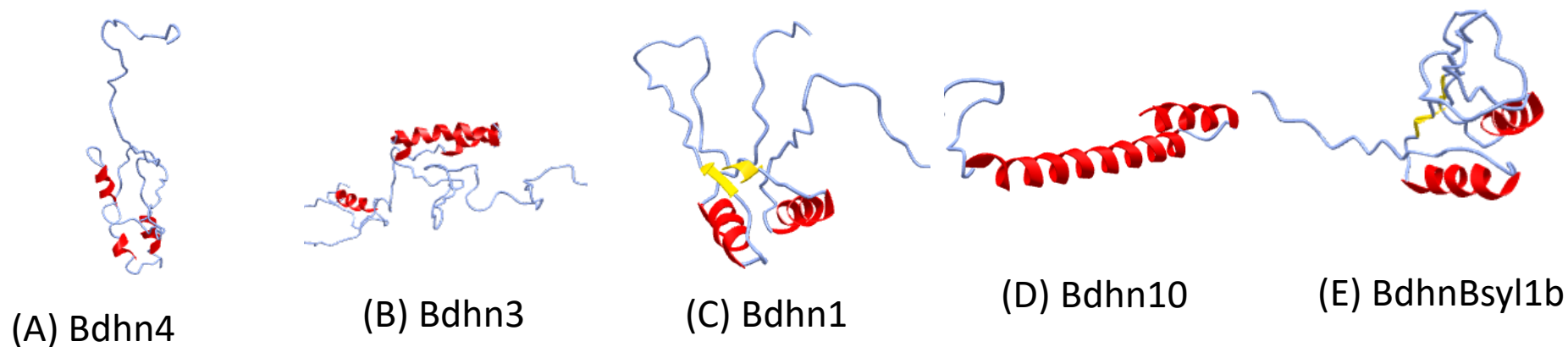


Fig.S1



Complete sets of 3D structures for all *Brachypodium* species and proteins are available in the following links:

Brachypodium distachyon: <http://zeta.uma.es/public/journal/brachy/raptorx/distachyon.html>

Brachypodium hybridum D: <http://zeta.uma.es/public/journal/brachy/raptorx/hybridumD.html>

Brachypodium stacei: <http://zeta.uma.es/public/journal/brachy/raptorx/stacei.html>

Brachypodium hybridum S: <http://zeta.uma.es/public/journal/brachy/raptorx/hybridumS.html>

Brachypodium sylvaticum: <http://zeta.uma.es/public/journal/brachy/raptorx/sylvaticum.html>

Fig.S2

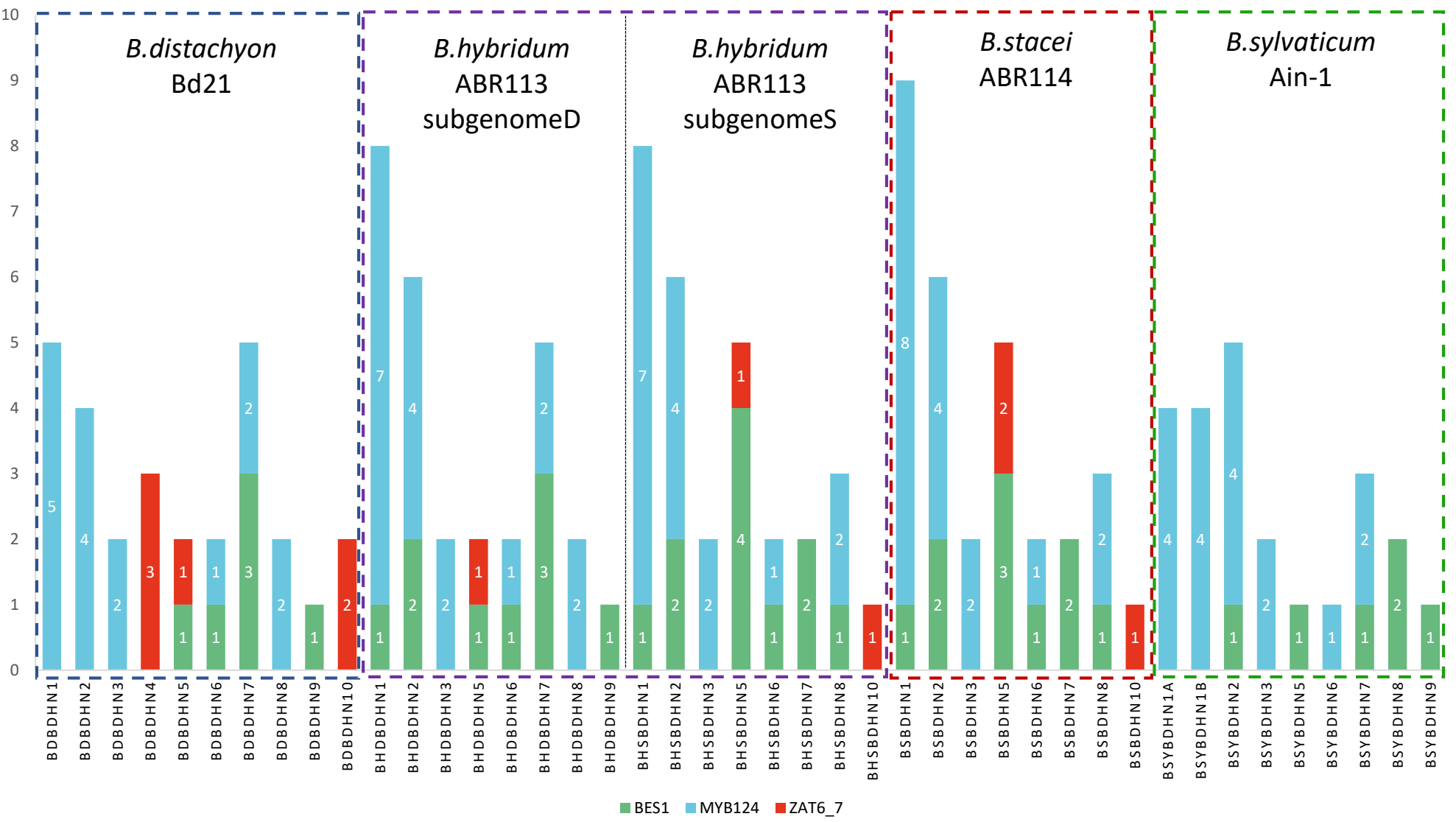
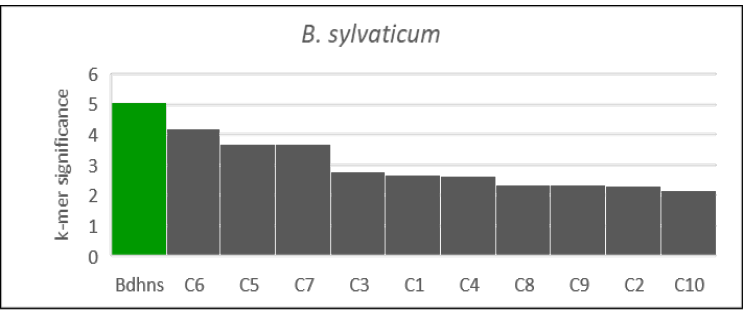
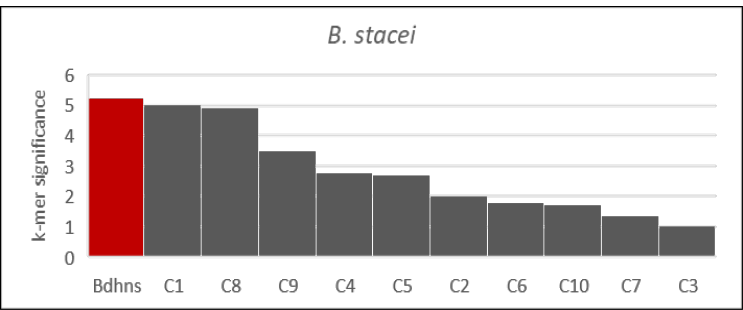
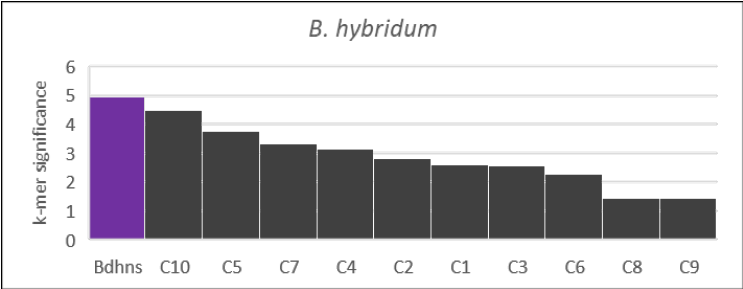
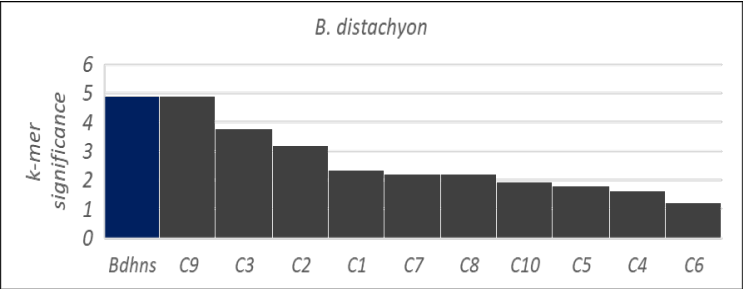


Fig.S2 (b)



(c)

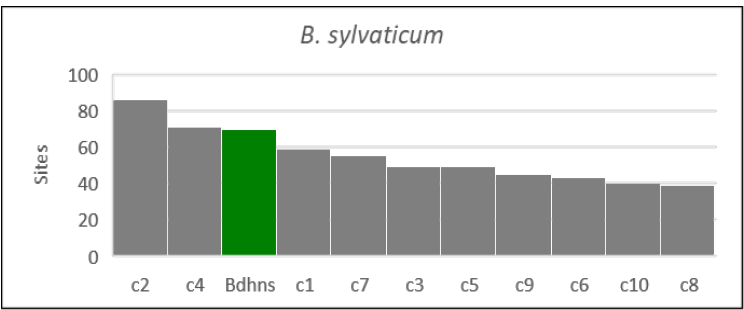
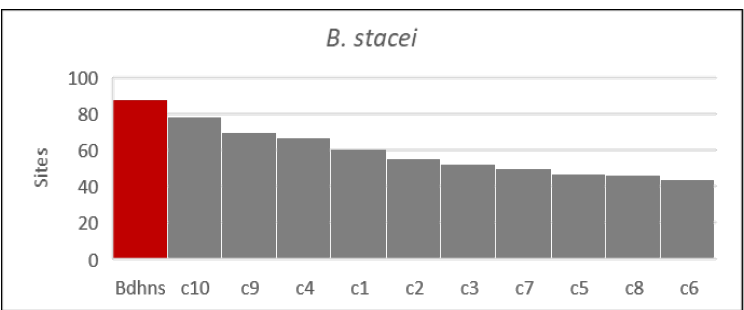
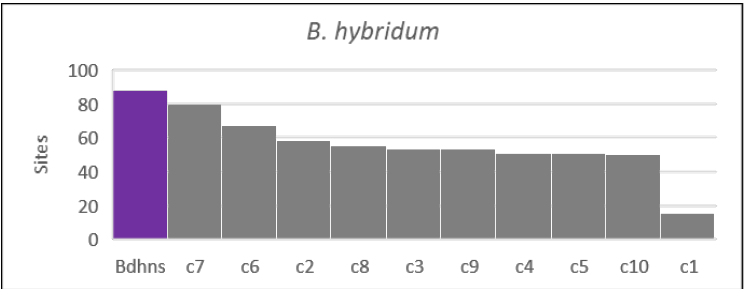
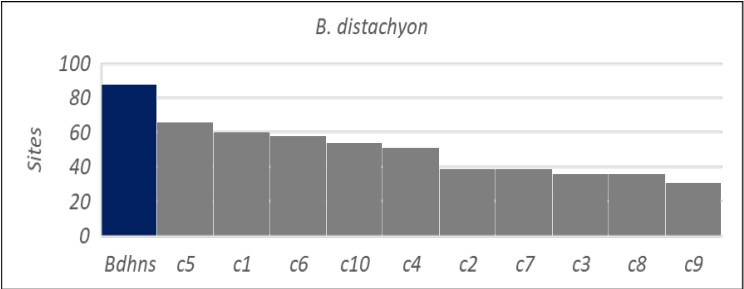


