90	0.01	0.88	0.92
Fnsua:Fnst	G(Ia)	0.89	0.01	0.86	0.92
Fnsua:Fnst	P(I)	0.90	0.01	0.88	0.91
Fnpt:Stal	E(I)	0.00	0.03	-0.06	0.06
Fnpt:Stal	G(Ia)	0.16	0.04	0.08	0.24
Fnpt:Stal	P(I)	0.05	0.02	0.01	0.08
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Table 24 – Continued from previous page

Table 24 – Continued from previous page						
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi	
Fnpt:Diam	E(I)	-0.01	0.03	-0.07	0.05	
Fnpt:Diam	G(Ia)	-0.25	0.04	-0.32	-0.18	
Fnpt:Diam	P(I)	-0.09	0.02	-0.12	-0.06	
Fnpt:Bwt	E(I)	0.12	0.03	0.06	0.18	
Fnpt:Bwt	G(Ia)	0.41	0.04	0.33	0.48	
Fnpt:Bwt	P(I)	0.21	0.02	0.18	0.24	
Fnpt:WrN	E(I)	0.07	0.03	0.01	0.13	
Fnpt:WrN	G(Ia)	-0.58	0.04	-0.66	-0.50	
Fnpt:WrN	P(I)	-0.13	0.02	-0.16	-0.10	
Fnpt:WrB	E(I)	0.05	0.03	-0.01	0.11	
Fnpt:WrB	G(Ia)	-0.48	0.04	-0.56	-0.40	
Fnpt:WrB	P(I)	-0.12	0.02	-0.15	-0.08	
Fnpt:WrT	E(I)	0.07	0.03	0.01	0.14	
Fnpt:WrT	G(Ia)	-0.54	0.04	-0.61	-0.47	
Fnpt:WrT	P(I)	-0.13	0.02	-0.16	-0.09	
Fnpt:Face	E(I)	0.07	0.05	-0.03	0.16	
Fnpt:Face	G(Ia)	-0.15	0.03	-0.20	-0.10	
Fnpt:Face	P(I)	-0.04	0.02	-0.07	-0.00	
Fnpt:Gfw	$\mid E(I) \mid$	0.00	0.03	-0.06	0.07	
Fnpt:Gfw	G(Ia)	-0.06	0.04	-0.14	0.01	
Fnpt:Gfw	P(I)	-0.02	0.02	-0.05	0.02	
Fnpt:Yld	$\mid E(I) \mid$	-0.02	0.03	-0.09	0.04	
Fnpt:Yld	G(Ia)	0.29	0.03	0.22	0.36	
Fnpt:Yld	P(I)	0.08	0.02	0.05	0.12	
Fnpt:Cww	E(I)	-0.01	0.03	-0.06	0.05	
Fnpt:Cww	G(Ia)	0.08	0.04	0.00	0.16	
Fnpt:Cww	P(I)	0.02	0.02	-0.01	0.06	
Fnpt:Staladj	$\mid E(I) \mid$	0.01	0.03	-0.05	0.07	
Fnpt:Staladj	G(Ia)	0.15	0.04	0.07	0.23	
Fnpt:Staladj	P(I)	0.05	0.02	0.01	0.08	
Fnpt:Gfwadj	E(I)	-0.00	0.03	-0.06	0.06	
Fnpt:Gfwadj	G(Ia)	-0.08	0.04	-0.16	0.00	
Fnpt:Gfwadj	P(I)	-0.02	0.02	-0.06	0.01	
Fnpt:Cwwadj	E(I)	-0.01	0.03	-0.06	0.05	
Fnpt:Cwwadj	G(Ia)	0.06	0.04	-0.02	0.14	
Fnpt:Cwwadj	P(I)	0.01	0.02	-0.02	0.05	
Fnpt:Crimp	E(I)	0.27	0.11	0.05	0.48	
Fnpt:Crimp	G(Ia)	-0.28	0.03	-0.34	-0.21	
Fnpt:Crimp	P(I)	-0.07	0.02	-0.11	-0.03	
Fnpt:Crwvl	E(I)	-0.23	0.06	-0.36	-0.11	
Fnpt:Crwvl	G(Ia)	0.31	0.04	0.22	0.39	
Fnpt:Crwvl	P(I)	0.03	0.02	-0.02	0.07	
Fnpt:Crst	E(I)	0.43	0.07	0.29	0.57	

