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Descriptions of barley genetic stocks for 2013

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In this volume of the Barley Genetics Newsletter, one hundred and twenty-five new and revised Barley Genetic Stock (BGS) descriptions are published (Table 1). The current lists of new and revised BGS descriptions, including those in Table 1, are presented by BGS number order (Table 2) and by locus symbol in alphabetic order (Table 3) in another section of this issue. Information on the description location, recommended locus name, chromosomal location, previous gene symbols, and the primary genetic stock (GSHO number and/or NGB number) are included in these lists. The GSHO stocks are held in the USDA-ARS Barley Genetic Stocks collection at the National Small Grains Collection (U.S. Department of Agriculture – Agricultural Research Service, National Small Grains Germplasm Research Facility, 1691 S 2700 W) Aberdeen, ID 83210, USA. The NGB stocks are held in the Nordic Genetic Resource Center (NordGen), P.O. Box 41, SE-230 53 Alnarp, Sweden. This information is available through the Internet at the following addresses:

(1) www.ars.usda.gov.PacWest/Aberdeen

(2) www.ars-grin.gov:7000/npgs/descriptors/barley-genetics (GRIN)

(3) http://wheat.pw.usda.gov/ggpages/bgn/

(4) http:/www.nordgen.org/sesto

Table 1. A listing of Barley Genetic Stock (BGS) descriptions published in volume 43 of the Barley Genetics Newsletter, giving recommended locus symbols and names, chromosomal locations, and stock source information.

BGS no.	Locus symbol* Rec.	Locus symbol* Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
1	brh1	br, ari-i	7HS	Brachytic 1	43:48	25
9	dsp1	l	7HS	Dense spike 1	43:50	1232
17	fch4	f4, yv	7HL	Chlorina seedling 4	43:54	1214
18	fch5	f5, yv2	7HS	Chlorina seedling 5	43:56	1215
34	msg50	msg,,hm	7HL	Male sterile genetic 50	43:57	2404
38	smn1	smn	3H/5H	Seminudoides 1	43:58	1602
43	mov1	mo5	7HL	Multiovary 1	43:59	3641
48	Rpt4	QRpt7	7HL	Reaction to *Pyrenophora teres* 4	43:61	
49	sld8	sld.i	7HS/4HL	Slender dwarf 8	43:63	2484
57	eog1	e, lep-e	2HL	Elongated outer glume 1	43:64	29
64	des7	des7	3H	Desynapsis 7	43:67	598
72	glo-c	glo-c	2H	Globosum-c	43:68	1329
73	fol-a	fol-a	2HL	Angustifolium-a	43:69	1744
90	ert-j	ert-j	2H	Erectoides-j	43:70	484
91	ert-q	ert-q	6H	Erectoides-q	43:71	1562
100	sld4	sld.d	2HS	Slender dwarf 4	43:72	2479
101	als1	als	3HL	Absent lower laterals 1	43:74	1065
108	alm1	al, ebu-a	3HS	Albino lemma 1	43:76	270
115	btr1	bt1	3HS	Non-brittle rachis 1	43:78	1233
116	btr2	bt2	3HS	Non-brittle rachis 2	43:80	842
118	lnt1	rnt, int-l	3HL	Low number of tillers 1	43:82	833
119	des2	ds	3H	Desynapsis 2	43:84	593
120	zeb1	zb	3HL	Zebra stripe 1	43:86	1279
125	lzd1	dw4	3H	Lazy dwarf 1	43:87	1787
138	nec4	nec4	3H	Necrotic leaf spot 4	43:88	
139	nec5	nec5	3H	Necrotic leaf spot 5	43:89	
143	sex8	sex.j	3HS	Shrunken endosperm xenia 8	43:90	2471
147	mov2	mo	3HS	Multiovary 2	43:91	3642
165	glf3	gl3, cer-j	4HL	Glossy leaf 3	43:92	577
177	fch10		4H	Chlorina seedling 10	43:95	1737
180	sid1	nls	4HL	Single internode dwarf 1	43:97	2477
187	brh9	brh.k	4HL	Brachytic 9	43:99	1676
193	viv-b	viv-6	4HS	Viviparoides-b	43:100	
194	sld7	sld.f	4HL	Slender dwarf 7	43:101	2481
195	sex9	sex.l	4HL	Shrunken endosperm xenia 9	43:102	2473
196	sdw7	sdw.u	4HL	Semidwarf 7	43.103	2462
197	nec34	nec.k	4HS	Necroticans 34	43:104	

