Descriptions of barley genetic stocks for 2014

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In this volume of the Barley Genetics Newsletter, one hundred and thirteen revised and new 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 new and revised Barley Genetic Stock (BGS) descriptions published in volume 44 of the Barley Genetics Newsletter, giving recommended locus symbols and names, chromosomal locations, and stock source information.

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
7	nud1	n, h	7HL	Naked caryopsis 1	44:51	115
13	des4	des4	7H	Desynapsis 4	44:54	595
14	des5	des5	7HL	Desynapsis 5	44:56	596
30	ert-m	ert-m	7HS	Erectoides-m	44:57	487
39	mss2	mss2	7HS	Midseason stripe 2	44:59	2409
40	prm1	prm	7HS	Premature ripe 1	44:60	2429
56	wst4	wst4	2HL	White streak 4	44:61	568
59	gpa1	gp, gp2	2HL	Grandpa 1	44:62	1379
65	Eam1	Ppd-H1, Ea	2HS	Early maturity 1	44:64	1316
68	Pvc1	P_c	2HL	Purple veined lemma 1	44:67	132
69	Gth1	G	2HL	Toothed lemma 1	44:68	309
76	Pre2	Re2, P	2HL	Red lemma and pericarp 2	44:70	234
80	ant2	pr, rub	2HL	Anthocyanin-less 2	44:72	1632
83	sld2	sld2	2HS	Slender dwarf 2	44:74	2491
84	mss1	mss	5H	Midseason stripe 1	44:75	1404
85	yst4	yst4	2HL	Yellow streak 4	44:76	2502
86	fst13	f13	5HL	Chlorina seedling 13	44:77	16
87	fst14	f14	2HL	Chlorina seedling 14	44:78	1739
89	ari-g	ari-g, lk10	2H	Breviaristatum-g	44:79	1655
109	yst2	yst2	3HS	Yellow streak 2	44:81	570
114	cur2	cu2	3HL	Curly 2	44:82	274
127	Pub1	Pub	3HL	Pubescent leaf blade 1	44:84	1576
128	sca1	sca	3HS	Short crooked awn 1	44:85	2439
130	eam10	ea_{sp}	3HL	Early maturity 10	44:86	2504
131	gra-a	gran-a	7H	Granum-a	44:88	1757
144	sld5	sld5	3HS	Slender dwarf 5	44:90	2483
151	fch9	f9	4HS	Chlorina seedling 9	44:92	571
156	lbi2	lb2, ert-i	4HS	Long basal rachis internode 2	44:93	572
157	brh2	br2, ari-l	4HL	Brachytic 2	44:95	573
161	min1	min	4HL	Semi-minute dwarf 1	44:97	987
164	Hln1	Hn	4HL	Hairs on lemma nerves 1	44:99	576
166	msg25	msg,,r	4HL	Male sterile genetic 25	44:101	744
170	lgn3	lg3	1HL	Light green 3	44:103	171
171	lgn4	lg4, lg9	4HL	Light green 4	44:105	681
179	Hsh1	Hs	4HL	Hairy leaf sheath 1	44:107	986
183	Ynd1	Yn	4HS	Yellow node 1	44:109	1607
185	brh5	brh.m	4HS	Brachytic 5	44:110	1678
229	cud2	cud2	1HL	Curly dwarf 2	44:111	1712

Table 1. (continued)