Table 24 – Continued from previous page

Traitpair		Estimate	StdErr	CI95lo	CI95hi
Fnpt:Crst	G(Ia)	-0.47	0.04	-0.56	-0.39
Fnpt:Crst	P(I)	-0.03	0.02	-0.07	0.02
Fnpt:Crstadj	E(I)	0.39	0.07	0.26	0.52
Fnpt:Crstadj	G(Ia)	-0.45	0.04	-0.54	-0.37
Fnpt:Crstadj	P(I)	-0.02	0.02	-0.06	0.03
Fnpt:Crwvt	E(I)	-0.30	0.05	-0.40	-0.20
Fnpt:Crwvt	G(Ia)	0.47	0.05	0.37	0.57
Fnpt:Crwvt	P(I)	0.01	0.02	-0.03	0.06
Fnpt:Dp	E(I)	-0.15	0.07	-0.28	-0.02
Fnpt:Dp	G(Ia)	-0.12	0.07	-0.26	0.02
Fnpt:Dp	P(I)	-0.13	0.03	-0.20	-0.07
Fnpt:Ds	E(I)	-0.11	0.06	-0.23	0.01
Fnpt:Ds	G(Ia)	-0.31	0.08	-0.47	-0.15
Fnpt:Ds	P(I)	-0.17	0.03	-0.24	-0.11
Fnpt:Dps	E(I)	-0.11	0.06	-0.22	0.01
Fnpt:Dps	G(Ia)	-0.32	0.08	-0.48	-0.15
Fnpt:Dps	P(I)	-0.17	0.03	-0.23	-0.11
Fnpt:DpovDs	E(I)	-0.11	0.11	-0.33	0.10
Fnpt:DpovDs	G(Ia)	0.04	0.06	-0.08	0.15
Fnpt:DpovDs	P(I)	-0.02	0.03	-0.09	0.04
Fnpt:CVDp	E(I)	0.10	0.06	-0.01	0.22
Fnpt:CVDp	G(Ia)	-0.10	0.10	-0.29	0.09
Fnpt:CVDp	P(I)	0.04	0.03	-0.02	0.11
Fnpt:CVDs	E(I)	-0.05	0.06	-0.17	0.06
Fnpt:CVDs	G(Ia)	0.29	0.10	0.09	0.49
Fnpt:CVDs	P(I)	0.04	0.03	-0.02	0.10
Fnpt:MaxDp	E(I)	-0.00	0.06	-0.11	0.11
Fnpt:MaxDp	G(Ia)	-0.14	0.08	-0.29	0.01
Fnpt:MaxDp	P(I)	-0.05	0.03	-0.11	0.01
Fnpt:MinDp	E(I)	-0.14	0.05	-0.23	-0.04
Fnpt:MinDp	G(Ia)	-0.49	0.21	-0.90	-0.09
Fnpt:MinDp	P(I)	-0.18	0.03	-0.24	-0.12
Fnpt:MaxDs	E(I)	-0.12	0.05	-0.23	-0.02
Fnpt:MaxDs	G(Ia)	-0.12	0.12	-0.36	0.11
Fnpt:MaxDs	P(I)	-0.12	0.03	-0.19	-0.06
Fnpt:MinDs	E(I)	-0.05	0.05	-0.15	0.04
Fnpt:MinDs	G(Ia)	0.01	0.26	-0.50	0.52
Fnpt:MinDs	P(I)	-0.04	0.03	-0.11	0.02
Fnpt:SDDp	E(I)	0.02	0.07	-0.11	0.15
Fnpt:SDDp	G(Ia)	-0.17	0.08	-0.32	-0.02
Fnpt:SDDp	P(I)	-0.05	0.03	-0.11	0.02
Fnpt:SDDs	E(I)	-0.11	0.06	-0.23	0.01
Fnpt:SDDs	G(Ia)	0.04	Continued of	-0.13	0.21