Fig.S3

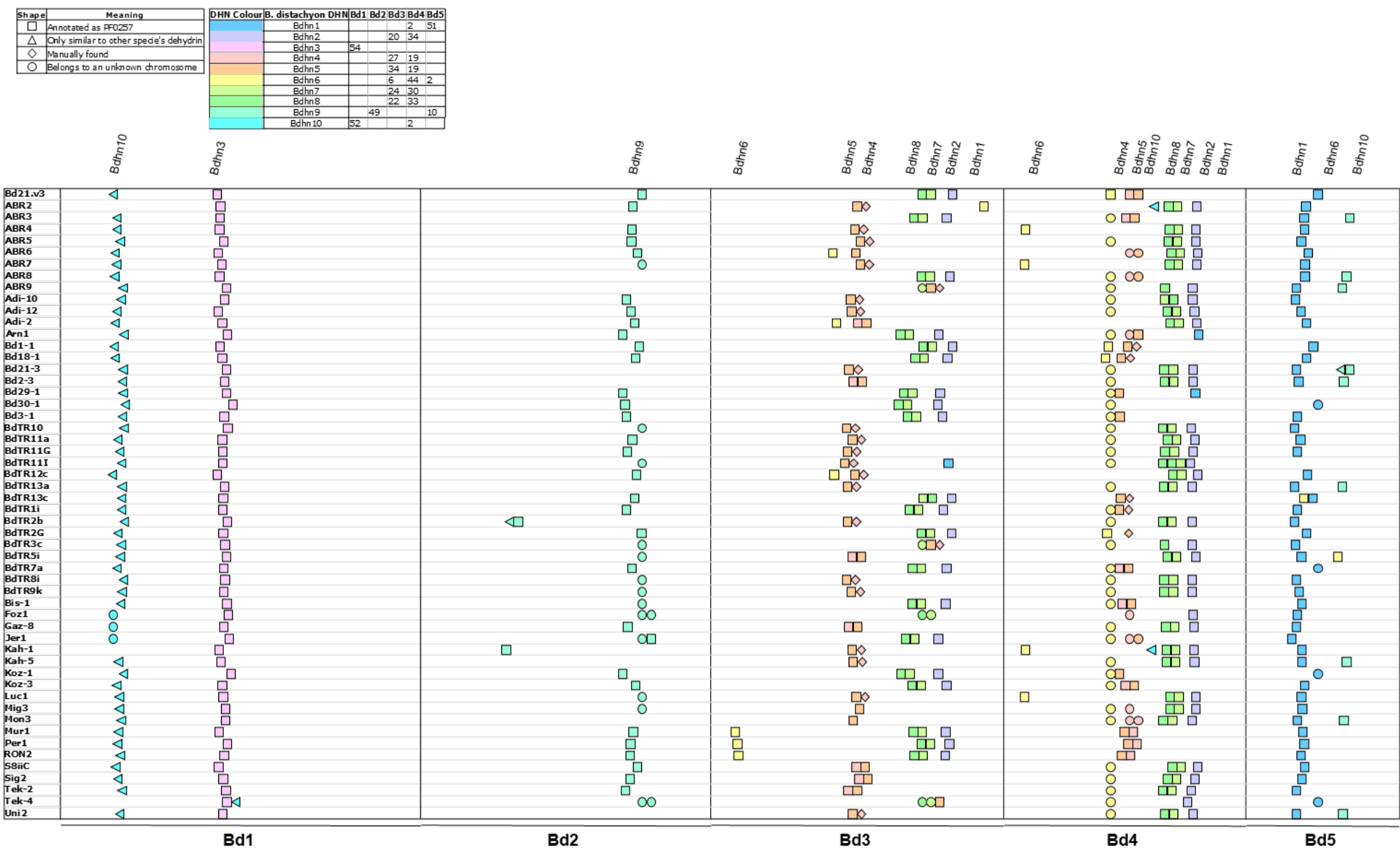


Fig.S4

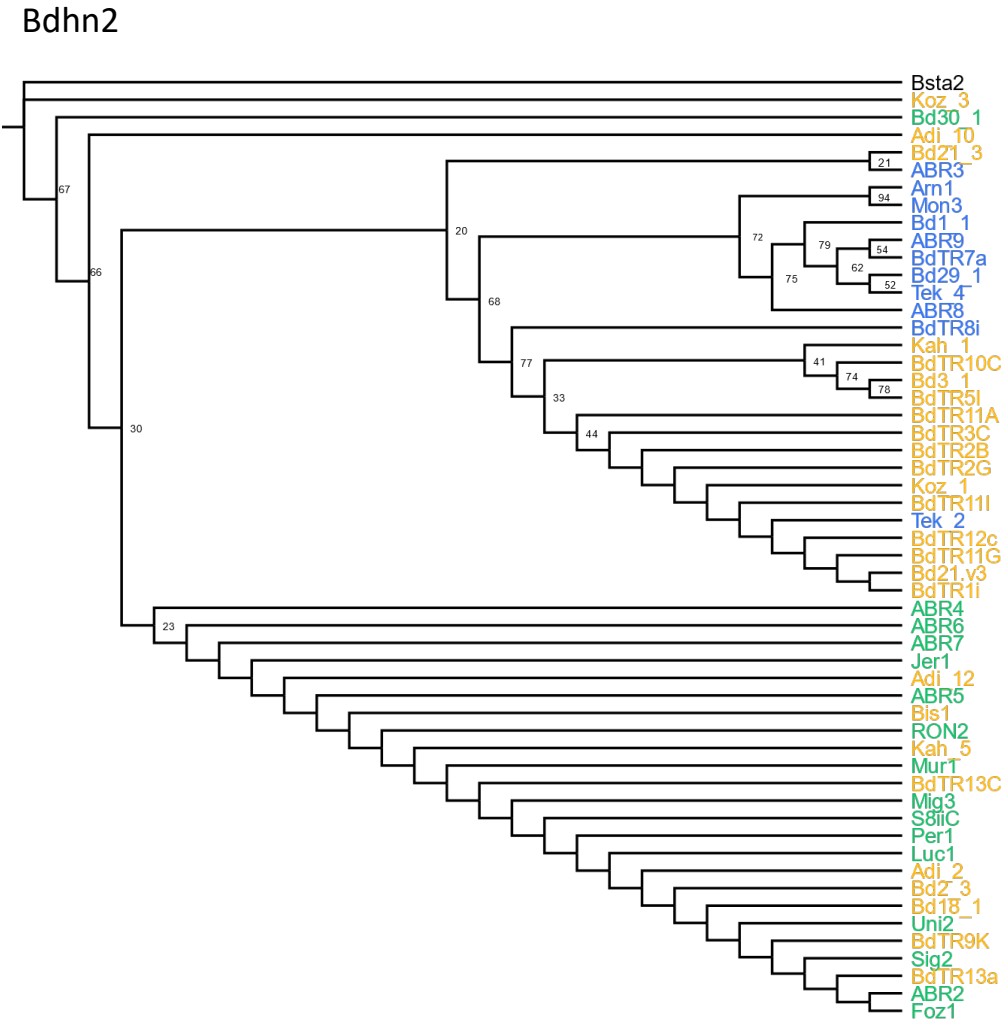
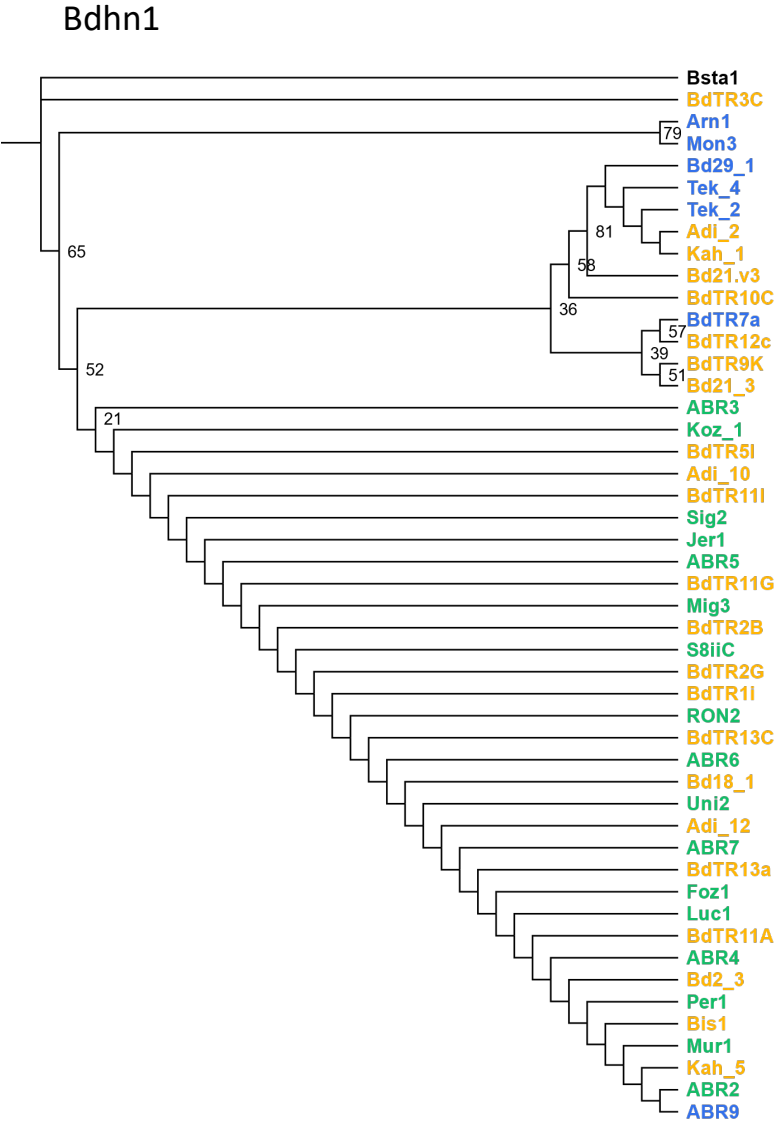


