

Broadbalk Crop Nutrients Data Available for Wheat Grain and Straw, 1968-2017

DOI: 10.23637/rbk1-crop nutrients wheat 68-17-1

Prepared by: Sarah A M Perryman & Margaret J Glendining, CAS Department, Rothamsted Research, Harpenden, Herts, AL5 2JQ, UK.

Published by: Rothamsted Research

DOI minted: March 2021

Description: Contains two tables indicating the nutrient data available for Broadbalk grain and straw samples from 1968-2017; which sections and whether all nutrients are available or just nitrogen. The nutrients available are calcium, potassium, magnesium, sodium, nitrogen, phosphorous and sulphur (S from 1996).

Page 1 Nutrient data available for Broadbalk grain 1968-2017. Page 2 Nutrient data available for Broadbalk straw 1968-2017.

Site: Broadbalk Wheat Experiment, Rothamsted Research, West Common, Harpenden, Hertfordshire, AL5 2JQ, UK. Latitude 51.8066 N, Longitude -0.3602 E, 128m asl.

Related Resources:

- Broadbalk Crop Nutrient Content: http://www.era.rothamsted.ac.uk/Broadbalk/bbknutr
- Broadbalk Crop Nutrient Content, Potatoes 1968-1996:
 10.23637/rbk1-crop_nutrients_potatoes_68-96-1
- Broadbalk Crop Nutrient Content, Beans 1968-1978:
 10.23637/rbk1-crop nutrients beans 68-78-1
- Broadbalk Crop Nutrient Content, Potatoes 1968-1996:
 10.23637/rbk1-crop_nutrients_potatoes_68-96-1
- Broadbalk Crop Nutrient Content, Maize 1997-2017:
 10.23637/rbk1-crop nutrients wheat 97-17-1
- Broadbalk Crop Nutrient Content, Oats 1996-2015:
 10.23637/rbk1-crop_nutrients_oats_96-15-1

Cite as: Perryman S.A.M. & Glendining (2021). *Broadbalk Crop Nutrients Data Available for Wheat Grain and Straw. Rothamsted Research* 10.23637/rbk1-crop nutrients wheat 68-17-1

Funding: Rothamsted Research receives strategic funding from the UK Biotechnology and Biological Sciences Research Council (BBSRC). The Rothamsted Long-term Experiments National Capability is supported by the BBSRC Grant BBS/E/C/000J0300 and the Lawes Agricultural Trust.

Licence and conditions of re-use:

© BY

This summary is published under the Creative Commons Attribution 4.0 International licence. CC BY 4.0. You are free to adapt, copy, redistribute this summary but must provide appropriate credit using the provided citation, including the DOI and indicate any changes

made. You must not apply additional restrictions on the licence.

Nutrient data available for Broadbalk GRAIN samples

Nitrogen only Nitrogen plus macros P, K, Ca, Mg, Na (and S from 1996)

Sections Cultivar 8\$ Year 2 3 5 Cappelle 1968 W W BE W W W F P W W Desprez 1969 W W W W BE W 1970 W F BE W W W W Desprez W BE W 1971 W W Desprez W W BE Desprez 1972 W W W Desprez 1973 W W P F BE W W W W W W W W W Desprez W w W 1975 BF W W Desprez Desprez 1976 W P F Be W W W W Desprez BE W W Р W Desprez 1978 W ΒE W W W Flanders W 1980 W Р W W W W W Flanders Flanders 1981 W W F W W ٥ E W Flanders 1982 P P 1983 W W W W W W Flanders P Flanders 1984 W W F W W w W 1985 W W W ū W W W W P Brimstone 1986 W W W W W W W W W 1987 W W W W Brimstone w W W W 1988 Brimstone P Brimstone 1989 W W W W F W W W W Brimstone 1990 W W W D W W W W Р Apollo 1991 W W W W W W W W 1992 w W W w w W Apollo w Apollo P 1003 W W W W W W W 1994 W W W W F W W P F W Apollo P W W Apollo W W P Hereward 1996 0 1997 W М W W Hereward W W 0 W W W Hereward 1998 W* М W W 0 W W W W W М W Hereward 1999 W* 2000 Hereward 0 W W W 2001 W М W W Hereward 0 Hereward 2002 W М W W w W W w O 2003 F(UC) М Hereward W 2004 Hereward F(UC) W w W М W W Hereward 2005 W W W М 0 W W W W 2006 W Hereward W 0 W W W W 2007 0 М W W W Hereward W Hereward 2008 W W М W W W W 0 F W Hereward W 2010 W W W М 0 W W W Hereward w Hereward 2011 W W w 0 M W w W W w м 2012 Hereward 0 Crusoe* 2013 W W М W W W W 0 W W

W=w.wheat, P=potatoes, BE=s.beans, F=fallow, O=w.oats, M=forage maize.

W

w

W

w

W

0

W

w

0

М

0

М

W

0

М

W

w

W

м

w

W

W

W

W

W

Year is that in which the crop was harvested.