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnpt:SDDs	P(I)	-0.06	0.03	-0.12	0.00		
Fnpt:SDD	E(I)	-0.07	0.06	-0.19	0.05		
Fnpt:SDD	G(Ia)	0.01	0.09	-0.16	0.18		
Fnpt:SDD	P(I)	-0.04	0.03	-0.11	0.02		
Fnpt:CVD	E(I)	-0.01	0.06	-0.13	0.10		
Fnpt:CVD	G(Ia)	0.24	0.10	0.05	0.43		
Fnpt:CVD	P(I)	0.06	0.03	-0.01	0.12		
Fnpt:Gt30Dp	E(I)	-0.07	0.07	-0.20	0.06		
Fnpt:Gt30Dp	G(Ia)	-0.16	0.08	-0.31	-0.01		
Fnpt:Gt30Dp	P(I)	-0.10	0.03	-0.16	-0.04		
Fnpt:Gt30Ds	E(I)	-0.11	0.06	-0.22	0.00		
Fnpt:Gt30Ds	G(Ia)	-0.13	0.10	-0.33	0.06		
Fnpt:Gt30Ds	P(I)	-0.11	0.03	-0.18	-0.05		
Fnpt:Gt30D	E(I)	-0.09	0.06	-0.20	0.02		
Fnpt:Gt30D	G(Ia)	-0.15	0.10	-0.34	0.03		
Fnpt:Gt30D	P(I)	-0.11	0.03	-0.17	-0.04		
Fnpt:Fnua	E(I)	0.36	0.03	0.31	0.42		
Fnpt:Fnua	G(Ia)	0.33	0.04	0.25	0.41		
Fnpt:Fnua	P(I)	0.35	0.02	0.32	0.39		
Fnpt:Fr	E(I)	-0.41	0.03	-0.46	-0.37		
Fnpt:Fr	G(Ia)	-0.53	0.04	-0.60	-0.46		
Fnpt:Fr	P(I)	-0.45	0.01	-0.48	-0.42		
Fnpt:Fnt	E(I)	0.42	0.02	0.37	0.47		
Fnpt:Fnt	G(Ia)	0.53	0.04	0.46	0.60		
Fnpt:Fnt	P(I)	0.45	0.01	0.42	0.48		
Fnpt:Sarea	E(I)	0.13	0.03	0.07	0.19		
Fnpt:Sarea	G(Ia)	0.41	0.04	0.34	0.49		
Fnpt:Sarea	P(I)	0.22	0.02	0.18	0.25		
Fnpt:Fd	E(I)	0.05	0.03	-0.01	0.11		
Fnpt:Fd	G(Ia)	-0.29	0.06	-0.41	-0.16		
Fnpt:Fd	P(I)	-0.03	0.02	-0.06	0.01		
Fnpt:Fc	E(I)	0.12	0.05	0.03	0.21		
Fnpt:Fc	G(Ia)	-0.47	0.03	-0.53	-0.40		
Fnpt:Fc	P(I)	-0.13	0.02	-0.16	-0.09		
Fnpt:Fu	E(I)	0.05	0.03	-0.02	0.12		
Fnpt:Fu	G(Ia)	-0.41	0.05	-0.50	-0.32		
Fnpt:Fu	P(I)	-0.09	0.02	-0.13	-0.05		
Fnpt:Colour	E(I)	-0.01	0.03	-0.07	0.04		
Fnpt:Colour	G(Ia)	-0.01	0.06	-0.13	0.10		
Fnpt:Colour	P(I)	-0.01	0.02	-0.05	0.02		
Fnpt:Fly	E(I)	-0.03	0.03	-0.08	0.02		
Fnpt:Fly	G(Ia)	0.29	0.08	0.13	0.45		
Fnpt:Fly	P(I)	0.02	0.02	-0.02	0.06		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnpt:Flcrot	E(I)	-0.01	0.03	-0.06	0.04		
Fnpt:Flcrot	G(Ia)	0.22	0.18	-0.13	0.57		
Fnpt:Flcrot	P(I)	0.01	0.02	-0.03	0.04		
Fnpt:Bactst	E(I)	-0.01	0.03	-0.08	0.05		
Fnpt:Bactst	G(Ia)	0.02	0.14	-0.26	0.29		
Fnpt:Bactst	P(I)	-0.01	0.02	-0.06	0.04		
Fnpt:MycD	E(I)	-0.05	0.03	-0.11	0.02		
Fnpt:MycD	G(Ia)	-0.11	0.28	-0.65	0.43		
Fnpt:MycD	P(I)	-0.05	0.02	-0.09	-0.00		
Fnpt:Bcts	E(I)	0.06	0.05	-0.04	0.16		
Fnpt:Bcts	G(Ia)	-0.03	0.03	-0.10	0.03		
Fnpt:Bcts	P(I)	0.01	0.02	-0.02	0.05		
Fnpt:Bctb	E(I)	0.07	0.05	-0.03	0.16		
Fnpt:Bctb	G(Ia)	-0.06	0.03	-0.13	0.00		
Fnpt:Bctb	P(I)	0.00	0.02	-0.03	0.04		
Fnpt:Weanwt	E(I)	0.03	0.03	-0.03	0.09		
Fnpt:Weanwt	G(Ia)	0.36	0.06	0.25	0.47		
Fnpt:Weanwt	P(I)	0.11	0.02	0.08	0.15		
Fnpt:NLB	$\mid E(I) \mid$	-0.02	0.03	-0.08	0.03		
Fnpt:NLB	G(Ia)	-0.11	0.05	-0.22	-0.01		
Fnpt:NLB	P(I)	-0.04	0.02	-0.08	-0.01		
Fnpt:NLW	E(I)	-0.01	0.03	-0.07	0.04		
Fnpt:NLW	G(Ia)	-0.08	0.05	-0.18	0.03		
Fnpt:NLW	P(I)	-0.03	0.02	-0.06	0.01		
Fnpt:Fnpua	$\mid E(I) \mid$	0.91	0.01	0.89	0.93		
Fnpt:Fnpua	G(Ia)	0.88	0.02	0.85	0.91		
Fnpt:Fnpua	P(I)	0.90	0.01	0.89	0.91		
Fnpt:Fnsua	E(I)	0.32	0.03	0.27	0.38		
Fnpt:Fnsua	G(Ia)	0.30	0.04	0.22	0.38		
Fnpt:Fnsua	P(I)	0.32	0.02	0.28	0.35		
Fnpt:Fnpt	E(I)	1.00	0.00	1.00	1.00		
Fnpt:Fnpt	G(Ia)	1.00	0.00	1.00	1.00		
Fnpt:Fnpt	P(I)	1.00	0.00	1.00	1.00		
Fnpt:Fnst	E(I)	0.38	0.03	0.33	0.43		
Fnpt:Fnst	G(Ia)	0.50	0.04	0.43	0.57		
Fnpt:Fnst	P(I)	0.41	0.02	0.38	0.44		
Fnst:Stal	E(I)	-0.08	0.03	-0.14	-0.01		
Fnst:Stal	G(Ia)	-0.07	0.04	-0.15	-0.00		
Fnst:Stal	P(I)	-0.08	0.02	-0.11	-0.04		
Fnst:Diam	E(I)	-0.39	0.03	-0.44	-0.33		
Fnst:Diam	G(Ia)	-0.51	0.03	-0.56	-0.45		
Fnst:Diam	P(I)	-0.43	0.02	-0.46	-0.40		
