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Descriptions of barley genetic stocks Tables 2 and 3 (2013).

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In this section of the Barley Genetics Newsletter, you will find two updated tables with new and revised barley locus descriptions. The descriptions are listed by BGS numbers (Table 2) and by alphabetic order using the existing and recommended symbols (Table 3). As research in barley is proceeding rapidly, it is necessary to update the latest research and findings about specific barley genes.

Table 2. A listing of Barley Genetic Stock (BGS) descriptions in recent issues of the Barley Genetics Newsletter with chromosome location information, recommended locus symbols, locus names, and stock location information.

Table 3. An alphabetic listing of recently published Barley Genetic Stock (BGS) descriptions for loci in barley (*Hordeum vulgare*), including information on chromosomal locations, recommended locus names, and original cultivars.

Table 2. A listing of Barley Genetic Stock (BGS) descriptions in recent issues of the Barley Genetics Newsletter with chromosome location information, recommended locus symbols, locus names, and stock location information.

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
1	brh1	br, ari-i	7HS	Brachytic 1	43: 48	25
2	fch12	f_c, clo-fc	7HS	Chlorina seedling 12	41: 60	36
3	yvs2	y_c	7HS	Virescent seedling 2	26: 46	41
4	abo8	a_{c2}, alb-m	7HS	Albino seedling 8	26: 47	61
5	fch8	f8	7HS	Chlorina seedling 8	41: 62	40
6	vrs1	v, Int-d	2HL	Six-rowed spike 1	37:192	196
7	nud1	n, h	7HL	Naked caryopsis 1	37:195	115
9	dsp1	l	7HS	Dense spike 1	43: 50	1232
10	lks2	lk2, lk4	7HL	Short awn 2	41: 66	566
11	ubs4	u4, ari-d	7HL	Unbranched style 4	41: 69	567
12	des1	lc	7H	Desynapsis 1	42: 58	592
13	des4	des4	7H	Desynapsis 4	41: 71	595
14	des5	des5	7HL	Desynapsis 5	41: 73	596
15	blx1	bl	4HL	Non-blue aleurone xenia 1	26: 60	185
16	wax1	wx, glx	7HS	Waxy endosperm 1	42: 65	908
17	fch4	f4, yv	7HL	Chlorina seedling 4	43: 54	1214
18	fch5	f5, yv2	7HS	Chlorina seedling 5	43: 56	1215
19	blx2	bl2	7HS	Non-blue aleurone xenia 2	26: 65	209
20	Rym2	Ym2	7HL	Reaction to BaYMV 2	26: 66	984
21	Run1	Un	7HS	Reaction to *Ustilago nuda* 1	26: 67	1324
22	Rsg1	Grb	7H	Reaction to *Schizaphis graminum* 1	37:199	1317
23	wnd1	wnd	4HL	Winding dwarf 1	42: 74	2499
24	fst3	fs3	7HS	Fragile stem 3	41: 74	1746
25	Xnt1	X_a	7HL	Xantha seedling 1	26: 71	1606
26	snb1	sb	7HS	Subnodal bract 1	26: 72	1217
27	lbi3	lb3	7HL	Long basal rachis internode 3	42: 79	536
28	ert-a	ert-a	7HS	Erectoides-a	41: 76	468
29	ert-d	ert-d	7HS	Erectoides-d	42: 82	475
30	ert-m	ert-m	7HS	Erectoides-m	26: 78	487
31	sex6	sex6	7HS	Shrunken endosperm xenia 6	26: 80	2476
32	Rph9	Pa9	5HL	Reaction to *Puccinia hordei* 9	37:201	1601