Fig.S4

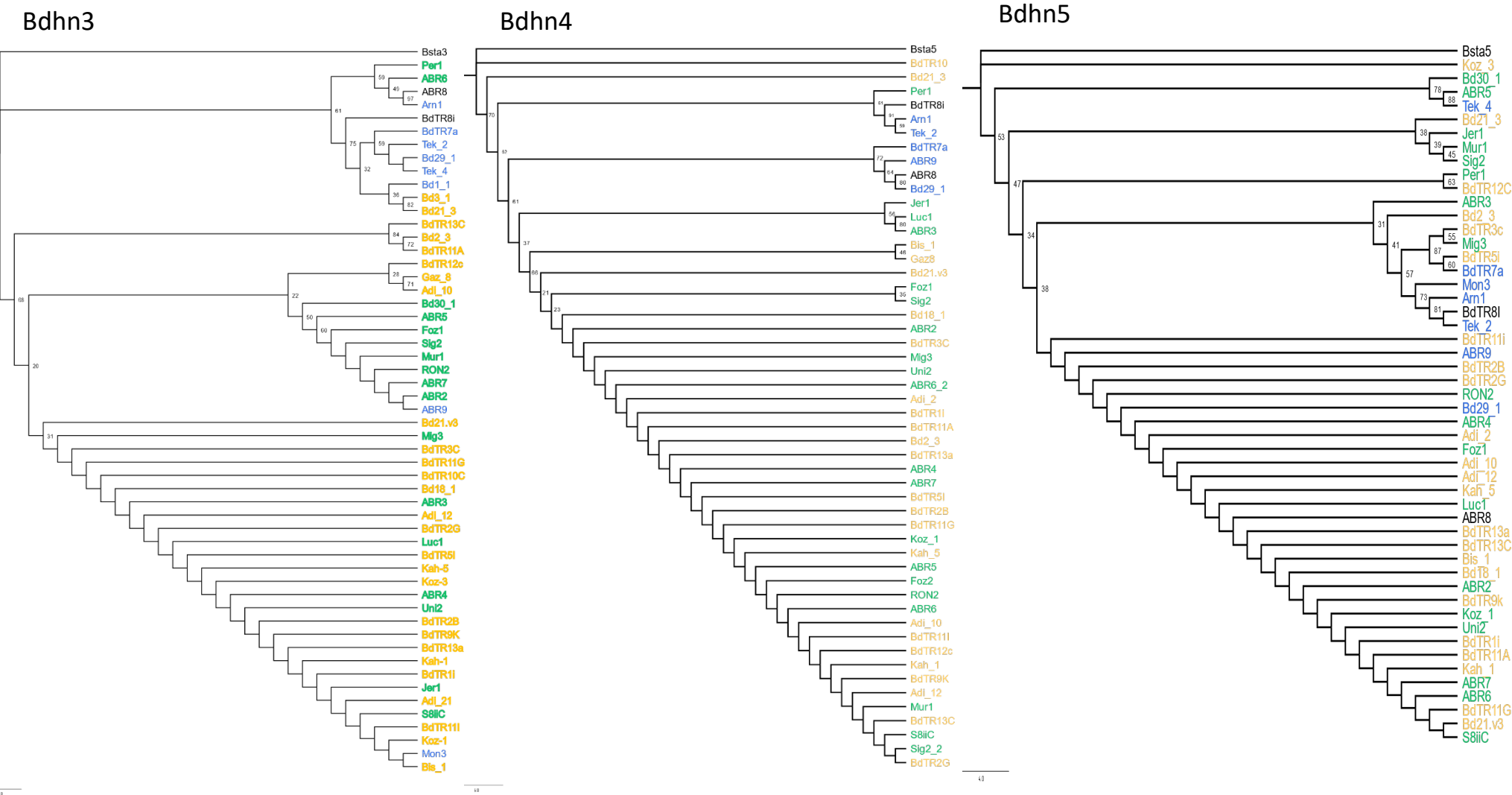
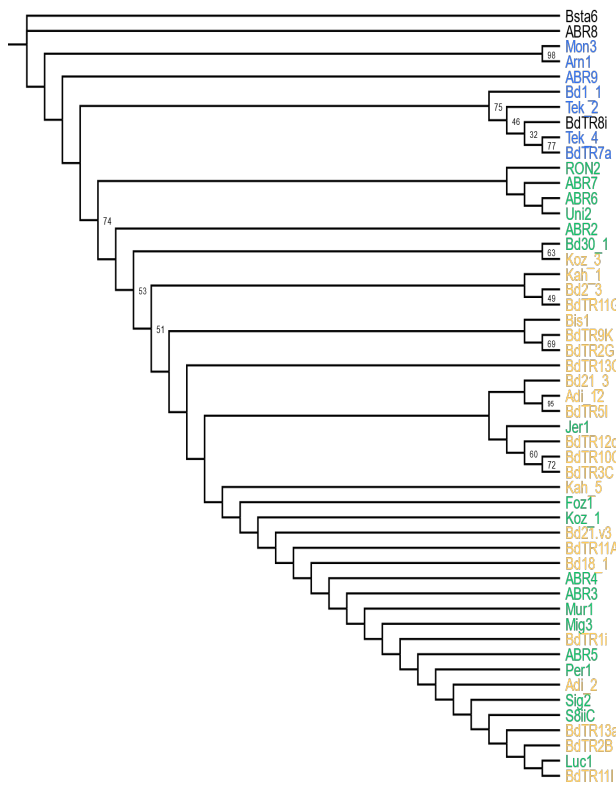
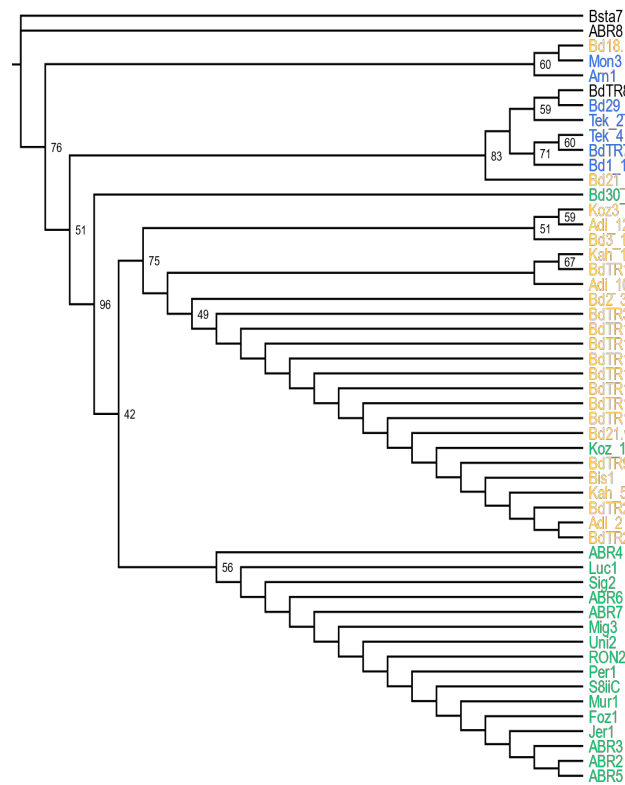


Fig.S4

Bdhn6



Bdhn7



Bdhn8

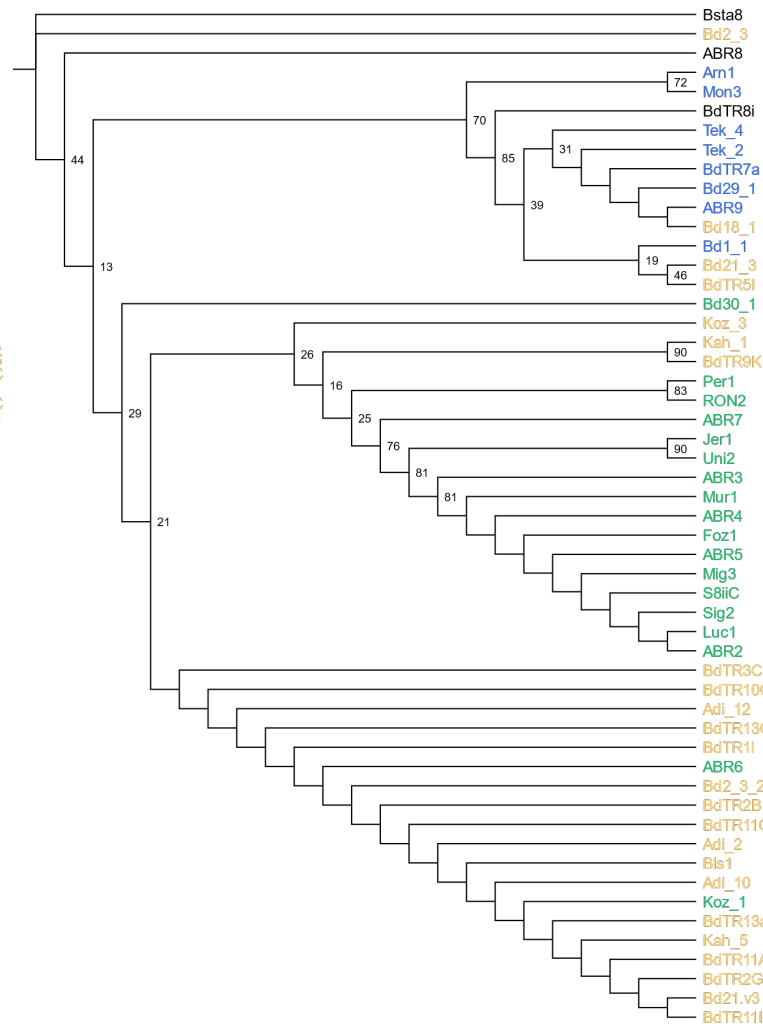
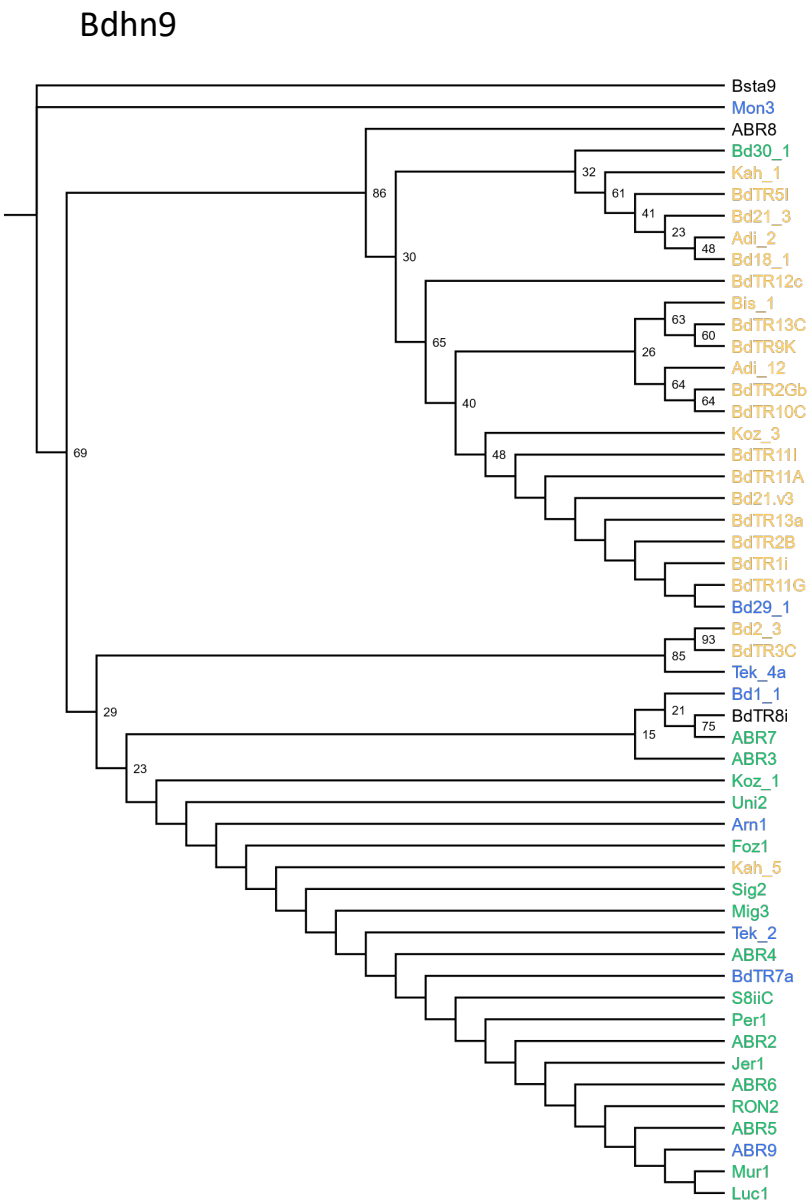