Fnst:Bwt	E(I)	0.20	0.03	0.14	0.26		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnst:Bwt	G(Ia)	0.25	0.03	0.18	0.32		
Fnst:Bwt	P(I)	0.22	0.02	0.19	0.25		
Fnst:WrN	E(I)	0.14	0.03	0.08	0.20		
Fnst:WrN	G(Ia)	-0.27	0.04	-0.34	-0.20		
Fnst:WrN	P(I)	0.00	0.02	-0.03	0.04		
Fnst:WrB	E(I)	0.18	0.03	0.12	0.24		
Fnst:WrB	G(Ia)	-0.32	0.04	-0.39	-0.25		
Fnst:WrB	P(I)	0.01	0.02	-0.03	0.04		
Fnst:WrT	E(I)	0.19	0.03	0.12	0.25		
Fnst:WrT	G(Ia)	-0.32	0.04	-0.39	-0.25		
Fnst:WrT	P(I)	0.01	0.02	-0.03	0.04		
Fnst:Face	E(I)	0.12	0.05	0.02	0.22		
Fnst:Face	G(Ia)	-0.07	0.03	-0.12	-0.02		
Fnst:Face	P(I)	0.02	0.02	-0.02	0.05		
Fnst:Gfw	E(I)	0.22	0.03	0.16	0.28		
Fnst:Gfw	G(Ia)	-0.10	0.04	-0.17	-0.02		
Fnst:Gfw	P(I)	0.12	0.02	0.08	0.15		
Fnst:Yld	E(I)	-0.03	0.03	-0.10	0.04		
Fnst:Yld	G(Ia)	0.43	0.03	0.36	0.49		
Fnst:Yld	P(I)	0.14	0.02	0.11	0.17		
Fnst:Cww	E(I)	0.21	0.03	0.15	0.27		
Fnst:Cww	G(Ia)	0.10	0.04	0.03	0.18		
Fnst:Cww	P(I)	0.18	0.02	0.14	0.21		
Fnst:Staladj	E(I)	-0.07	0.03	-0.13	-0.01		
Fnst:Staladj	G(Ia)	-0.09	0.04	-0.16	-0.01		
Fnst:Staladj	P(I)	-0.08	0.02	-0.11	-0.04		
Fnst:Gfwadj	E(I)	0.21	0.03	0.15	0.27		
Fnst:Gfwadj	G(Ia)	-0.11	0.04	-0.18	-0.04		
Fnst:Gfwadj	P(I)	0.10	0.02	0.07	0.14		
Fnst:Cwwadj	E(I)	0.20	0.03	0.14	0.26		
Fnst:Cwwadj	G(Ia)	0.09	0.04	0.01	0.16		
Fnst:Cwwadj	P(I)	0.16	0.02	0.13	0.20		
Fnst:Crimp	E(I)	0.76	0.14	0.48	1.05		
Fnst:Crimp	G(Ia)	-0.46	0.04	-0.53	-0.39		
Fnst:Crimp	P(I)	-0.04	0.02	-0.08	0.00		
Fnst:Crwvl	E(I)	-0.47	0.07	-0.60	-0.34		
Fnst:Crwvl	G(Ia)	0.48	0.04	0.39	0.57		
Fnst:Crwvl	P(I)	-0.00	0.02	-0.05	0.04		
Fnst:Crst	E(I)	0.44	0.07	0.29	0.58		
Fnst:Crst	G(Ia)	-0.62	0.04	-0.71	-0.54		
Fnst:Crst	P(I)	-0.09	0.02	-0.14	-0.05		
Fnst:Crstadj	E(I)	0.38	0.07	0.24	0.51		
Fnst:Crstadj	G(Ia)	-0.60	0.04	-0.69	-0.52		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnst:Crstadj	P(I)	-0.09	0.02	-0.14	-0.05		
Fnst:Crwvt	E(I)	-0.32	0.05	-0.42	-0.21		
Fnst:Crwvt	G(Ia)	0.64	0.05	0.54	0.73		
Fnst:Crwvt	P(I)	0.07	0.02	0.02	0.11		
Fnst:Dp	E(I)	-0.33	0.07	-0.46	-0.20		
Fnst:Dp	G(Ia)	-0.11	0.07	-0.25	0.04		
Fnst:Dp	P(I)	-0.23	0.03	-0.30	-0.17		
Fnst:Ds	E(I)	-0.31	0.06	-0.42	-0.20		
Fnst:Ds	G(Ia)	-0.69	0.07	-0.83	-0.55		
Fnst:Ds	P(I)	-0.43	0.03	-0.49	-0.38		
Fnst:Dps	E(I)	-0.32	0.06	-0.43	-0.22		
Fnst:Dps	G(Ia)	-0.71	0.07	-0.85	-0.56		
Fnst:Dps	P(I)	-0.44	0.03	-0.50	-0.39		
Fnst:DpovDs	E(I)	-0.17	0.12	-0.40	0.06		
Fnst:DpovDs	G(Ia)	0.25	0.06	0.13	0.37		
Fnst:DpovDs	P(I)	0.05	0.03	-0.01	0.12		
Fnst:CVDp	E(I)	-0.02	0.06	-0.14	0.09		
Fnst:CVDp	G(Ia)	-0.21	0.10	-0.40	-0.02		
Fnst:CVDp	P(I)	-0.08	0.03	-0.14	-0.01		
Fnst:CVDs	E(I)	0.05	0.06	-0.07	0.16		
Fnst:CVDs	G(Ia)	0.02	0.10	-0.18	0.22		
Fnst:CVDs	P(I)	0.04	0.03	-0.03	0.11		
Fnst:MaxDp	E(I)	-0.26	0.07	-0.39	-0.13		
Fnst:MaxDp	G(Ia)	-0.06	0.08	-0.21	0.09		
Fnst:MaxDp	P(I)	-0.18	0.03	-0.24	-0.12		
Fnst:MinDp	E(I)	-0.11	0.05	-0.21	-0.01		
Fnst:MinDp	G(Ia)	-0.13	0.20	-0.53	0.27		
Fnst:MinDp	P(I)	-0.11	0.03	-0.17	-0.04		
Fnst:MaxDs	E(I)	-0.15	0.05	-0.25	-0.04		
Fnst:MaxDs	G(Ia)	-0.50	0.12	-0.74	-0.27		
Fnst:MaxDs	P(I)	-0.23	0.03	-0.29	-0.16		
Fnst:MinDs	E(I)	-0.06	0.05	-0.16	0.04		
Fnst:MinDs	G(Ia)	-0.12	0.21	-0.53	0.30		
Fnst:MinDs	P(I)	-0.07	0.03	-0.13	-0.00		
Fnst:SDDp	E(I)	-0.19	0.07	-0.32	-0.06		
Fnst:SDDp	G(Ia)	-0.14	0.08	-0.29	0.01		
Fnst:SDDp	P(I)	-0.17	0.03	-0.23	-0.10		
Fnst:SDDs	E(I)	-0.13	0.06	-0.25	-0.01		
Fnst:SDDs	G(Ia)	-0.37	0.08	-0.53	-0.21		
Fnst:SDDs	P(I)	-0.21	0.03	-0.27	-0.14		
Fnst:SDD	E(I)	-0.16	0.06	-0.28	-0.04		
Fnst:SDD	G(Ia)	-0.37	0.08	-0.53	-0.21		
Fnst:SDD	P(I)	-0.23	0.03	-0.29	-0.17		