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
33	ant1	rs, rub-a	7HS	Anthocyanin-less 1	42: 89	1620
34	msg50	msg,,hm	7HL	Male sterile genetic 50	43: 57	2404
35	rsm1	sm	7HS	Reaction to BSMV 1	26: 84	2492
36	xnt4	x_{c2}	7HL	Xantha seedling 4	26: 85	42
37	xnt9	xan,,i	7HL	Xantha seedling 9	26: 86	584
38	smn1	smn	3H/5H	Seminudoides 1	43: 58	1602
39	mss2	mss2	7HS	Midseason stripe 2	32: 79	2409
40	prm1	prm	7HS	Premature ripe 1	32: 80	2429
41	brh7	brh.w	7H	Brachytic 7	42: 98	1687
42	Pyr1	Pyr.g,Pyr.i	3HL	Pyramidatum 1	41: 78	1581
43	mov1	mo5	7HL	Multiovary 1	43: 59	3641
44	brh16	brh.v	7HL	Brachytic 16	37:204	1686
45	sdw4		7HL	Semidwarf 4	41: 80	
48	Rpt4	QRpt7	7HL	Reaction to *Pyrenophora teres* 4	43: 61	
49	sld8	sld.i	7HS/ 4HL	Slender dwarf 8	43: 63	2484
51	rtt1	rt	2HS	Rattail spike 1	26: 87	216
52	fch15	or	2HS	Chlorina seedling 15	40: 48	49
53	abo2	a2	2HS	Albino seedling 2	26: 89	70
55	fch1	f, lg	2HS	Chlorina seedling 1	40: 49	112
56	wst4	wst4	2HL	White streak 4	26: 91	568
57	eog1	e, lep-e	2HL	Elongated outer glume 1	43: 64	29
58	vrs1	lr, v^{lr}	2HL	Six-rowed spike 1	26: 94	153
59	gpa1	gp, gp2	2HL	Grandpa 1	26: 95	1379
60	lig1	li, aur-a	2HL	Liguleless 1	42:116	6
61	trp1	tr	4HL	Triple awned lemma 1	41: 82	210
62	sbk1	sk, cal-a	2HS	Subjacent hood 1	40: 51	267
63	yvs1	y_x, alb-c2	2HS	Virescent seedling 1	26: 99	68
64	des7	des7	3H	Desynapsis 7	43: 67	598
65	Eam1	Ppd-H1, Ea	2HS	Early maturity 1	26:101	1316
66	vrs1	V^d	2HL	Two-rowed spike 1	26:103	346
67	vrs1	V^t	2HL	Deficiens 1	26:104	684
68	Pvc 1	P_c	2HL	Purple veined lemma 1	26:105	132

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
69	Gth 1	G	2HL	Toothed lemma 1	26:106	309
70	Rph1	Pa	2H	Reaction to *Puccinia hordei* 1	26:107	1313
71	com2	bir2	2HS	Compositum 2	40: 53	1703
72	glo-c	glo-c	2H	Globosum-c	43: 68	1329
73	fol-a	fol-a	2HL	Angustifolium-a	43: 69	1744
74	flo-c	flo-c	2HS	Extra floret-c	26:111	1743
75	Lks1	Lk	2HL	Awnless 1	41: 84	44
76	Pre2	Re2, P	2HL	Red lemma and pericarp 2	26:113	234
77	hcm1	h	2HL	Short culm 1	26:115	2492
78	mtt4	mtt,,e, mt	2HL	Mottled leaf 4	41: 86	1231
79	wst7	rb	2HL	White streak 7	41: 87	247
80	ant2	pr, rub	2HL	Anthocyanin-less 2	26:118	1632
81	gsh7	gs7	1H/2H /5H	Glossy sheath 7	40: 55	1759
82	Zeo1	Knd, Ert-r	2HL	Zeocriton 1	41: 89	1613
83	sld2	sld2	2HS	Slender dwarf 2	26:121	2491
84	mss1	mss	2H	Midseason stripe 1	26:122	1404
85	yst4	yst4	2HL	Yellow streak 4	37:210	2502
86	fch13	f13		Chlorina seedling 13	26:124	16
87	fch14	f14	2HL	Chlorina seedling 14	37:211	1739
88	Rph2	Pa2, A	5HS	Reaction to *Puccinia hordei* 2	37:212	1593
89	ari-g	ari-g, lk10		Breviaristatum-g	26:128	1655
90	ert-j	ert-j	2H	Erectoides-j	43: 70	484
91	ert-q	ert-q	6H	Erectoides-q	43: 71	1562
92	ert-u	ert-u, br5	2H	Erectoides-u	26:131	496
93	ert-zd	ert-zd, br7	7HL	Erectoides-zd	41: 91	504
94	abo4	a4	2H	Albino seedling 4	26:133	167
95	abo13	alb,,p	2HL	Albino seedling 13	26:134	585
96	Rph15	Rph16	2HS	Reaction to *Puccinia hordei* 15	37:214	1586
97	acr1	acr	2HL	Accordion rachis 1	40: 56	1617
98	Eam6	Ea6, Ea	2HS	Early maturity 6	37:216	
99	lin1	s, rin	2HL	Lesser internode number 1	41: 92	2492
100	sld4	sld.d	2HS	Slender dwarf 4	43: 72	2479
101	als1	als	3HL	Absent lower laterals 1	43: 74	1065