Fig.S4



Bdhn10

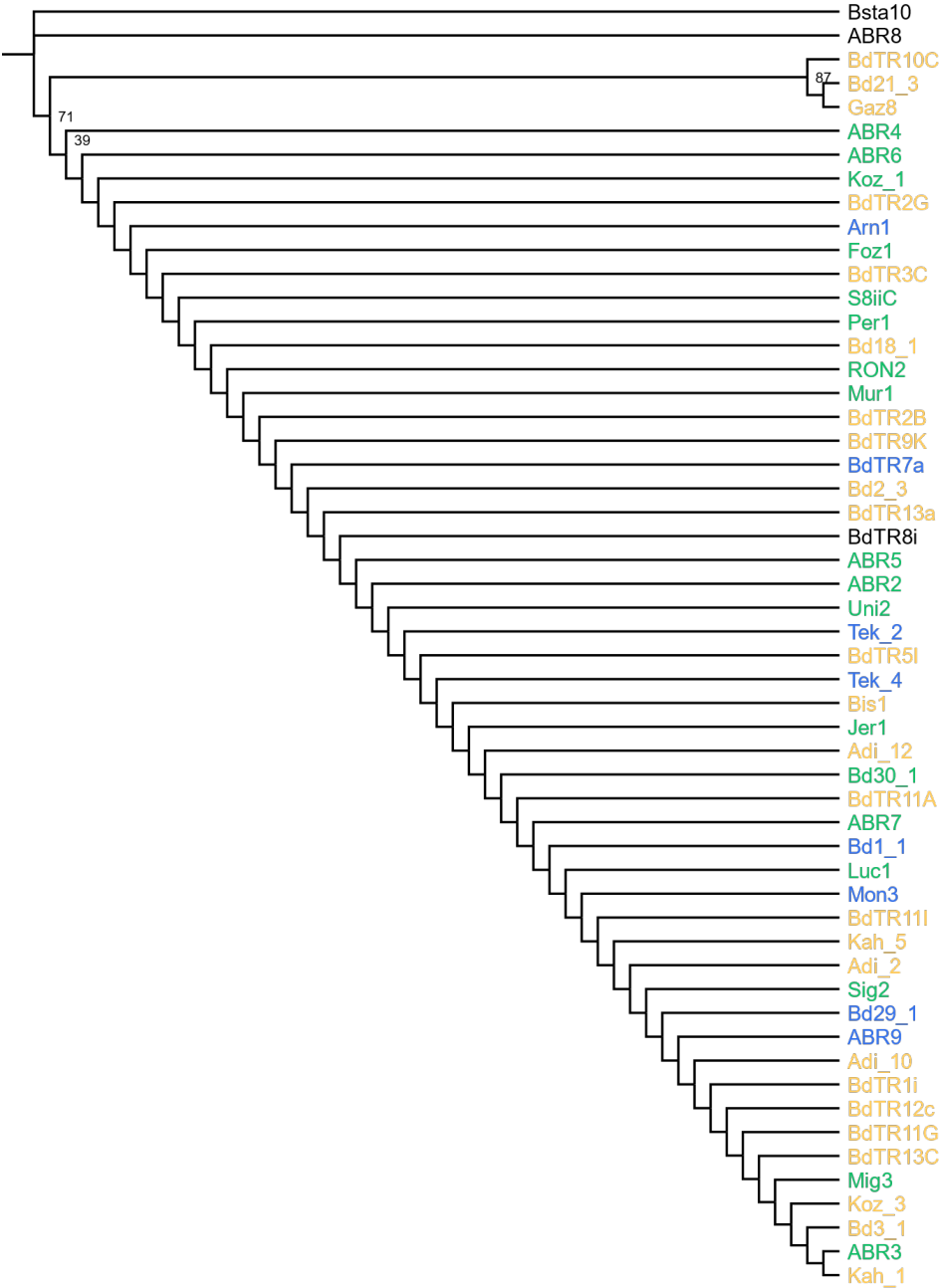


Fig.S5

#	Ecotypes	PCA1
1	ABR2	2.579269
2	ABR3	4.86108471
3	ABR4	5.69006454
4	ABR5	5.39529274
5	ABR6	3.40042965
6	ABR8	2.17586982
7	Adi10	-1.75668741
8	Adi12	-1.75668741
9	Adi2	-1.75668741
10	Bd1-1	-0.5973436
11	Bd18-1	0.73085546
12	Bd2-3	-5.71768222
13	Bd21-3	-3.51663046
14	Bd21control	-3.51663046
15	Bd3-1	-3.51663046
16	Bd30-1	-0.45762855
17	BdTR10c	0.88782452
18	BdTR11g	1.03334719
19	BdTR11i	0.04350879
20	BdTR1i	-0.28516673
21	BdTR2b	1.56035254
22	BdTR2g	2.60379124
23	BdTR5i	2.60379124
24	BdTR9k	1.12002182
25	Bis1	-3.66257669
26	Kah1	-3.54231265
27	Kah5	-3.54231265
28	Koz1	-3.2693441
29	Koz3	-3.2693441
30	RON2	5.47816162

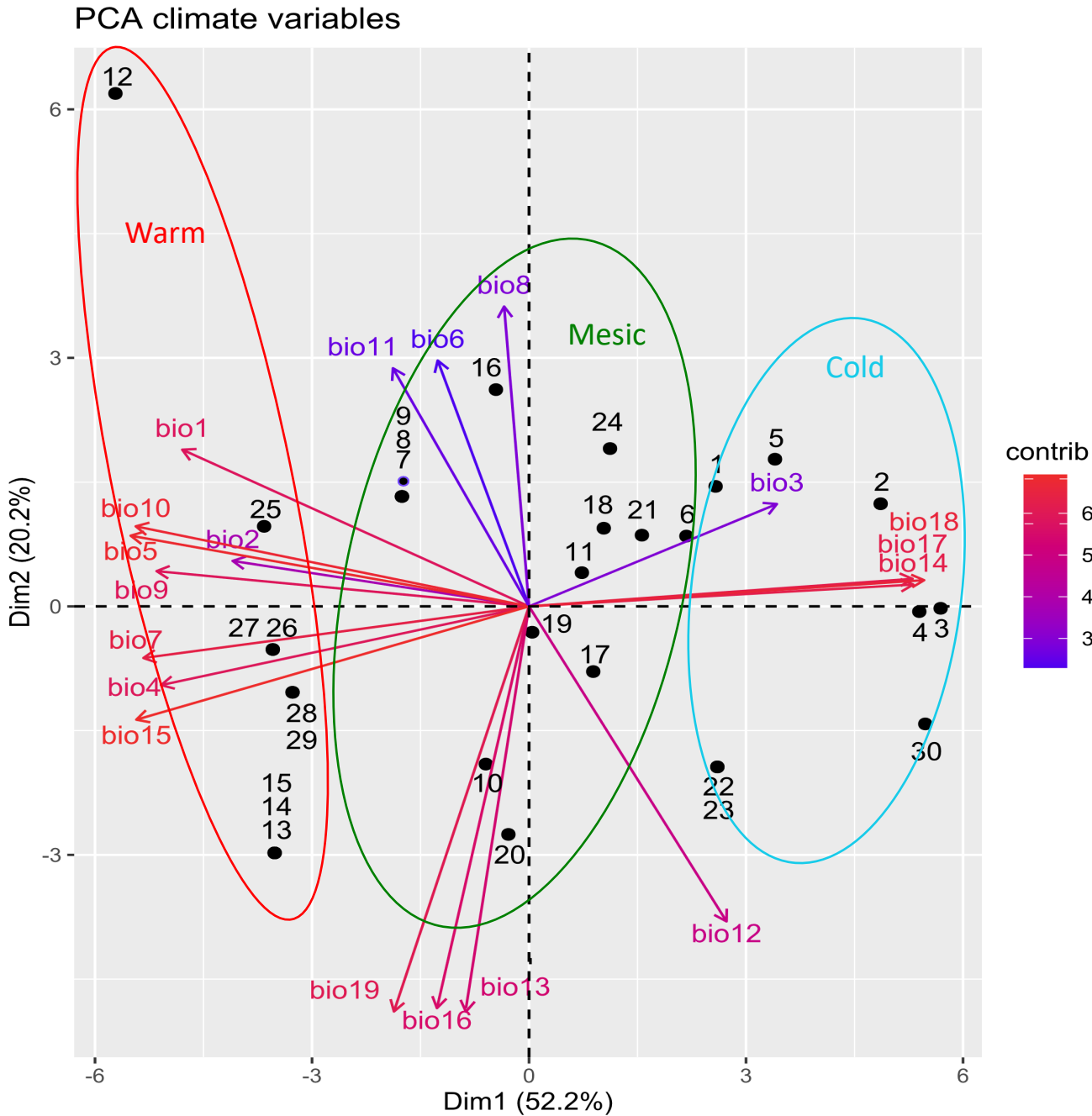
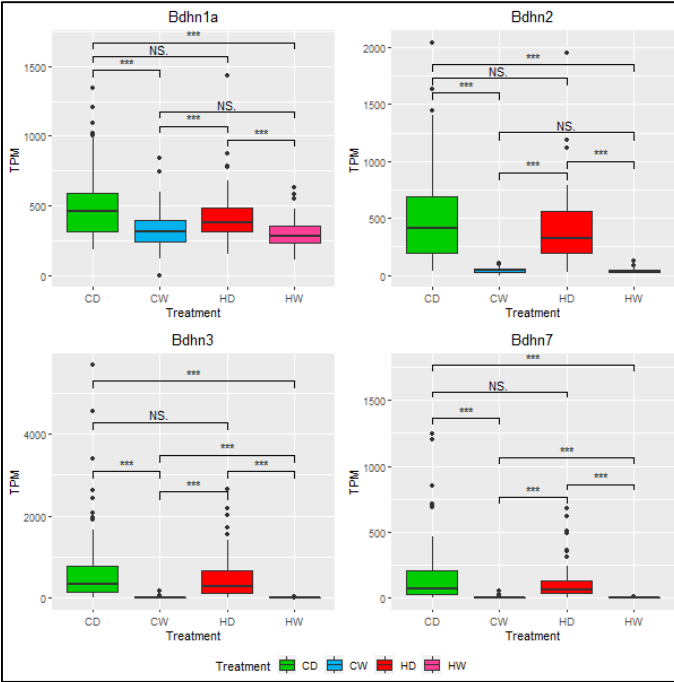
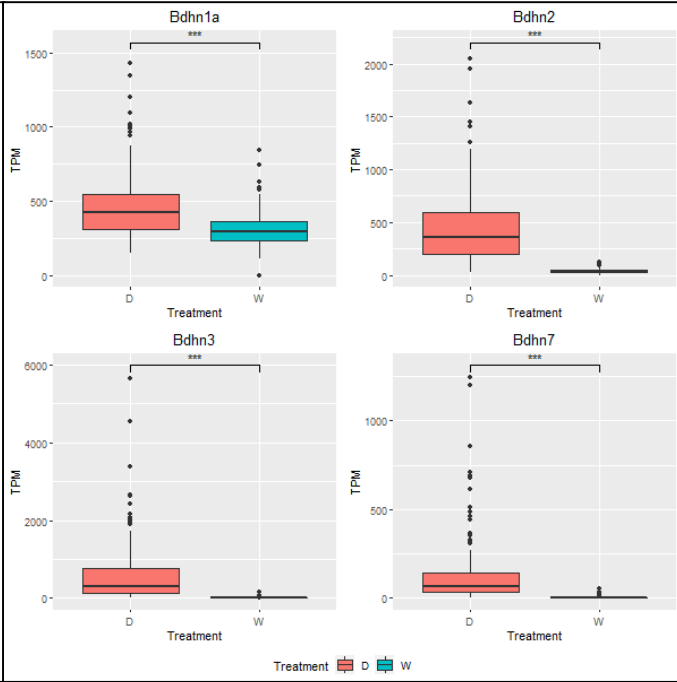


Fig.S6

(a)



(b)



(c)