Table 1. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
198	Rpt8	QRpts4	4HS	Reaction to *Pyrenophora teres* 8	43:105	
215	des6	des6	1HL/ 5HL	Desynapsis 6	43:106	597
222	nec1	sp,,b	1HL	Necrotic leaf spot 1	43:108	989
237	Rpt2	Rpt2c	1HS	Reaction to *Pyrenophora teres* 2	43:110	
253	cul2	uc2	6HL	Uniculm 2	43:112	531
258	dsp9	l9, ert-e	6HL	Dense spike 9	43:114	1774
265	nec3	nec3	6HS	Necrotic leaf spot 3	43:116	1330
266	ert-e	ert-e, dsp9	6HL	Erectoides-e	43:118	477
272	Rpt5	Rpt_a	6HL	Reaction to *Pyrenophora teres* 5	43:120	
274	ari-x	ari-22	6H	Breviaristatum-x	43:124	
308	lbi1	lb, rac-a	5HL	Long basal rachis internode 1	43:125	580
339	lys3	sex3	5HL	High lysine 3	43:127	1785
346	yst5	yst5	7HS	Yellow streak 5	43:130	2501
351	gsh1	gs1, cer-q	2HS	Glossy sheath 1	43:131	735
356	gsh6	gs6, cer-c	2HS	Glossy sheath 6	43:135	740
375	msg20	ms20	4HL	Male sterile genetic 20	43:139	2372
386	des3	des3	2H/5HL	Desynapsis 3	43:140	594
413	gsh8	cer-u, gs8	2HS	Glossy sheath 8	43:141	442
419	cer-za	cer-za	5HL	Eceriferum-za	43:144	1521
429	cer-zk	cer-zk	2H	Eceriferum-zk	43:146	458
432	cer-zo	cer-zo	3HS	Eceriferum-zo	43:148	462
448	cer-ye	cer-ye	4H	Eceriferum-ye	43:149	1538
455	seg8	seg8	7H	Shrunken endosperm genetic 8	43:150	2469
461	zeb2	zb2, f10	4HS	Zebra stripe 2	43:152	93
519	mnd1	m	2H	Many-noded dwarf 1	43:154	253
531	cer-yr	cer-yr	5HL	Eceriferum-yr	43:155	1551
562	ert-k	ert-k	6H	Erectoides-k	43:156	485
593	adp1	adp	3HL	Awned palea	43:158	1618
611	Nec6	Sp	7HS	Necrotic leaf spot 6	43:159	977
615	wxs1	wxs1	7H/2HL	Waxy spike 1	43:160	3649
616	cul3	cul3	3HL	Uniculme 3	43:161	2494
617	cul4	uc-5, uc-3	3HL	Uniculme 4	43:162	2495
623	eli-a	lig-a		Eligulum-a	43:164	3647
624	ops1	op-3	7HS	Opposite spikelets 1	43:165	2427
635	nec7	nec-45	1H/6H/ 7H	Necroticans 7	43:166	2420
636	tst2		4HL	Tip sterile 2	43:167	1781

Table 1. (continued)