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
102	uzu1	uz, u	3HL	Uzu 1 or semi brachytic 1	41: 94	1300
104	yst1	yst, ys	3HS	Yellow streak 1	42:178	1140
105	xnt3	x_c, vir-l	3HS	Xantha seedling 3	26:139	66
106	abo6	a_c	3HS	Albino seedling 6	26:140	30
107	wst1	wst, wst3	3HL	White streak 1	41: 97	159
108	alm1	al, ebu-a	3HS	Albino lemma 1	43: 76	270
109	yst2	yst2	3HS	Yellow streak 2	26:144	570
111	dsp10	l_c	3HL	Dense spike 10	41: 99	71
112	abo9	a_n	3HS	Albino seedling 9	26:146	348
113	xnt6	x_s	3HS	Xantha seedling 6	26:147	117
114	cur2	cu2	3HL	Curly 2	26:148	274
115	btr1	bt1	3HS	Non-brittle rachis 1	43: 78	1233
116	btr2	bt2	3HS	Non-brittle rachis 2	43: 80	842
117	fch2	f2, lg5	3HL	Chlorina seedling 2	26:151	107
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
121	Rph3	Pa3	7HL	Reaction to *Puccinia hordei* 3	26:156	1316
122	Rph5	Pa5, Pa6	3HS	Reaction to *Puccinia hordei* 5	37:224	1597
123	Ryd2	Yd2	3HL	Reaction to BYDV 2	26:158	1315
124	vrs4	mul, int-e	3HL	Six-rowed spike 4	41:101	775
125	lzd1	dw4	3H	Lazy dwarf 1	43: 87	1787
126	sld1	dw1	3HL	Slender dwarf 1	41:103	2488
127	Pub1	Pub	3HL	Pubescent leaf blade 1	26:163	1576
128	sca1	sca	3HS	Short crooked awn 1	26:164	2439
129	wst6	wst,,j	3HL	White streak 6	41:105	2500
130	eam10	ea_{sp}	3HL	Early maturity 10	37:226	2504
131	gra-a	gran-a	7H	Granum-a	42:216	1757
132	ari-a	ari-a, lk7	3HS	Breviaristatum-a	41:106	1648
133	sdw2	sdw-b	3HL	Semidwarf 2	26:169	2466
134	ert-c	ert-c	3HL	Erectoides-c	41:108	471
135	ert-ii	ert-ii	3HL	Erectoides-ii	26:172	483
136	Rph7	Pa7, Pa5	3HS	Reaction to *Puccinia hordei* 7	37:228	1318
137	Rph10	Rph10	3HL	Reaction to *Puccinia hordei* 10	26:174	1588