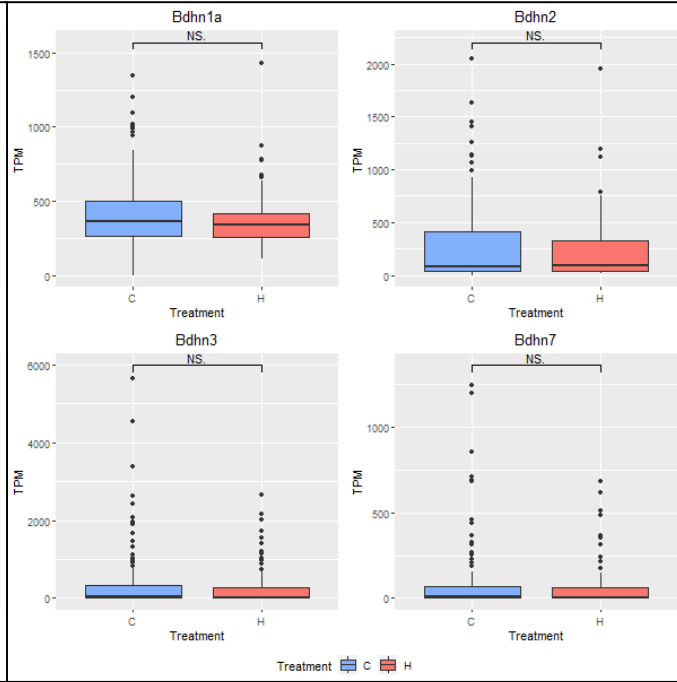
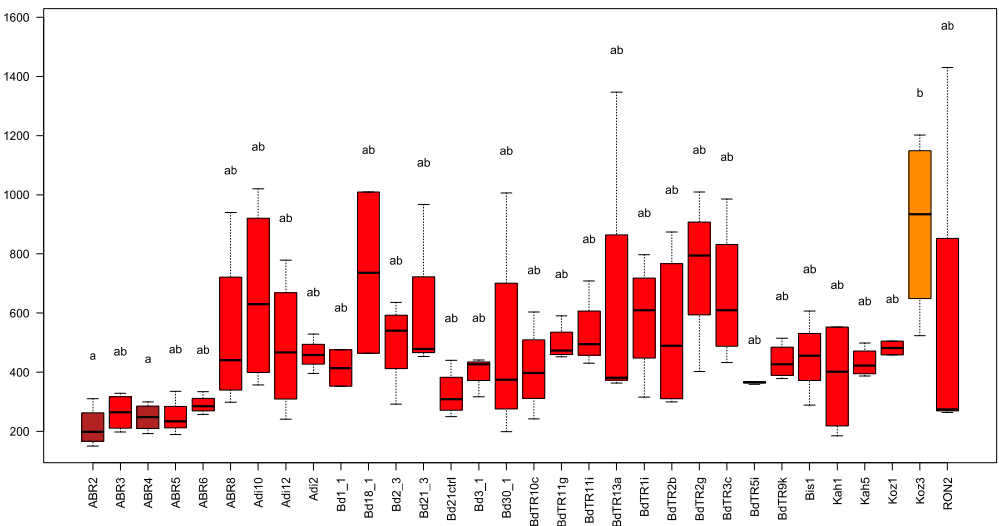
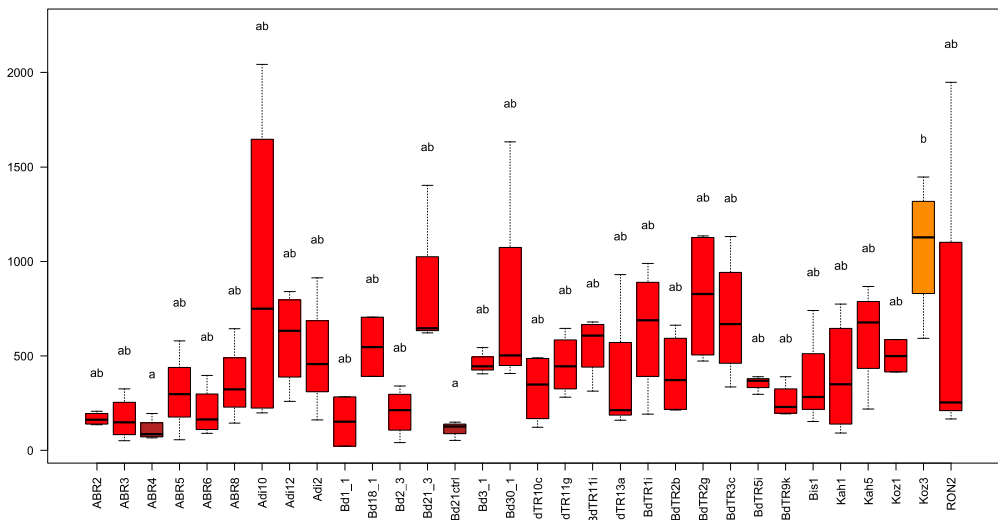


Fig.S7

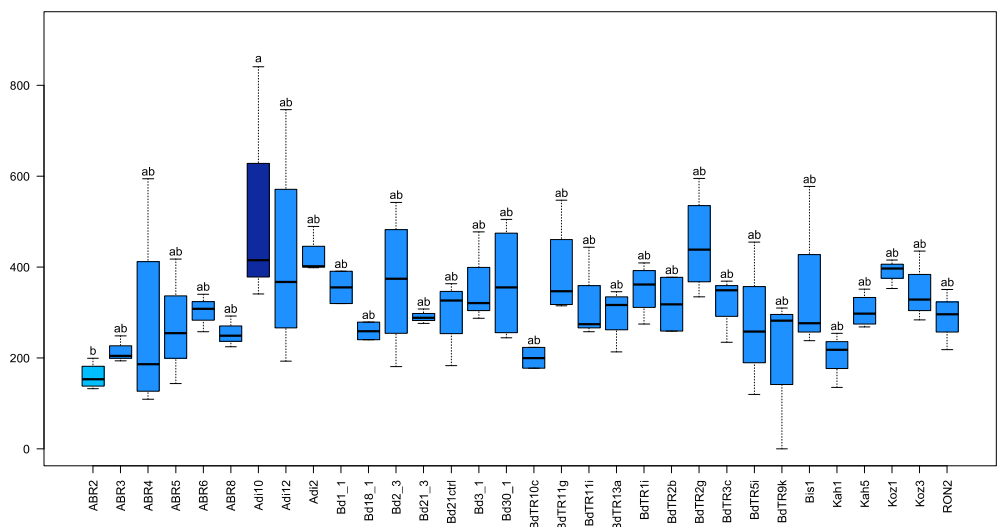
Bdhn1a D



Bdhn2 D



Bdhn1a W



Bdhn2W

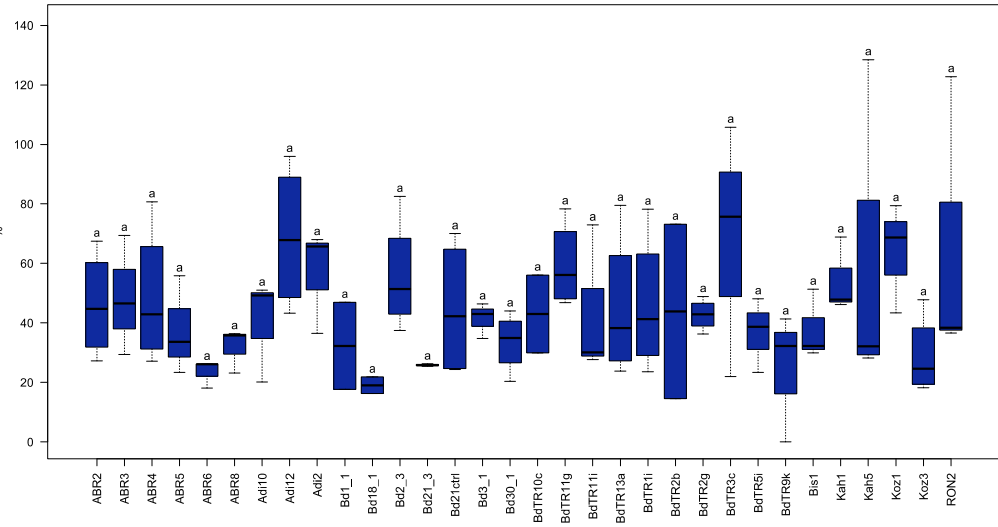
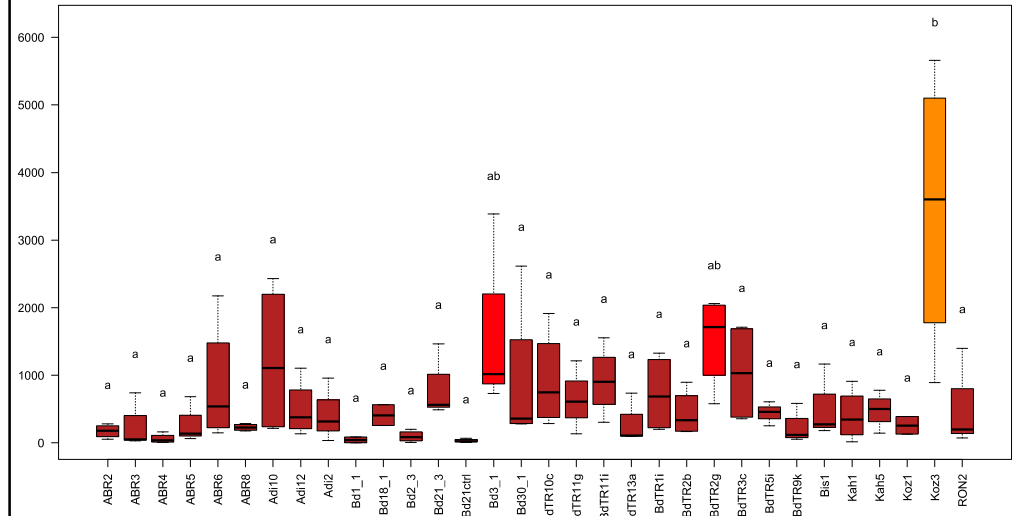
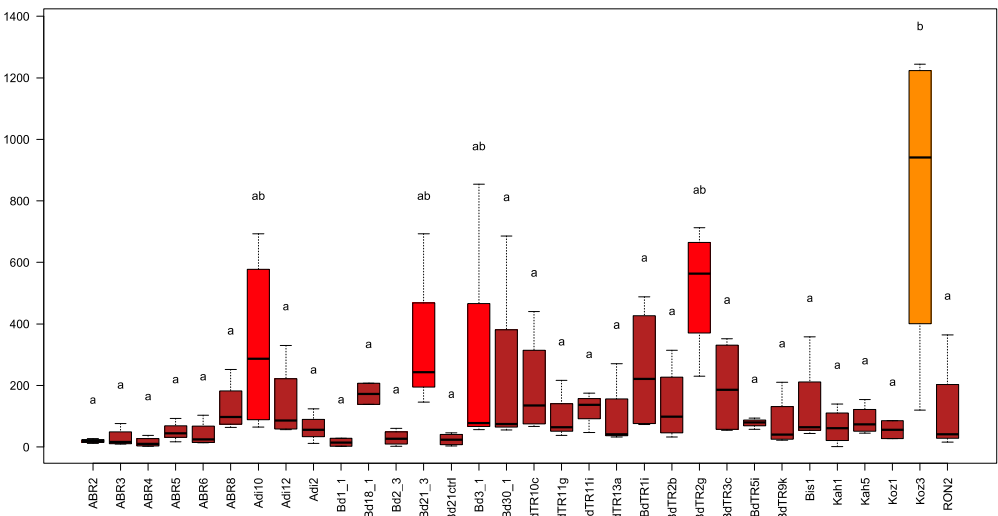