Table 24 – Continued from previous page

Table 24 – Continued from previous page							
Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi		
Fnst:CVD	E(I)	0.03	0.06	-0.08	0.15		
Fnst:CVD	G(Ia)	0.00	0.09	-0.18	0.19		
Fnst:CVD	P(I)	0.02	0.03	-0.04	0.09		
Fnst:Gt30Dp	E(I)	-0.22	0.07	-0.35	-0.09		
Fnst:Gt30Dp	G(Ia)	-0.20	0.08	-0.35	-0.05		
Fnst:Gt30Dp	P(I)	-0.21	0.03	-0.27	-0.14		
Fnst:Gt30Ds	E(I)	-0.25	0.05	-0.36	-0.14		
Fnst:Gt30Ds	G(Ia)	-0.49	0.09	-0.67	-0.30		
Fnst:Gt30Ds	P(I)	-0.32	0.03	-0.38	-0.25		
Fnst:Gt30D	E(I)	-0.28	0.05	-0.39	-0.18		
Fnst:Gt30D	G(Ia)	-0.50	0.09	-0.68	-0.33		
Fnst:Gt30D	P(I)	-0.35	0.03	-0.41	-0.29		
Fnst:Fnua	E(I)	0.89	0.01	0.87	0.91		
Fnst:Fnua	G(Ia)	0.89	0.01	0.86	0.92		
Fnst:Fnua	P(I)	0.89	0.01	0.88	0.90		
Fnst:Fr	E(I)	0.58	0.02	0.53	0.62		
Fnst:Fr	G(Ia)	0.47	0.03	0.40	0.53		
Fnst:Fr	P(I)	0.54	0.01	0.52	0.57		
Fnst:Fnt	E(I)	1.00	0.00	1.00	1.00		
Fnst:Fnt	G(Ia)	1.00	0.00	1.00	1.00		
Fnst:Fnt	P(I)	1.00	0.00	1.00	1.00		
Fnst:Sarea	E(I)	0.21	0.03	0.15	0.27		
Fnst:Sarea	G(Ia)	0.25	0.04	0.18	0.32		
Fnst:Sarea	P(I)	0.22	0.02	0.19	0.26		
Fnst:Fd	E(I)	0.13	0.03	0.07	0.19		
Fnst:Fd	G(Ia)	-0.13	0.06	-0.24	-0.02		
Fnst:Fd	P(I)	0.06	0.02	0.02	0.10		
Fnst:Fc	E(I)	0.01	0.05	-0.09	0.11		
Fnst:Fc	G(Ia)	-0.54	0.03	-0.59	-0.48		
Fnst:Fc	P(I)	-0.25	0.02	-0.28	-0.21		
Fnst:Fu	E(I)	-0.05	0.04	-0.12	0.02		
Fnst:Fu	G(Ia)	-0.37	0.04	-0.44	-0.29		
Fnst:Fu	P(I)	-0.16	0.02	-0.20	-0.12		
Fnst:Colour	E(I)	-0.06	0.03	-0.12	-0.00		
Fnst:Colour	G(Ia)	0.19	0.05	0.08	0.29		
Fnst:Colour	P(I)	-0.00	0.02	-0.04	0.03		
Fnst:Fly	E(I)	-0.02	0.03	-0.08	0.03		
Fnst:Fly	G(Ia)	0.27	0.08	0.13	0.42		
Fnst:Fly	P(I)	0.03	0.02	-0.01	0.07		
Fnst:Flcrot	E(I)	-0.02	0.03	-0.07	0.03		
Fnst:Flcrot	G(Ia)	0.37	0.18	0.02	0.71		
Fnst:Flcrot	P(I)	0.02	0.02	-0.02	0.05		
Fnst:Bactst	E(I)	-0.03	0.04	-0.10	0.04		