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
138	nec4	nec4	3H	Necrotic leaf spot 4	43: 88	
139	nec5	nec5	3H	Necrotic leaf spot 5	43: 89	
140	xnt8	xan,,h	3HS	Xantha seedling 8	26:177	582
141	rym5	Ym	3HL	Reaction to barley yellow mosaic virus 5	32: 90	
142	brh8	brh.ad	3HL	Brachytic 8	42:232	1671
143	sex8	sex.j	3HS	Shrunken endosperm xenia 8	43: 90	2471
144	sld5	sld5	3HS	Slender dwarf 5	32: 94	2483
146	cal-d	cal-d	3H	Calcaroides-d	40: 58	1698
147	mov2	mo	3HS	Multiovary 2	43: 91	3642
148	brh14	brh.q	3HL	Brachytic 14	37:231	1682
149	Rpc1		3H	Reaction to *Puccinia coronata* var. *hordei* 1	37:232	1601
150	scl-b	scl.5	3H/6H	Scirpoides leaf-b	40: 60	
151	fch9	f9	4HS	Chlorina seedling 9	26:178	571
152	Kap1	K	4HS	Hooded lemma 1	26:179	985
155	glf1	gl, cer-zh	4HL	Glossy leaf 1	40: 61	98
156	lbi2	lb2, ert-i	4HL	Long basal rachis internode 2	26:183	572
157	brh2	br2, ari-l	4HL	Brachytic 2	37:235	573
158	yhd1	yh	4HL	Yellow head 1	42:250	574
160	min2	en-min		Enhancer of minute 1	26:186	266
161	min1	min	4HL	Semi-minute dwarf 1	26:187	987
163	sgh1	sh1	4HL	Spring growth habit 1	26:188	575
164	Hln1	Hn	4HL	Hairs on lemma nerves 1	26:189	576
165	glf3	gl3, cer-j	4HL	Glossy leaf 3	43: 92	577
166	msg25	msg,,r	4HL	Male sterile genetic 25	26:192	744
167	rym1	Ym	4HL	Reaction to barley yellow mosaic virus 1	32: 96	
168	glo-a	glo-a	4HS	Globosum-a	26:194	1328
169	lgn2	lg2	4HS	Light green 2	42:264	171
170	lgn3	lg3	4HL	Light green 3	26:195	171
171	lgn4	lg4, lg9	4HL	Light green 4	26:196	681
172	lks5	lk5, ari-c	4HL	Short awn 5	41:110	1297
173	blx3	bl3	4HL	Non-blue aleurone xenia 3	26:198	2506
174	blx4	bl4	4HL	Non-blue (pink) aleurone xenia 4	26:199	2507

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Locus symbol* Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
176	ovl1	ovl	4H	Ovaryless 1	35:191	
177	fch10		4H	Chlorina seedling 10	43: 95	1737
178	int-c	i, v5	4HS	Intermedium spike-c	37:237	776
179	Hsh1	Hs	4HL	Hairy leaf sheath 1	37:240	986
180	sid1	nls	4HL	Single internode dwarf 1	43: 97	2477
181	eam9	ea,,c	4HL	Early maturity 9	26:204	1732
182	flo-a	flo-a	6H	Extra floret-a	41:112	1741
183	Ynd1	Yn	4HS	Yellow node 1	32: 98	
184	Zeo3	Zeo.h	4HL	Zeocriton 3	32: 99	1611
185	brh5	brh.m	4HS	Brachytic 5	37:242	1678
186	sld3	ant17.567	4HS	Slender dwarf 3	40: 63	2480
187	brh9	brh.k	4HL	Brachytic 9	43: 99	1676
189	Acr2	Acr, lax	4HL	Accordion rachis 2	40: 65	1071
190	tfm1		1HL	Thick filament 1	40: 67	
191	fch17	vy	1H/3H	Chlorina seedling 17	40: 68	1079
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	
198	Rpt8	QRpts4	4HS	Reaction to *Pyrenophora teres* 8	43:105	
201	fch7	f7, clo-f7	1HL	Chlorina seedling 7	41:113	4
202	trd1	t, bra-c	1HL	Third outer glume 1	26:207	227
203	Blp1	B	1HL	Black lemma and pericarp 1	40: 69	988
207	abo1	a_t	1HL	Albino seedling 1	26:210	51
208	fst2	fs2	1HL	Fragile stem 2	41:114	578
213	Sgh3	Sh3	1HL	Spring growth habit 3	26:212	764
214	eam8	ea_k, mat-a	1HL	Early maturity 8	41:116	765
215	des6	des6	1HL/ 5HL	Desynapsis 6	43:106	597
218	Rph4	Pa4	1HS	Reaction to *Puccinia hordei* 4	42:302	1314
220	fch3	f3	1HS	Chlorina seedling 3	40: 71	851
221	wst5	wst5	1HL	White streak 5	26:219	591
222	nec1	sp,,b	1HL	Necrotic leaf spot 1	43:108	989