W* = no data for plot 11 in Sect 1 in 1974

W** = N data only for plot 18

2014

2015

2016

2017

W

W

Crusoe

Crusoe

W*** = no Na data for Section 3, 2000

^{* =} straw incorporated since autumn 1986. * = no herbicides. * = restricted pesticide use since 1985.

F(UC) Section 0 fallowed (uncultivated) in 2003 and 2004 in an attempt to control Equisetum and test various herbicides

Crusoe sown very late in harvest year 2013 (22 Feb 2013) due to very wet autumn/winter.

b Mulika spring wheat sown as very wet autumn prevented sowing of winter wheat.

Nutrient data available for Broadbalk STRAW samples

Nitrogen only Nitrogen plus macros P, K, Ca, Mg, Na (and S from 1996)

Sections

Sections											
Cultivar	Year	0"	1	2	3	4	5	6"	7	8\$	9
Cappelle	1968	w	W'	BE	W	W	W	F	Р	W	W
Desprez	1969	w	W	W	W	Р	F	W	BE	W	W
Desprez	1970	w	W	Р	F	BE	W	W	W	W	W
Desprez	1971	w	W	BE	W	W	W	F	Р	W	W
Desprez	1972	w	W	W	W	Р	F	W	BE	F	W
Desprez	1973	w	W	Р	F	BE	W	W	W	W	W
Desprez	1974	W	W*	BE	W	W	W	F	P	W	W
Desprez	1975	w	W	W	W	Р	F	W	BE	W	W
Desprez	1976	w	W	Р	F	Be	W	W	W	W	W
Desprez	1977	w	W	BE	w	W	W	F	P	W	W
Desprez	1978	w	W	W	W	Р	F	W	BE	W	W
Flanders	1979	W	W	F	F	Р	W	W	W	W	W
Flanders	1980	W	W	Р	w	W	W	w	F	W	W
Flanders	1981	w	W	W	W	F	W	W	Р	F	W
Flanders	1982	w	W	F	W	Р	W	W	W	W	W
Flanders	1983	W	W	Р	W	W	W	W	F	W	W
Flanders	1984	w	W	W	W	F	W	W	P	W	W
Brimstone	1985	w	W	W	W	Р	F	W	W	W	W
Brimstone	1986	w	W	W	F	W	Р	W	W	W	W
Brimstone	1987	w	W	F	Р	W	W	W	W	W	W
Brimstone	1988	w	W	P	W	W	W	w	F	F	W
Brimstone	1989	w	W	W	W	F	W	W	P	W	W
Brimstone	1990	w	W	W	W	Р	F	W	W	W	W
Apollo	1991	W	W	W	F	W	Р	W	W	W	W
Apollo	1992	W	W	F	Р	W	W	W	W	W	W
Apollo	1993	w	W	Р	W	W	W	W	F	W	W
Apollo	1994	w	W	W	W	F	W	W	Р	F	W
Apollo	1995	W	W	W	W	Р	F	W	W	W	W
Hereward	1996	W	W	W	0	W	Р	W	W	W	W
Hereward	1997	W	W	0	M	W	W	W	W	W	W
Hereward	1998	w	W**	M	W	W	W	W	0	W	W
Hereward	1999	W	W	W	W	0	W	W	M	W	W
Hereward	2000	W	W	W	W***	M	0	W	W	W	W
Hereward	2001	W	W	W	0	W	M	W	W	F	W
Hereward	2002*	w	W	0	M	W	W	W	W	W	W*
Hereward	2003	F(UC)	W	M	W	W	W	W	0	W	W
Hereward	2004	F(UC)	W	W	W	0	W	W	M	W	W
Hereward	2005	w	W	W	W	M	0	W	W	W	W
Hereward	2006	w	W	W	0	W	M	W	W	W	W
Hereward	2007	w	W	0	M	W	W	W	W	W	W
Hereward	2008	W	W	M	W	W	W	w	0	F	W
Hereward	2009	W	W	W	W	0	W	W	M	W	W
Hereward	2010	W	W	W	W	M	0	W	W	W	W
Hereward	2011	W	W	W	0	W	M	W	W	W	W
Hereward	2012	W	W	0	M	W	W	W	W	W	W
Crusoe*	2013	W	W	M	W	w	W	W	0	W	W
Crusoe	2014	W	W	W	W	0	W	W	M	W	W
Mulikab	2015	W	W	W	W	M	0	W	W	F	W
Crusoe	2016	w	w	w	0	W	M	w	W	F	w
Crusoe	2017	w	w	0	M	W	W	w	w	W	w
				-							

W=w.wheat, P=potatoes, BE=s.beans, F=fallow, O=w.oats, M=forage maize.

Year is that in which the crop was harvested.

W' no data for plot 20

W [bold] indicates no data for plots 10-14 and 17-19

W* no S data

[&]quot; = straw incorporated since autumn 1986. 5 = no herbicides. " = restricted pesticide use since 1985.

F(UC) Section 0 fallowed (uncultivated) in 2003 and 2004 in an attempt to control Equisetum and test various herbicides

Crusoe sown very late in harvest year 2013 (22 Feb 2013) due to very wet autumn/winter.

^b Mulika spring wheat sown as very wet autumn prevented sowing of winter wheat.