BGS no.	Locus Symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
257	raw5	r,,e	6HL	Smooth awn 5	44:112	785
268	lax-b	lax-b	6HL	Laxatum-b	44:113	1776
269	lys6	lys6	6H	High lysine 6	44:114	1786
303	var3	va3	5HL	Variegated 3	44:115	1277
313	fch6	f6, yv	5HL	Chlorina seedling 6	44:116	1390
320	int-b	int-b	5HL	Intermedium spike-b	44:118	1764
331	ert-n	ert-n	5HL	Erectoides-n	44:120	488
347	mnd4	m4	5HL	Many noded dwarf 4	44:122	1798
352	gsh2	gs2, cer-b	3HL	Glossy sheath 2	44:124	736
355	gsh5	gs5, cer-s	2HL	Glossy sheath 5	44:126	739
359	msg3	ms3	2HS	Male sterile genetic 3	44:128	1130
375	msg20	ms20	4HL	Male sterile genetic 20	44:130	2372
388	des9	des9	7HL	Desynapsis 9	44:131	600
390	des11	des11	3HL	Desynapsis 11	44:132	602
391	des12	des12	3H	Desynapsis 12	44:133	603
392	des13	des13	3H	Desynapsis 13	44:134	604
393	des14	des14	7H	Desynapsis 14	44:135	605
394	des15	des15	3HL	Desynapsis 15	44:136	606
395	msg26	msg26	7HS	Male sterile genetic 26	44:137	745
396	seg6	se6	3HL	Shrunken endosperm genetic 6	44:138	2467
402	cer-g	cer-g	2HL	Eceriferum-g	44:140	428
406	cer-l	cer-l	3HL	Eceriferum-l	44:142	433
408	cer-n	cer-n	2HL	Eceriferum-n	44:143	435
411	cer-r	cer-r	3HL	Eceriferum-r	44:145	439
414	cer-v	cer-v	2HS	Eceriferum-v	44:147	443
417	cer-y	cer-y	1HS	Eceriferum-y	44:149	446
418	cer-z	cer-z	7HS	Eceriferum-z	44:150	447
423	cer-ze	gl5	7HS	Eceriferum-ze	44:152	452
432	cer-zo	cer-zo	3HS	Eceriferum-zo	44:154	462
435	cer-zr	cer-zr	5HL	Eceriferum-zr	44:155	1525
436	cer-zs	cer-zs		Eceriferum-zs	44:156	1526
437	cer-zt	cer-zt	2HS	Eceriferum-zt	44:157	1527
441	cer-zx	cer-zx	3H	Eceriferum-zx	44:158	1531
443	cer-zz	cer-zz		Eceriferum-zz	44:159	1533
449	cer-yf	cer-yf	7H	Eceriferum-yf	44:160	1539
450	cer-yg	cer-yg	7HS	Eceriferum-yg	44:161	1540
453	fer1	fer		Few roots 1	44:162	
462	yst3	yst,,c	3HS	Yellow streak 3	44:163	48
463	gig1	gig,sf	2HL	Gigas 1	44:164	1650

501	msg38	msg,,jl	3HL	Male sterile genetic 38	44:166	2390
524	cer-yk	cer-yk	7HL	Eceriferum-yk	44:167	1544

Table 1. (continued)

BGS no.	Locus Symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
528	cer-yo	cer-yo	4HS	Eceriferum-yo	44:168	1548
529	cer-yp	cer-yp	5HS	Eceriferum-yp	44:169	1549
530	cer-yq	cer-yq	5H	Eceriferum-yq	44:170	1550
531	cer-yr	cer-yr	5HL	Eceriferum-yr	44:171	1551
532	cer-ys	cer-ys	2HL	Eceriferum-ys	44:172	1552
537	cer-yz	cer-yz	1H/5H	Eceriferum-yz	44:173	1557
538	cer-xa	cer-xa	2HL/4H/5HL	Eceriferum-xa	44:174	1558
539	cer-xb	cer-xb	4H	Eceriferum-xb	44:175	1559
540	cer-xc	cer-xc	1H	Eceriferum-xc	44:176	1560
541	cer-zd	cer-zd	4H/5HL	Eceriferum-xd	44:177	1561
543	int-f	int-f	2HS/ 3HL	Intermedium spike-f	44:178	1767
544	int-h	int-h	5H	Intermedium spike-h	44:179	1768
546	int-k	int-k	7H	Intermedium spike-k	44:180	1770
547	int-m	int-m	5HL	Intermedium spike-m	44:181	1772
549	Lga1	Log	7HS	Long glume awn 1	44:183	835
550	ari-b	ari-b		Breviaristatum-b	44:185	1649
552	ari-j	ari-j		Breviaristatum-j	44:186	1658
553	ari-k	ari-k	3H	Breviaristatum-k	44:187	1659
558	ari-q	ari-q	4H	Breviaristatum-q	44:188	1665
561	ert-h	ert-h	5HL	Erectoides-h	44:189	481
571	ert-za	ert-za	5H	Erectoides-za	44:190	501
612	gig2	gig2	4HL	Gigas 2	44:191	1750
617	cul4	uc-5, uc-3	3HL	Uniculme 4	44:192	2495
618	mnd3	mn3, m3	4HS	Many noded dwarf 3	44:194	1797
619	bra-a	bra-a	7H	Bracteatum-a	44:196	1693
620	cal-b	cal-b	5HL	Calcaroides-b	44:197	1697
623	eli-a	lig-a		Eligulum-a	44:199	3647
625	sci-a	sci-3	5H	Scirpoides 1	44:200	
626	scl-a	scl-6	1HL	Scirpoides leaf-a	44:201	
632	mnd5	mnd5	7HL	Many noded dwarf 5	44:202	
633	mnd6	den-6	5HL	Many noded dwarf 6	44:203	1713
657	brh15	brh.u	2HL	Brachytic 15	44:205	1685
675	mtt9	Mut 2721		Mottled leaf 9	44:207	3598
729	dsk2	msg,,df	7HL	Dusky 2	44:208	

* 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.