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
223	zeb3	zb3, zb_c	1HL	Zebra stripe 3	40: 72	1451
224	ert-b	ert-b	1HL	Erectoides-b	40: 74	470
225	clh1	clh	7H/5H	Curled leaf dwarf 1	40: 76	1212
226	rvl1	rvl	1HL	Revoluted leaf 1	40: 77	608
227	sls1	sls	1HL	Small lateral spikelet 1	40: 78	2492
228	Sil1	Sil	1H	Subcrown internode length 1	40: 79	1604
229	cud2	cud2	1HL	Curly dwarf 2	26:227	1712
230	glo-e	glo-e	1HL	Globosum-e	26:228	1755
231	cur5	cu5	2HS	Curly 5	41:120	1710
232	Lys4	sex5	1HS	High lysine 4	40: 80	2475
233	xnt7	xan,,g	1HL	Xantha seedling 7	26:231	581
234	mov3	mo-a	1H	Multiovary 3	32:102	
235	lel1	lel	1HL	Leafy lemma 1	32:103	1780
237	Rpt2	Rpt2c	1HS	Reaction to *Pyrenophora teres* 2	43:110	
238	ari-t	ari-25	1H	Breviaristatum-t	40: 82	
239	sci-b	sci-4	1H/6H	Scirpoides-b	40: 83	
240	sdw6	sdw.f	1H/7H	Semidwarf 6	40: 84	2449
241	Acr3	acr	1HL	Accordionrachis 3	40: 85	1071
242	sld6	sld.g	1H	Slender dwarf 6	40: 87	2482
244	dsp11	dsp.am, dsp.ao	1HL	Dense spike 11	41:121	1722 1723
251	mul2	mul2	6HL	Multiflorus 2	26:232	1394
252	eam7	ea7, ec	6HS	Early maturity 7	41:123	579
253	cul2	uc2	6HL	Uniculm 2	43:112	531
254	rob1	o, rob-o	6HS	Orange lemma 1	37:255	707
255	xnt5	x_n	6HL	Xantha seedling 5	26:237	43
257	raw5	r,,e	6HL	Smooth awn 5	26:238	785
258	dsp9	l9, ert-e	6HL	Dense spike 9	43:114	1774
260	fch11	f11	6HL	Chlorina seedling 11	26:240	1738
261	nec2	nec2	6HS	Necrotic leaf spot 2	26:241	1224
262	cur1	cu1	6HL	Curly 1	26:242	1705
263	cur3	cu3	6HL	Curly 3	41:125	1707
264	mtt5	mt,,f	6HL	Mottled leaf 5	41:126	2410
265	nec3	nec3	6HS	Necrotic leaf spot 3	43:116	1330

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
266	ert-e	ert-e, dsp9	6HL	Erectoides-e	43:118	477
267	Rph11	Rph11	6HL	Reaction to *Puccinia hordei* 11	26:247	1589
268	lax-b	lax-b	6HL	Laxatum-b	26:248	1776
269	lys6	lys6	6H	High lysine 6	26:249	1786
270	abo14	alb,,q	6HL	Albino seedling 14	26:250	586
271	abo15	alb,,t	6HS	Albino seedling 15	26:251	
272	Rpt5	Pt_a	6HL	Reaction to *Pyrenophora teres* 5	43:120	
274	ari-x	ari-22	6H	Breviaristatum-x	43:124	
301	fst1	fs	5HL	Fragile stem 1	26:252	629
302	mtt2	mt2	5HL	Mottled leaf 2	41:127	1398
303	var3	va3	5HL	Variegated 3	26:254	1277
304	wst2	wst2	5HL	White streak 2	26:255	766
305	crm1	cm	5HL	Cream seedling 1	26:256	20
306	var1	va	5HL	Variegated 1	37:259	1278
308	lbi1	lb, rac-a	5HL	Long basal rachis internode 1	43:125	580
309	Sgh2	Sh2	5HL	Spring growth habit 2	26:259	770
311	dex1	sex2	5HS	Defective endosperm xenia 1	26:260	
312	raw1	r	5HL	Smooth awn 1	26:261	27
313	fch6	f6, yv	5HL	Chlorina seedling 6	26:262	1390
314	vrs2	v2	5HL	Six-rowed spike 2	26:263	773
315	vrs3	v3, int-a	1HL	Six-rowed spike 3	40: 90	774
317	ddt1	ddt	5HS	Reaction to DDT 1	26:266	331
319	rpg4	rpg4	5HL	Reaction to *Puccinia graminis* 4	26:267	2438
320	int-b	int-b	5HL	Intermedium spike-b	26:268	1764
321	srh1	s, l	5HL	Short rachilla hair 1	26:269	27
322	dsk1	dsk	5HL	Dusky 1	41:128	1714
323	nld1	nld	5HL	Narrow leafed dwarf 1	26:271	769
324	cud1	cud	5HL	Curly dwarf 1	26:272	1711
325	crl1	crl, cl	6H	Curly lateral 1	41:129	1211
326	blf1	bb	2HL	Broad leaf 1	41:130	1393
327	flo-b	flo-b	5HL	Extra floret-b	26:275	1742
328	ari-e	ari-e, lk9	5HL	Breviaristatum-e	41:131	1653
329	ari-h	ari-h	5HL	Breviaristatum-h	26:277	1656
330	ert-g	ert-g, br3	1HL	Erectoides-g	41:133	479