Fig.S7

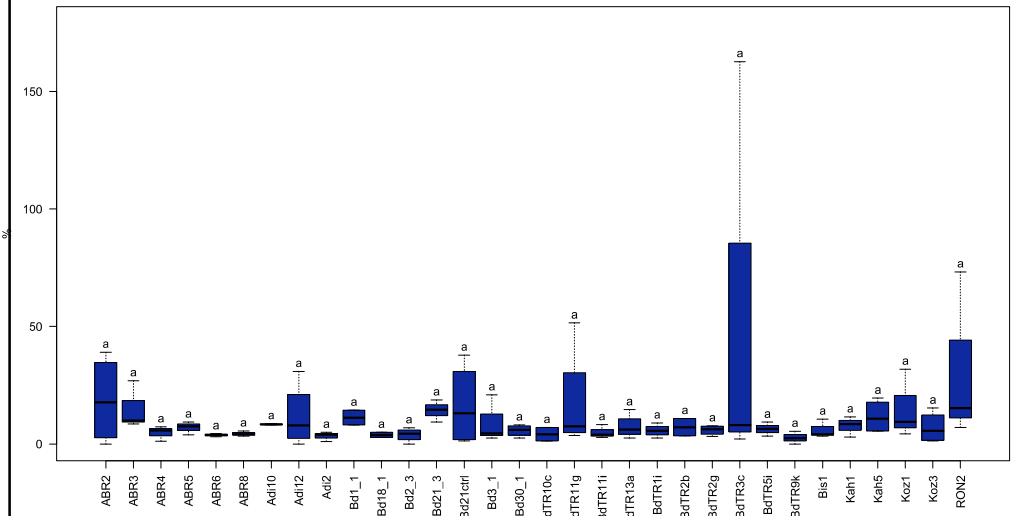
Bdhn3 D



Bdhn7 D



Bdhn3 W



Bdhn7 W

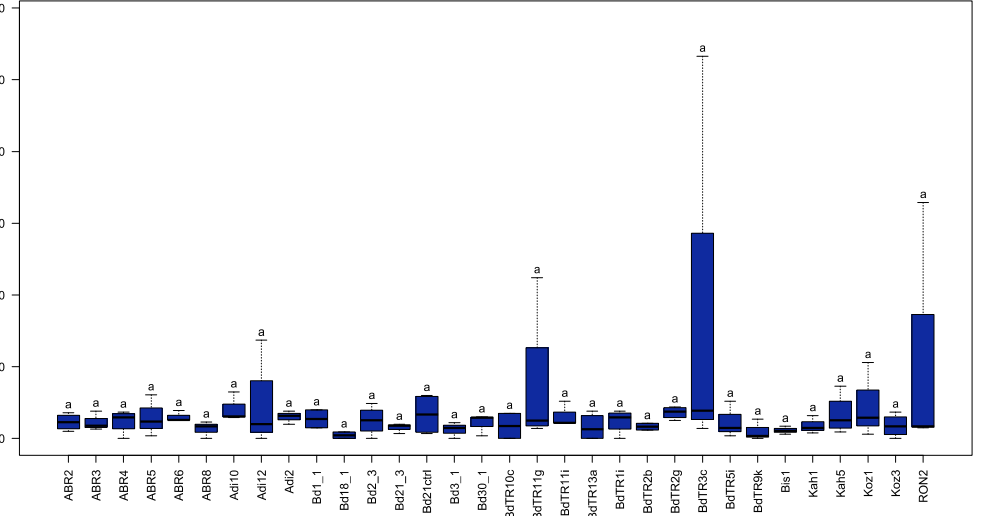


Fig.S8

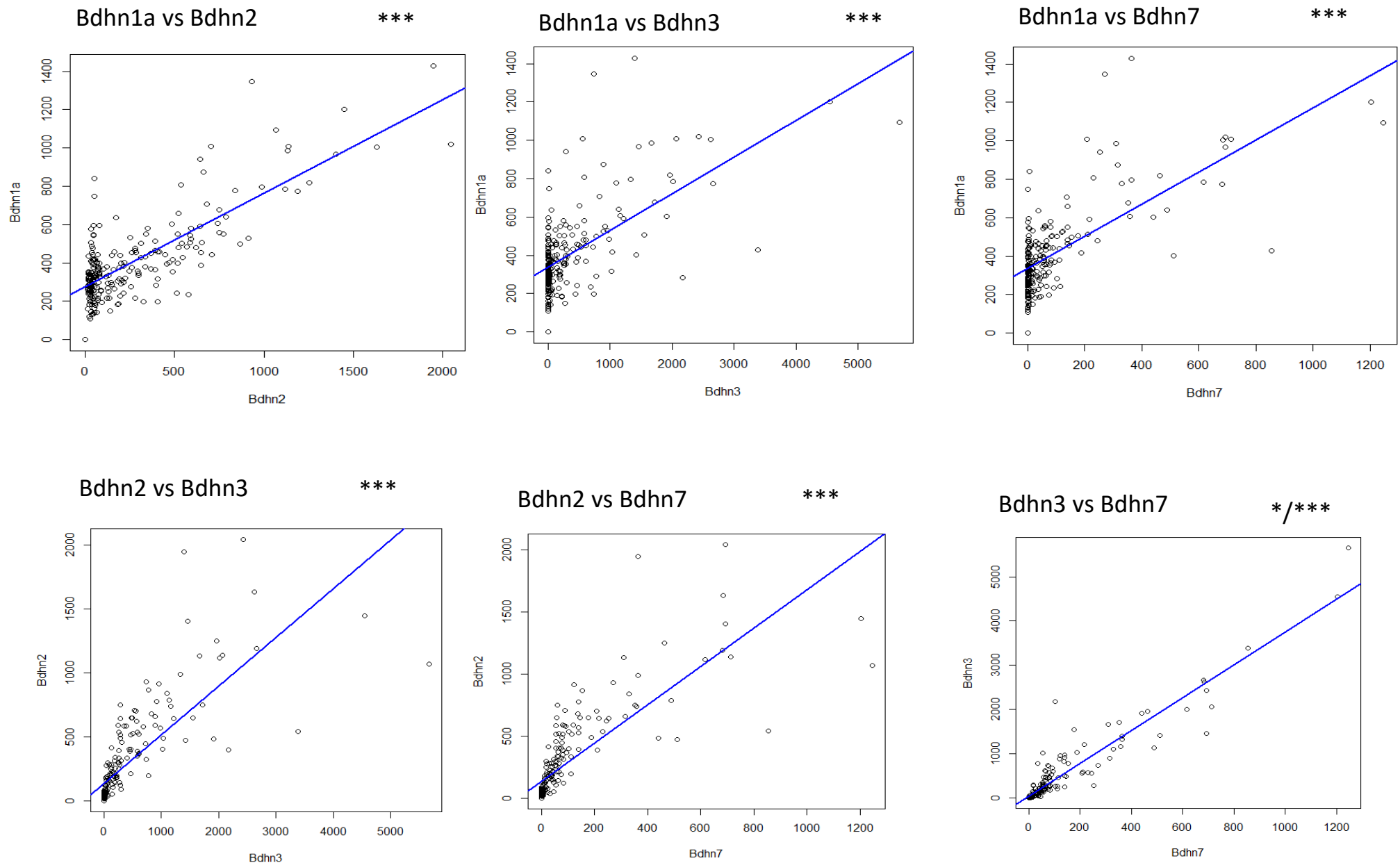


Fig.S9

Triticum aestivum

Brachypodium distachyon

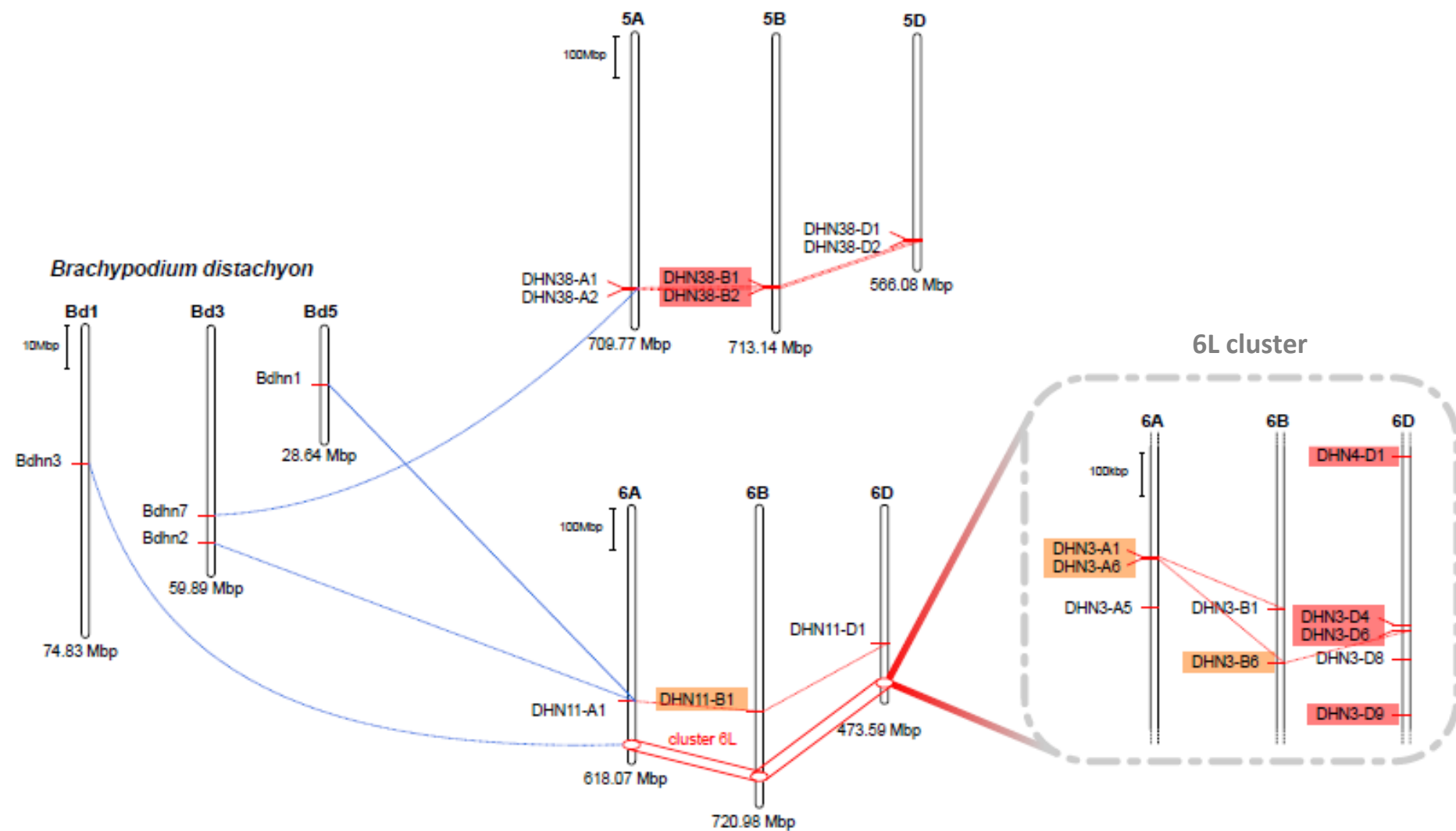


Fig. S10

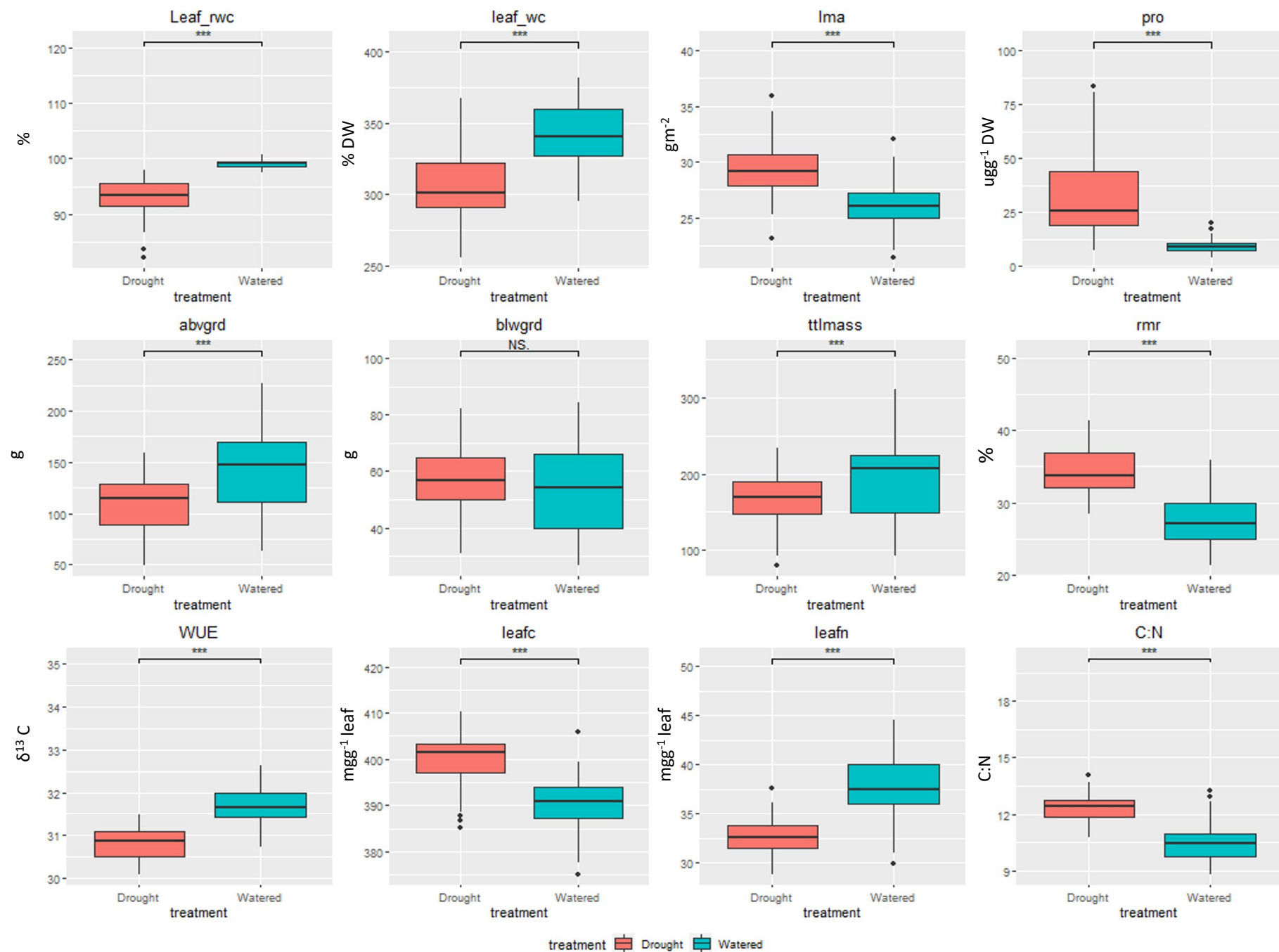


Fig.S11

Bdhn1a vs phenotypic traits

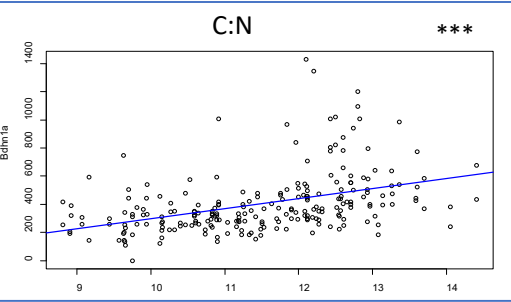