Table 24 – Continued from previous page

Traitpair	Component	Estimate	StdErr	CI95lo	CI95hi
Fnst:Bactst	G(Ia)	0.34	0.13	0.08	0.60
Fnst:Bactst	P(I)	0.02	0.02	-0.02	0.07
Fnst:MycD	E(I)	-0.00	0.03	-0.07	0.06
Fnst:MycD	G(Ia)	0.16	0.27	-0.38	0.69
Fnst:MycD	P(I)	0.01	0.02	-0.04	0.05
Fnst:Bcts	E(I)	-0.08	0.05	-0.19	0.02
Fnst:Bcts	G(Ia)	0.03	0.03	-0.03	0.09
Fnst:Bcts	P(I)	-0.02	0.02	-0.06	0.02
Fnst:Bctb	E(I)	-0.10	0.05	-0.20	-0.00
Fnst:Bctb	G(Ia)	0.04	0.03	-0.01	0.10
Fnst:Bctb	P(I)	-0.03	0.02	-0.06	0.01
Fnst:Weanwt	E(I)	0.32	0.03	0.25	0.38
Fnst:Weanwt	G(Ia)	-0.21	0.05	-0.32	-0.10
Fnst:Weanwt	P(I)	0.17	0.02	0.13	0.21
Fnst:NLB	E(I)	-0.22	0.03	-0.27	-0.16
Fnst:NLB	G(Ia)	0.06	0.05	-0.04	0.16
Fnst:NLB	P(I)	-0.15	0.02	-0.18	-0.12
Fnst:NLW	E(I)	-0.20	0.03	-0.26	-0.15
Fnst:NLW	G(Ia)	0.14	0.05	0.04	0.24
Fnst:NLW	P(I)	-0.12	0.02	-0.15	-0.08
Fnst:Fnpua	E(I)	0.28	0.03	0.23	0.33
Fnst:Fnpua	G(Ia)	0.42	0.04	0.34	0.50
Fnst:Fnpua	P(I)	0.31	0.02	0.28	0.35
Fnst:Fnsua	$\mid E(I) \mid$	0.90	0.01	0.88	0.92
Fnst:Fnsua	G(Ia)	0.89	0.01	0.86	0.92
Fnst:Fnsua	P(I)	0.90	0.01	0.88	0.91
Fnst:Fnpt	E(I)	0.38	0.03	0.33	0.43
Fnst:Fnpt	G(Ia)	0.50	0.04	0.43	0.57
Fnst:Fnpt	P(I)	0.41	0.02	0.38	0.44
Fnst:Fnst	E(I)	1.00	0.00	1.00	1.00
Fnst:Fnst	G(Ia)	1.00	0.00	1.00	1.00
Fnst:Fnst	P(I)	1.00	0.00	1.00	1.00

The symbols E(I), G(Ia), and P(I) in the components column indicate whether the correlation is environmental, additive genetic, or phenotypic. The symbol (I) is there to indicate that these correlations are based on variation of effects operating in individuals, not effects of maternal genes or maternal environment. There were no maternal genetic or environmental components fitted in this analysis. The columns CI95lo and CI95hi represent the lower and upper limits of a 95 percent confidence interval for the correlation estimate. The column labelled Estimate is a point estimate and should be at the center of the confidence limits.

This is a huge table occupying 219 pages. It is considered important to have the environmental, genetic and phenotypic estimates presented side-by-side. It represents three correlation matrices of order 56. These are of course symmetric, but we present all traitpairs for each trait so there is duplication. For example you can find Stal:Bwt and also Bwt:Stal, and the estimates will be the same.

5.4.3 Proportion of phenotypic variance due to each component

We calculate the proportion of variance for both the environmental and additive genetic components. These are presented in Table 25. The additive genetic component, as a proportion, is conventionally referred to as heritability.

Table 25: Estimates of proportion of phenotypic variance due to each component, with standard errors and confidence limits, for 56 skin and wool traits

Trait	Component	Estimate	StdErr	CI95lo	CI95hi
Stal	VarE(I)	0.644	0.012	0.620	0.668
Stal	VarG(Ia)	0.356	0.012	0.332	0.380
Stal	VarP(I)	1.000	0.000	1.000	1.000
Diam	VarE(I)	0.551	0.013	0.525	0.576
Diam	VarG(Ia)	0.449	0.013	0.424	0.475
Diam	VarP(I)	1.000	0.000	1.000	1.000
Bwt	VarE(I)	0.651	0.012	0.627	0.675
Bwt	VarG(Ia)	0.349	0.012	0.324	0.373
Bwt	VarP(I)	1.000	0.000	1.000	1.000
WrN	VarE(I)	0.597	0.013	0.572	0.622
WrN	VarG(Ia)	0.403	0.013	0.378	0.428
WrN	VarP(I)	1.000	0.000	1.000	1.000
WrB	VarE(I)	0.602	0.013	0.577	0.627
WrB	VarG(Ia)	0.398	0.013	0.373	0.423
WrB	VarP(I)	1.000	0.000	1.000	1.000
WrT	VarE(I)	0.551	0.013	0.526	0.576
WrT	VarG(Ia)	0.449	0.013	0.423	0.474
WrT	VarP(I)	1.000	0.000	1.000	1.000
Face	VarE(I)	0.289	0.015	0.259	0.320
Face	VarG(Ia)	0.711	0.015	0.680	0.741
Face	VarP(I)	1.000	0.000	1.000	1.000
Gfw	VarE(I)	0.640	0.012	0.616	0.664
Gfw	VarG(Ia)	0.360	0.012	0.336	0.384
Gfw	VarP(I)	1.000	0.000	1.000	1.000
Yld	VarE(I)	0.543	0.013	0.518	0.569
Yld	VarG(Ia)	0.457	0.013	0.431	0.482
Yld	VarP(I)	1.000	0.000	1.000	1.000
Cww	VarE(I)	0.658	0.012	0.634	0.682