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
331	ert-n	ert-n	5HL	Erectoides-n	26:279	488
332	Ert-r	Ert-r	2HL	Erectoides-r	41:135	492
333	Rph12	Rph12	5HL	Reaction to *Puccinia hordei* 12	26:281	1590
334	raw6	r6	5HL	Smooth awn 6	26:282	2437
335	msg49	msg,,jw	5HL	Male sterile genetic 49	26:283	2402
336	glo-b	glo-b	5HL	Globosum-b	26:284	1326
337	blf2	bb2, nlh	5HL	Broad leaf 2	41:137	1667
338	lys1	lys	5HL	High lysine 1	26:286	1784
339	lys3	sex3	5HL	High lysine 3	43:127	1785
340	raw2	r2	5HL	Smooth awn 2	26:289	27
341	abo12	alb,,o	5HS	Albino seedling 12	26:290	583
342	glo-f	glo-e	5HL	Globosum-f	26:291	
343	Lfb1	Lfb	5HL	Leafy bract 1	41:140	1577
344	var2	va2	5HL	Variegated 2	32:104	2496
345	rym3	ym3	5HS	Reaction to barley yellow mosaic virus 3	32:105	
346	yst5	yst5	7HS	Yellow streak 5	43:130	2501
347	mnd4	m4	5HL	Many noded dwarf 4	32:108	1798
348	Eam5	Ea5	5HL	Early maturity 5	37:260	
349	brh4	brh.j	2HL	Brachytic 4	42:407	1675
350	brh6	brh.s	5HS	Brachytic 6	42:408	1683
351	gsh1	gs1, cer-q	2HS	Glossy sheath 1	43:131	735
352	gsh2	gs2, cer-b	3HL	Glossy sheath 2	41:141	736
353	gsh3	gs3, cer-a	7HS	Glossy sheath 3	41:143	737
354	gsh4	gs4, cer-x	6HL	Glossy sheath 4	41:146	738
355	gsh5	gs5, cer-s	2HL	Glossy sheath 5	41:149	739
356	gsh6	gs6, cer-c	2HS	Glossy sheath 6	43:135	740
357	msg1	ms1	1HL	Male sterile genetic 1	40: 98	1810
358	msg2	ms2	2HL	Male sterile genetic 2	42:428	2371
359	msg3	ms3	2HS	Male sterile genetic 3	26:307	1130
360	msg4	ms4	1H	Male sterile genetic 4	40:100	2392
361	msg5	ms5	3HS	Male sterile genetic 5	26:309	2403
362	msg6	ms6	6HS	Male sterile genetic 6	26:310	2405
363	msg7	ms7	5HL	Male sterile genetic 7	26:311	2406