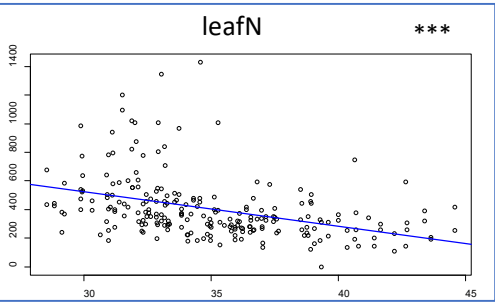
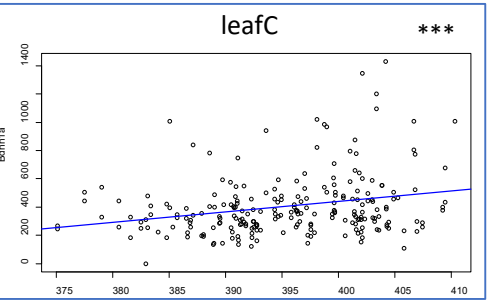
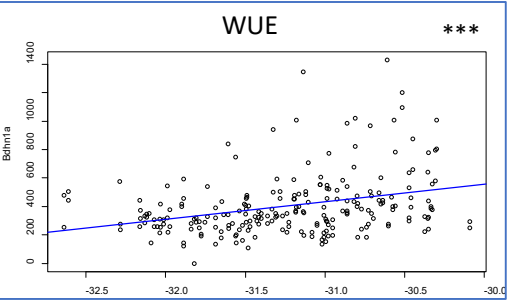
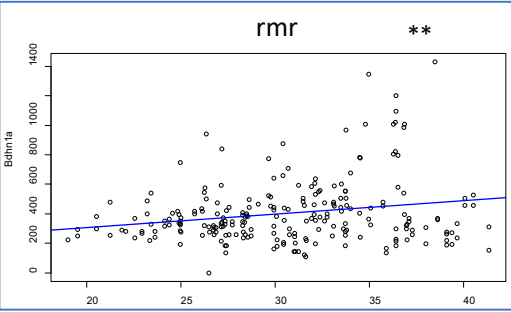
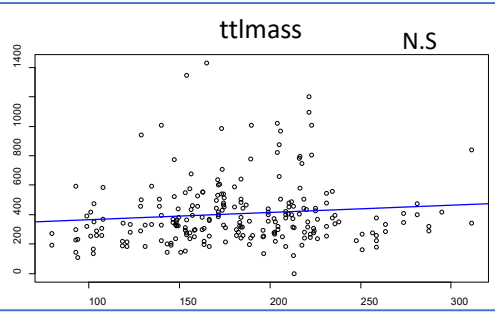
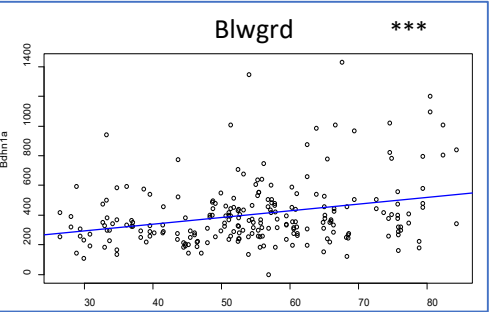
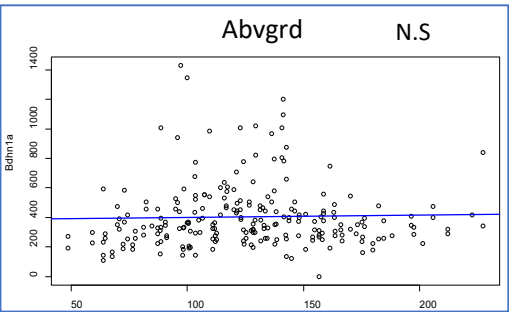
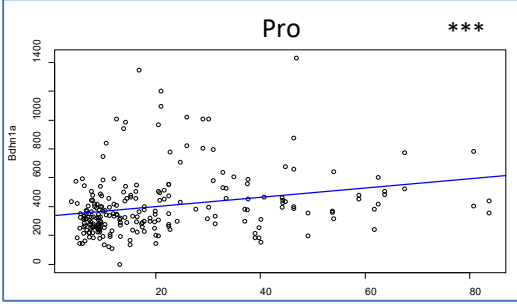
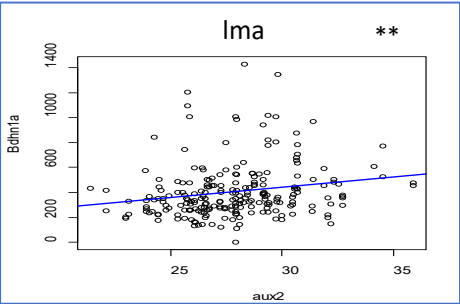
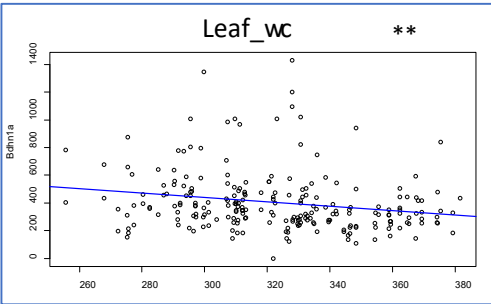
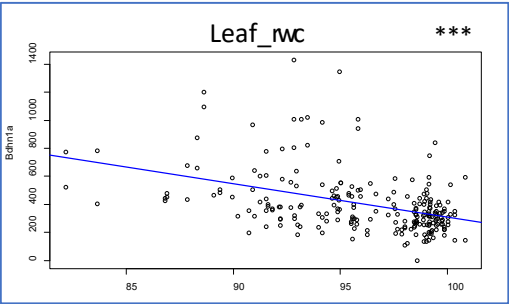