 ${\bf Table}~{\bf 25}-{\bf \it Continued}~{\it from}~{\it previous}~{\it page}$

Trait	Component	Estimate	StdErr StdErr	CI95lo	CI95hi
Cww	VarG(Ia)	0.342	0.012	0.318	0.366
Cww	VarP(I)	1.000	0.000	1.000	1.000
Staladj	VarE(I)	0.645	0.012	0.620	0.669
Staladj	VarG(Ia)	0.355	0.012	0.331	0.380
Staladj	VarP(I)	1.000	0.000	1.000	1.000
Gfwadj	VarE(I)	0.646	0.012	0.622	0.671
Gfwadj	VarG(Ia)	0.354	0.012	0.329	0.378
Gfwadj	VarP(I)	1.000	0.000	1.000	1.000
Cwwadj	VarE(I)	0.671	0.012	0.647	0.695
Cwwadj	VarG(Ia)	0.329	0.012	0.305	0.353
Cwwadj	VarP(I)	1.000	0.000	1.000	1.000
Crimp	VarE(I)	0.032	0.024	-0.015	0.080
Crimp	VarG(Ia)	0.968	0.024	0.920	1.016
Crimp	VarP(I)	1.000	0.000	1.000	1.000
Crwvl	VarE(I)	0.428	0.019	0.392	0.465
Crwvl	VarG(Ia)	0.572	0.019	0.535	0.608
Crwvl	VarP(I)	1.000	0.000	1.000	1.000
Crst	VarE(I)	0.335	0.021	0.293	0.377
Crst	VarG(Ia)	0.665	0.021	0.623	0.707
Crst	VarP(I)	1.000	0.000	1.000	1.000
Crstadj	VarE(I)	0.380	0.021	0.339	0.421
Crstadj	VarG(Ia)	0.620	0.021	0.579	0.661
Crstadj	VarP(I)	1.000	0.000	1.000	1.000
Crwvt	VarE(I)	0.524	0.019	0.488	0.561
Crwvt	VarG(Ia)	0.476	0.019	0.439	0.512
Crwvt	VarP(I)	1.000	0.000	1.000	1.000
Dp	VarE(I)	0.485	0.031	0.423	0.546
Dp	VarG(Ia)	0.515	0.031	0.454	0.577
Dp	VarP(I)	1.000	0.000	1.000	1.000
Ds	VarE(I)	0.590	0.030	0.531	0.649
Ds	VarG(Ia)	0.410	0.030	0.351	0.469
Ds	VarP(I)	1.000	0.000	1.000	1.000
Dps	VarE(I)	0.616	0.030	0.558	0.675
Dps	VarG(Ia)	0.384	0.030	0.325	0.442
Dps	VarP(I)	1.000	0.000	1.000	1.000
DpovDs	VarE(I)	0.188	0.036	0.118	0.259
DpovDs	VarG(Ia)	0.812	0.036	0.741	0.882
DpovDs	VarP(I)	1.000	0.000	1.000	1.000
CVDp	VarE(I)	0.665	0.029	0.607	0.723
CVDp	VarG(Ia)	0.335	0.030	0.277	0.393
CVDp	VarP(I)	1.000	0.000	1.000	1.000
CVDs	VarE(I)	0.719	0.029	0.662	0.776
CVDs	VarG(Ia)	0.281	0.029	0.224	0.338

Table 25 – Continued from previous page

	Table 25 – Continued from previous page							
Trait	Component	Estimate	StdErr	CI95lo	CI95hi			
CVDs	VarP(I)	1.000	0.000	1.000	1.000			
MaxDp	VarE(I)	0.515	0.031	0.454	0.576			
MaxDp	VarG(Ia)	0.485	0.031	0.424	0.546			
MaxDp	VarP(I)	1.000	0.000	1.000	1.000			
MinDp	VarE(I)	0.946	0.029	0.890	1.002			
MinDp	VarG(Ia)	0.054	0.029	-0.002	0.110			
MinDp	VarP(I)	1.000	0.000	1.000	1.000			
MaxDs	VarE(I)	0.799	0.029	0.743	0.855			
MaxDs	VarG(Ia)	0.201	0.029	0.144	0.257			
MaxDs	VarP(I)	1.000	0.000	1.000	1.000			
MinDs	VarE(I)	0.943	0.028	0.887	0.998			
MinDs	VarG(Ia)	0.057	0.028	0.002	0.113			
MinDs	VarP(I)	1.000	0.000	1.000	1.000			
SDDp	VarE(I)	0.510	0.031	0.449	0.570			
SDDp	VarG(Ia)	0.490	0.031	0.429	0.551			
SDDp	VarP(I)	1.000	0.000	1.000	1.000			
SDDs	VarE(I)	0.588	0.030	0.529	0.647			
SDDs	VarG(Ia)	0.412	0.030	0.353	0.471			
SDDs	VarP(I)	1.000	0.000	1.000	1.000			
SDD	VarE(I)	0.575	0.030	0.515	0.634			
SDD	VarG(Ia)	0.425	0.030	0.366	0.485			
SDD	VarP(I)	1.000	0.000	1.000	1.000			
CVD	VarE(I)	0.693	0.029	0.635	0.750			
CVD	VarG(Ia)	0.307	0.029	0.250	0.365			
CVD	VarP(I)	1.000	0.000	1.000	1.000			
Gt30Dp	VarE(I)	0.526	0.031	0.465	0.586			
Gt30Dp	VarG(Ia)	0.474	0.031	0.414	0.535			
Gt30Dp	VarP(I)	1.000	0.000	1.000	1.000			
Gt30Ds	VarE(I)	0.719	0.029	0.662	0.776			
Gt30Ds	VarG(Ia)	0.281	0.029	0.224	0.338			
Gt30Ds	VarP(I)	1.000	0.000	1.000	1.000			
Gt30D	VarE(I)	0.699	0.029	0.642	0.756			
Gt30D	VarG(Ia)	0.301	0.029	0.244	0.358			
Gt30D	VarP(I)	1.000	0.000	1.000	1.000			
Fnua	VarE(I)	0.708	0.013	0.683	0.734			
Fnua	VarG(Ia)	0.292	0.013	0.266	0.317			
Fnua	VarP(I)	1.000	0.000	1.000	1.000			
Fr	VarE(I)	0.694	0.013	0.668	0.720			
Fr	VarG(Ia)	0.306	0.013	0.280	0.332			
Fr	VarP(I)	1.000	0.000	1.000	1.000			
Fnt	VarE(I)	0.697	0.013	0.671	0.722			
Fnt	VarG(Ia)	0.303	0.013	0.278	0.329			
Fnt	VarP(I)	1.000	0.000	1.000	1.000			
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Table 25 – Continued from previous page