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
364	msg8	ms8	5HL	Male sterile genetic 8	26:312	2407
365	msg9	ms9	2HS	Male sterile genetic 9	26:313	2408
366	msg10	ms10	7HS	Male sterile genetic 10	26:314	1811
367	msg11	ms11		Male sterile genetic 11	26:315	1812
368	msg13	ms13		Male sterile genetic 13	26:316	1813
369	msg14	ms14	7HS	Male sterile genetic 14	26:317	1814
370	msg15	ms15		Male sterile genetic 15	26:318	1815
371	msg16	ms16	5HS	Male sterile genetic 16	26:319	1816
372	msg17	ms17		Male sterile genetic 17	26:320	1817
373	msg18	ms18	5HL	Male sterile genetic 18	26:321	1818
374	msg19	ms19	5HS	Male sterile genetic 19	26:322	1819
375	msg20	ms20	4HL	Male sterile genetic 20	43:139	2372
376	msg21	ms21	1HL	Male sterile genetic 21	40:101	2373
377	seg1	se1	7HL	Shrunken endosperm genetic 1	37:264	750
378	seg2	se2	7HS	Shrunken endosperm genetic 2	26:326	751
379	seg3	se3	3H	Shrunken endosperm genetic 3	37:265	752
380	seg4	se4	7HL	Shrunken endosperm genetic 4	37:267	753
381	seg5	se5	7HS	Shrunken endosperm genetic 5	26:329	754
382	sex1	lys5	6HL	Shrunken endosperm xenia 1	26:330	755
383	msg22	ms22	7H	Male sterile genetic 22	26:331	741
384	msg23	ms23	7HL	Male sterile genetic 23	26:332	2375
385	msg24	ms24	4HL	Male sterile genetic 24	26:333	2376
386	des3	des3	2H/ 5HL	Desynapsis 3	43:140	594
387	des8	des8	3H	Desynapsis 8	41:151	599
388	des9	des9		Desynapsis 9	26:336	600
389	des10	des,,p	5HL	Desynapsis 10	41:152	601
390	des11	des11		Desynapsis 11	26:338	602
391	des12	des12		Desynapsis 12	26:339	603
392	des13	des13		Desynapsis 13	26:340	604
393	des14	des14		Desynapsis 14	26:341	605
394	des15	des15		Desynapsis 15	26:342	606
395	msg26	msg26	7HS	Male sterile genetic 26	26:343	745
396	seg6	se6	3HL	Shrunken endosperm genetic 6	37:268	2467

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
397	seg7	se7		Shrunken endosperm genetic 7	37:269	2468
399	cer-d	cer-d	5HL	Eceriferum-d	41:153	425
400	cer-e	cer-e	1HL	Eceriferum-e	40:102	1518
401	cer-f	cer-f	1H	Eceriferum-f	40:104	427
402	cer-g	cer-g	2HL	Eceriferum-g	41:155	428
403	cer-h	cer-h	4HS	Eceriferum-h	41:157	429
404	cer-i	cer-i	5HL	Eceriferum-i	41:158	430
405	cer-k	cer-k	4HL	Eceriferum-k	41:160	432
406	cer-l	cer-l		Eceriferum-l	26:355	433
407	cer-m	cer-m	1HL/ 3HL	Eceriferum-m	41:161	434
408	cer-n	gs9	2HL	Eceriferum-n	26:357	435
409	cer-o	cer-o	1HL	Eceriferum-o	40:106	436
410	cer-p	cer-p	7HL	Eceriferum-p	41:162	437
411	cer-r	cer-r	3HL	Eceriferum-r	26:361	439
412	cer-t	cer-t	5HL	Eceriferum-t	41:164	441
413	gsh8	cer-u, gs8	2HS	Glossy sheath 8	43:141	442
414	cer-v	cer-v	2HS	Eceriferum-v	26:366	443
415	cer-w	cer-w	5HL	Eceriferum-w	41:166	1519
417	cer-y	cer-y		Eceriferum-y	26:368	446
418	cer-z	cer-z	7HS	Eceriferum-z	26:369	447
419	cer-za	cer-za	5HL	Eceriferum-za	43:144	1521
420	cer-zb	cer-zb	5HS	Eceriferum-zb	42:508	1522
421	cer-zc	cer-zc	4HL/ 2HS	Eceriferum-zc	42:510	450
422	cer-zd	cer-zd	3HL	Eceriferum-zd	40:110	451
423	cer-ze	gl5	7HS	Eceriferum-ze	42:514	452
424	cer-zf	cer-zf	3H/ 7HS	Eceriferum-zf	42:516	453
425	cer-zg	cer-zg	4HL	Eceriferum-zg	26:377	454
427	cer-zi	cer-zi	1HL	Eceriferum-zi	41:168	456
428	cer-zj	cer-zj	5HL	Eceriferum-zj	42:520	457
429	cer-zk	cer-zk	2H	Eceriferum-zk	43:146	458
430	cer-zl	cer-zl		Eceriferum-zl	26:382	459