Fig.S11

Bdhn2 vs phenotypic traits

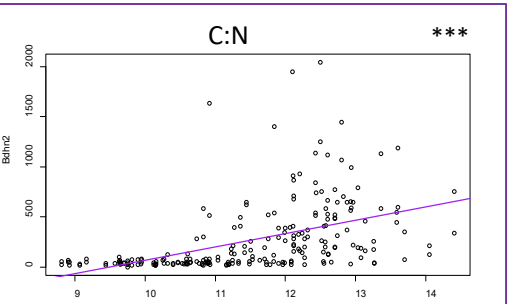
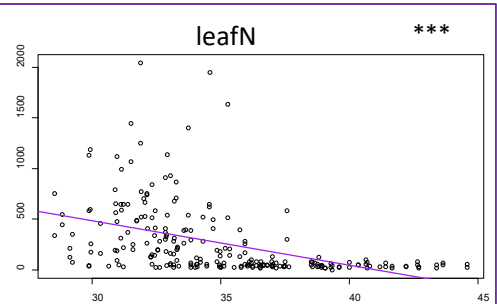
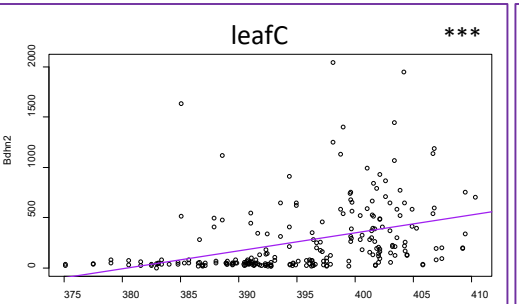
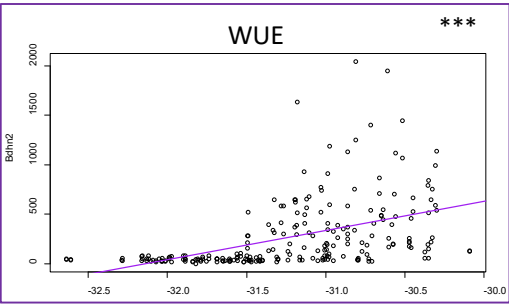
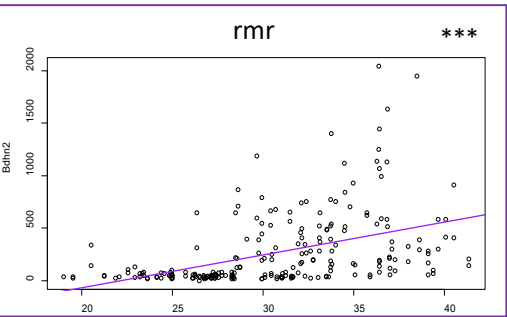
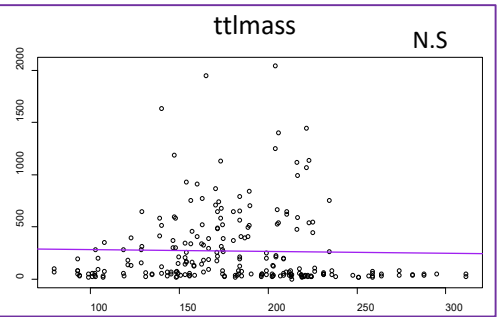
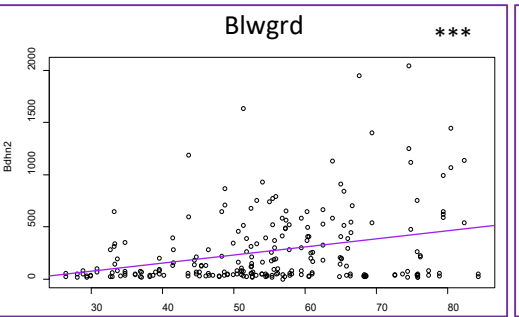
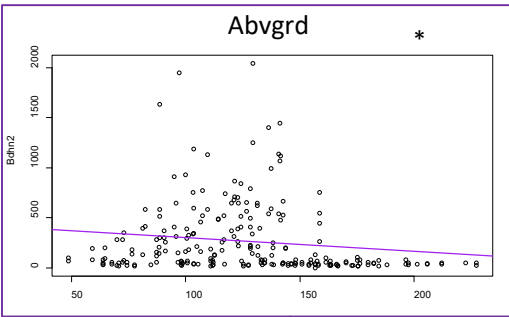
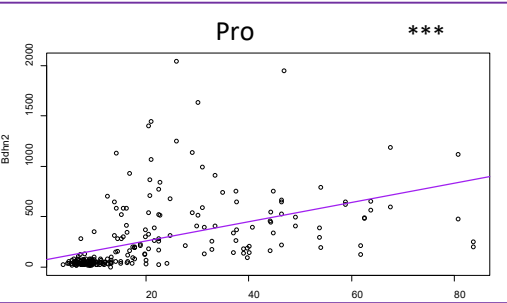
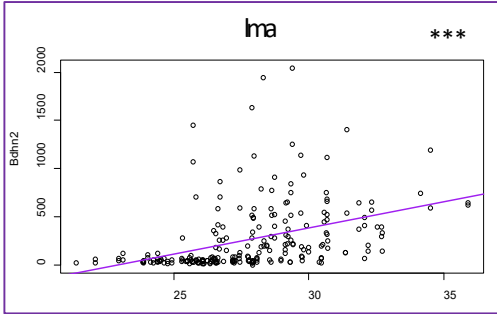
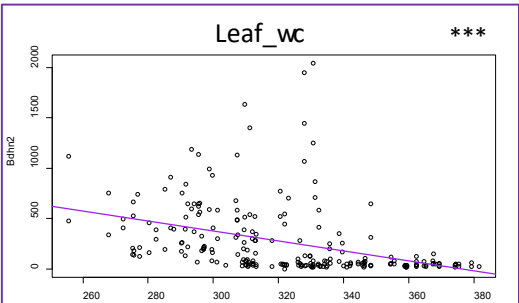
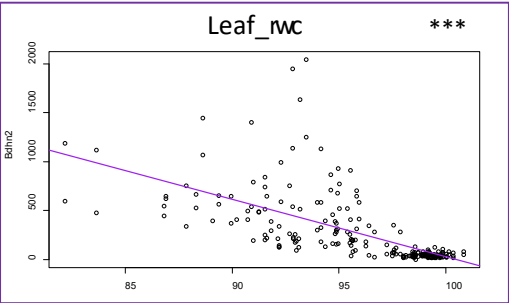


Fig.S11

Bdhn3vs phenotypic traits

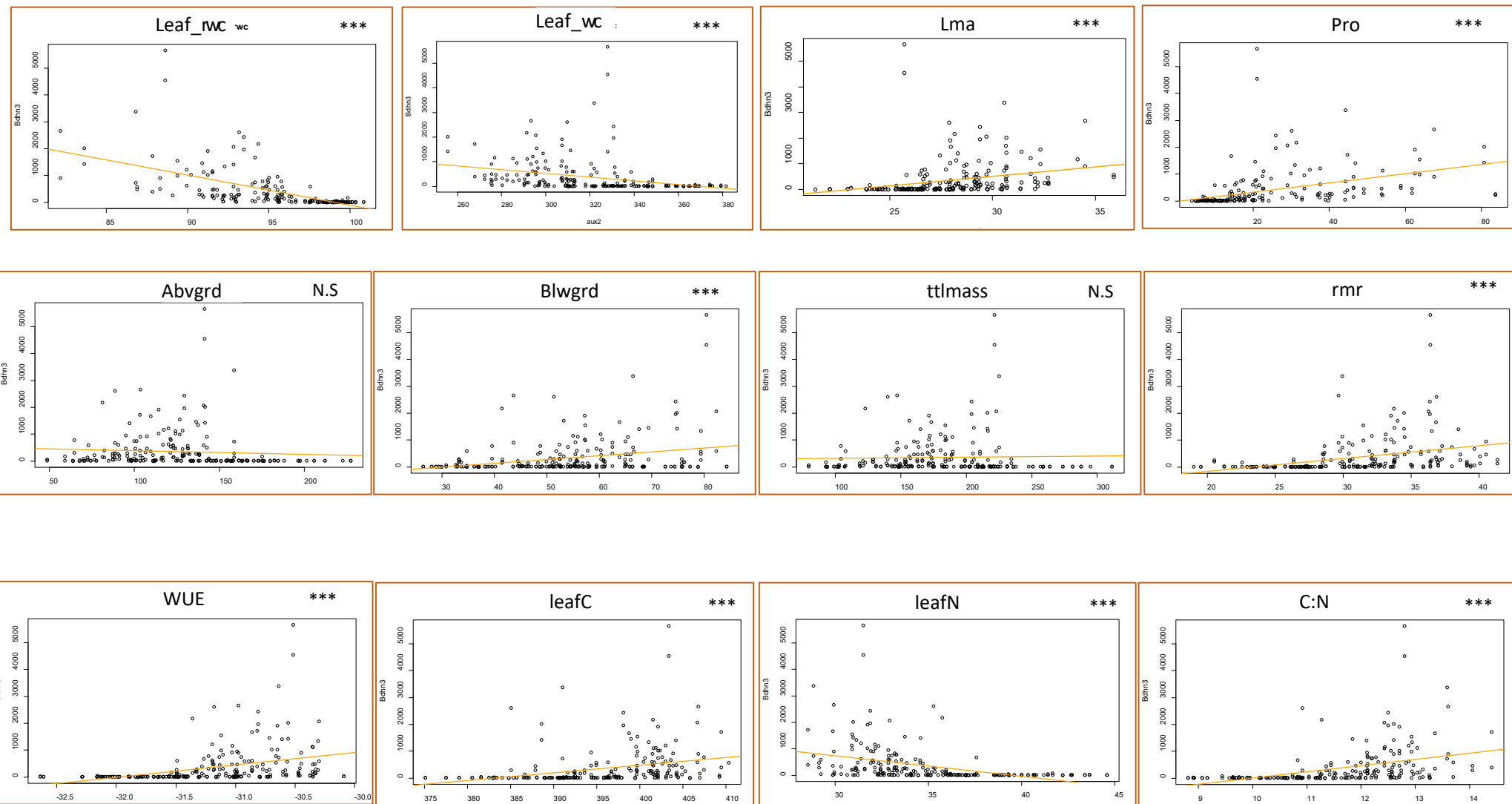


Fig.S11

Bdhn7vs phenotypic traits

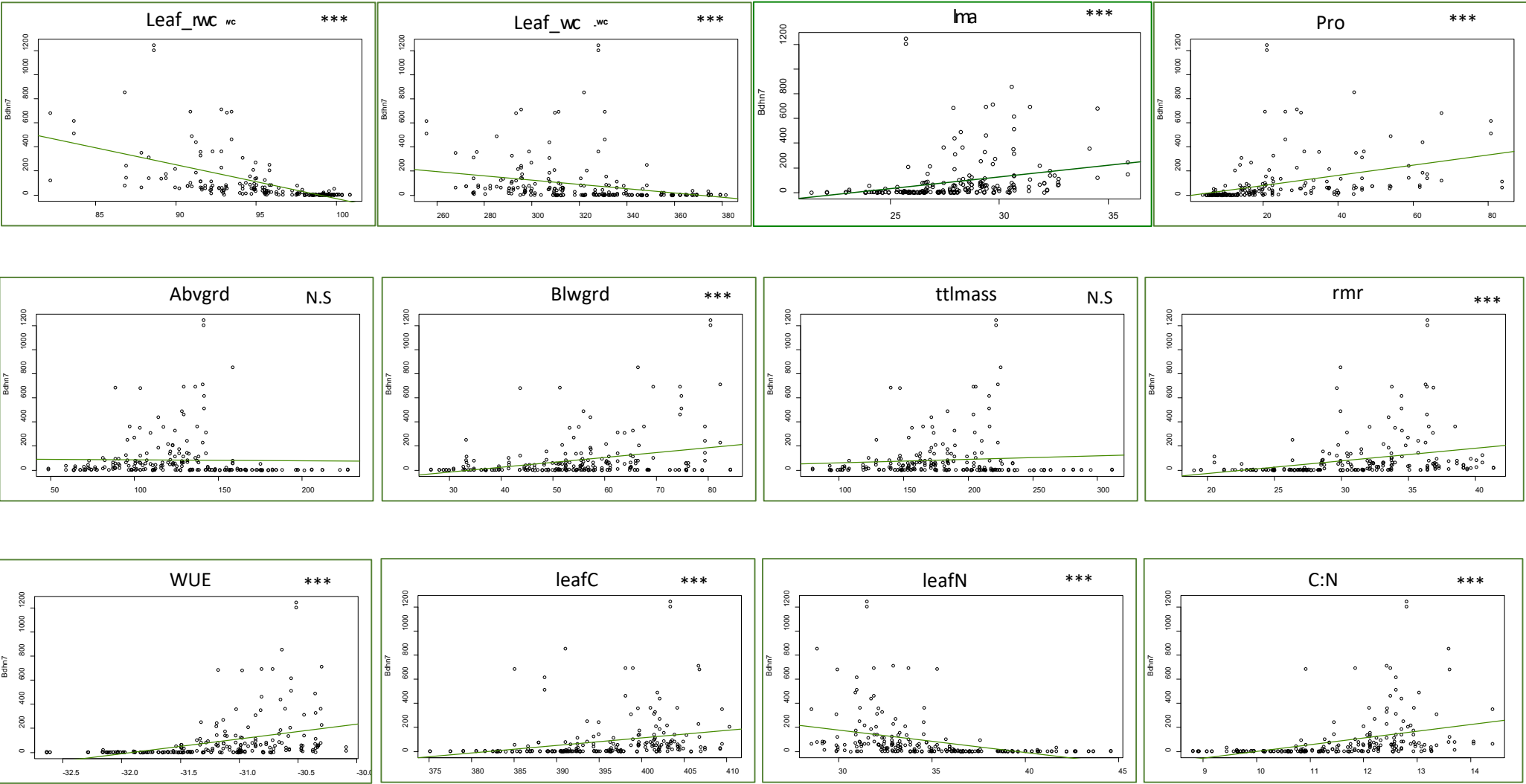


Fig.S12