Trait	Trait Component Estimate StdErr CI95lo CI95hi						
	Component						
Sarea	VarE(I)	0.644	0.013	0.618	0.670		
Sarea	VarG(Ia)	0.356	0.013	0.330	0.382		
Sarea	VarP(I)	1.000	0.000	1.000	1.000		
Fd	VarE(I)	0.821	0.014	0.794	0.849		
Fd	VarG(Ia)	0.179	0.014	0.151	0.206		
Fd	VarP(I)	1.000	0.000	1.000	1.000		
Fc	VarE(I)	0.362	0.018	0.327	0.396		
Fc	VarG(Ia)	0.638	0.018	0.604	0.673		
Fc	VarP(I)	1.000	0.000	1.000	1.000		
Fu	VarE(I)	0.637	0.015	0.607	0.666		
Fu	VarG(Ia)	0.363	0.015	0.334	0.393		
Fu	VarP(I)	1.000	0.000	1.000	1.000		
Colour	VarE(I)	0.828	0.012	0.805	0.852		
Colour	VarG(Ia)	0.172	0.012	0.148	0.195		
Colour	VarP(I)	1.000	0.000	1.000	1.000		
Fly	VarE(I)	0.907	0.012	0.884	0.930		
Fly	VarG(Ia)	0.093	0.012	0.070	0.116		
Fly	VarP(I)	1.000	0.000	1.000	1.000		
Flcrot	VarE(I)	0.969	0.012	0.946	0.992		
Flcrot	VarG(Ia)	0.031	0.012	0.008	0.054		
Flcrot	VarP(I)	1.000	0.000	1.000	1.000		
Bactst	VarE(I)	0.954	0.015	0.924	0.984		
Bactst	VarG(Ia)	0.046	0.015	0.016	0.076		
Bactst	VarP(I)	1.000	0.000	1.000	1.000		
MycD	VarE(I)	0.961	0.015	0.932	0.991		
MycD	VarG(Ia)	0.039	0.015	0.009	0.068		
MycD	VarP(I)	1.000	0.000	1.000	1.000		
Bcts	VarE(I)	0.207	0.018	0.172	0.242		
Bcts	VarG(Ia)	0.793	0.018	0.758	0.828		
Bcts	VarP(I)	1.000	0.000	1.000	1.000		
Bctb	VarE(I)	0.244	0.017	0.210	0.278		
Bctb	VarG(Ia)	0.756	0.017	0.722	0.790		
Bctb	VarP(I)	1.000	0.000	1.000	1.000		
Weanwt	VarE(I)	0.764	0.013	0.738	0.790		
Weanwt	VarG(Ia)	0.236	0.013	0.210	0.262		
Weanwt	VarP(I)	1.000	0.000	1.000	1.000		
NLB	VarE(I)	0.800	0.011	0.778	0.823		
NLB	VarG(Ia)	0.200	0.011	0.177	0.222		
NLB	VarP(I)	1.000	0.000	1.000	1.000		
NLW	VarE(I)	0.788	0.011	0.766	0.811		
NLW	VarG(Ia)	0.212	0.011	0.189	0.234		
NLW	VarP(I)	1.000	0.000	1.000	1.000		
Fnpua	VarE(I)	0.780	0.013	0.755	0.805		
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Trait	Component	Estimate	StdErr	CI95lo	CI95hi
Fnpua	VarG(Ia)	0.220	0.013	0.195	0.245
Fnpua	VarP(I)	1.000	0.000	1.000	1.000
Fnsua	VarE(I)	0.707	0.013	0.682	0.733
Fnsua	VarG(Ia)	0.293	0.013	0.267	0.318
Fnsua	VarP(I)	1.000	0.000	1.000	1.000
Fnpt	VarE(I)	0.742	0.013	0.717	0.767
Fnpt	VarG(Ia)	0.258	0.013	0.233	0.283
Fnpt	VarP(I)	1.000	0.000	1.000	1.000
Fnst	VarE(I)	0.698	0.013	0.672	0.723
Fnst	VarG(Ia)	0.302	0.013	0.277	0.328
Fnst	VarP(I)	1.000	0.000	1.000	1.000

Most measured wool traits have a heritability of between 0.35 and 0.5. There is an exceptional estimate for crimp frequency (0.97) and this will have to be investigated as the heritability of follicle curvature (Fc) is much lower (0.63). The heritability estimates for Fnua and Fr are slightly low at around 0.3. The scores (Colour, Fly, Flcrot, Bactst, MycD) have low heritabilities, and this reflects the low incidences for these traits. Birthcoat hairiness (Bcts and Bctb) is highly heritable. Twinning (NLB and NLW) is around 0.2 for heritability.

5.5 Multivariate analysis

6 Discussion

7 Conclusions

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