BGS no.	Locus Symbol* Rec.	Locus Symbol* Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
645	bsp1			Bushy spike 1	43:168	3652
646	ovl2	ovl2		Ovaryless 2	43:169	3655
647	tst1	tst1	6HL	Tip sterile 1	43:170	3644
648	mov4	mo8		Multiovary 4	43:171	3643
649	asp1	asp1		Aborted spike 1	43:172	3654
650	sun1	sun1		Sensitivity to *Ustilago nuda* 1	43:173	3650
651	lam1	lam1		Late maturity 1	43:174	3653
652	ylf1	ylf1	7HS	Yellow leaf 1	43:175	
660	nld2		5H/6H/ 7H	Narrow leafed dwarf 2	43:176	3645
667	Rpt1	Pt	3HL	Reaction to *Pyrenophora teres* 1	43:177	
671	nec8	nec.w	5HL	Necrotic leaf spot 8	43:179	3600
672	nec9	Mut 3091	3HL	Necrotic leaf spot 9	43:181	3599
674	mtt8	Mut 1661		Mottled leaf 8	43:182	3597
675	mtt9	Mut 2721		Mottled leaf 9	43:183	3598
681	nec10	necS 1-1	3H	Necroticans 10	43:184	3607
682	nec11		1H	Necroticans 11	43:185	3610
683	nec12			Necroticans 12	43:186	3613
684	nec13			Necroticans 13	43:187	3616
685	nec14			Necroticans 14	43:188	3619
686	nec15			Necroticans 15	43:189	3620
687	nec16			Necroticans 16	43:190	3621
688	nec17			Necroticans 17	43:191	3622
689	nec18			Necroticans 18	43:192	3623
690	nec19			Necroticans 19	43:193	3624
691	nec20			Necroticans 20	43:194	3625
692	nec21			Necroticans 21	43:195	3626
693	Nec22			Necroticans 22	43:196	3627
694	nec23			Necroticans 23	43:197	3628
695	Nec24			Necroticans 24	43:198	3629
696	nec25			Necroticans 25	43:199	3630
697	Nec26			Necroticans 26	43:200	3631
698	nec27			Necroticans 27	43:201	3633
699	nec28			Necroticans 28	43:202	3635
700	nec29			Necroticans 29	43:203	3636
701	nec30			Necroticans 30	43:204	3637
702	nec31			Necroticans 31	43:205	3638
703	nec32			Necroticans 32	43:206	3639
704	nec33			Necroticans 33	43:207	3640
711	Rpt3	Qrptts2	2HS	Reaction to *Pyrenophora teres 3*	43:208	

Table 1. (continued)

BGS no.	Locus Symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
713	Rpt6		5HL	Reaction to *Pyrenophora teres* 6	43:210	
714	Rpt7	Qrpts4	4HL	Reaction to *Pyrenophora teres* 7	43:211	
718	ops2	op-2	5HL	Opposite spikelets 2	43:213	2426
719	ops3	op-1	5HS	Opposite spikelets 3	43:214	2425
720	viv-c	viv-1	5H	Viviparoides-c	43:215	2497
721	ari-w	ari-153	7H	Breviaristatum-w	43:216	
722	ari-y	ari-9	5H	Breviaristatum-y	43:217	
723	mov5	mov.o		Multiovary 5	43:218	3671
724	lks6	lks.q	1H/5H/6H	Short awn 6	43:219	3674
725	ovl3			Ovaryless 3	43:220	3687
726	mnd7			Many noded dwarf 7	43:221	3686
727	ubs5			Unbranched style 5	43:222	3675
728	fxp1			Fenoxaprop-p-ethyl reaction 1	43:223	3684

* Recommended locus symbols are based on utilization of a three letter code for barley genes as approved at the business meeting of the Seventh International Barley Genetics Symposium at Saskatoon, Saskatchewan, Canada, on 05 August 1996.

† Chromosome numbers and arm designations are based on a resolution passed at the business meeting of the Seventh International Barley Genetics Symposium at Saskatoon, Saskatchewan, Canada, on 05 August 1996. The Burnham and Hagberg (1956) designations of barley chromosomes were 1 2 3 4 5 6 and 7 while new designations based on the Triticeae system are 7H 2H 3H 4H 1H 6H and 5H, respectively.

‡ The seed stock associated with each BGS number is held as a GSHO stock number in the Barley Genetics Stock Collection at the USDA-ARS National Grains Germplasm Research Facility, Aberdeen, Idaho, USA.