Table 2. (continued)

BGS no.	Locus symbol* Rec.	Prev.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
431	cer-zn	cer-zn	1H	Eceriferum-zn	40:112	1523
432	cer-zo	cer-zo	3HS	Eceriferum-zo	43:148	462
433	cer-zp	cer-zp	5HL	Eceriferum-zp	26:385	463
434	cer-zq	cer-zq		Eceriferum-zq	26:386	1524
435	cer-zr	cer-zr		Eceriferum-zr	26:387	1525
436	cer-zs	cer-zs		Eceriferum-zs	26:388	1526
437	cer-zt	cer-zt	2HS	Eceriferum-zt	37:270	1527
438	cer-zu	cer-zu	1HS	Eceriferum-zu	41:170	1528
439	cer-zv	cer-zv		Eceriferum-zv	26:391	1529
440	cer-zw	cer-zw		Eceriferum-zw	26:392	1530
441	cer-zx	cer-zx		Eceriferum-zx	26:393	1531
442	cer-zy	cer-zy	1HS	Eceriferum-zy	40:116	1532
443	cer-zz	cer-zz		Eceriferum-zz	26:395	1533
444	cer-ya	cer-ya	3HS	Eceriferum-ya	26:396	1534
445	cer-yb	cer-yb	2HL	Eceriferum-yb	41:171	1535
446	cer-yc	cer-yc	6H/ 7HS	Eceriferum-yc	41:172	1536
447	cer-yd	cer-yd	3HS	Eceriferum-yd	26:399	1537
448	cer-ye	cer-ye	4H	Eceriferum-ye	43:149	1538
449	cer-yf	cer-yf		Eceriferum-yf	37:271	1539
450	cer-yg	cer-yg	7HS	Eceriferum-yg	26:402	1540
451	cer-yh	cer-yh	3HS	Eceriferum-yh	26:403	1541
454	blx5	bl5	7HL	Non-blue aleurone xenia 5	26:404	2509
455	seg8	seg8	7H	Shrunken endosperm genetic 8	43:150	2469
460	cur4	cu4,glo-d	2HL	Curly 4	26:406	1708
461	zeb2	zb2, f10	4HS	Zebra stripe 2	43:152	93
462	yst3	yst,,c	3HS	Yellow streak 3	26:409	48
463	gig1	gig, sf	2H?	Gigas 1	26:410	1650
464	msg27	msg,,ae	2HL	Male sterile genetic 27	26:411	2379
465	msg28	msg,,as	2HS	Male sterile genetic 28	41:173	2380
466	msg29	msg,,a	5HL	Male sterile genetic 29	26:413	2381
467	msg30	msg,,c	7HL	Male sterile genetic 30	26:414	2382
468	msg31	msg,,d	1HL	Male sterile genetic 31	40:117	2383
469	msg32	msg,,w	7H	Male sterile genetic 32	26:416	2384

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
470	msg33	msg,,x	2HS	Male sterile genetic 33	26:417	2385
471	msg34	msg,,av	6H	Male sterile genetic 34	26:418	2386
472	abr1	abr	2HL	Accordion basal rachis internode 1	26:419	1563
473	com1	bir1	5HL	Compositum 1	40:118	1702
474	lax-a	lax-a	5HL	Laxatum-a	40:120	1775
475	lax-c	lax-c	6HL	Laxatum-c	41:174	1777
498	msg35	msg,,dr	2HL	Male sterile genetic 35	26:424	2387
499	msg36	msg,,bk	6HS	Male sterile genetic 36	26:425	2388
500	msg37	msg,,hl		Male sterile genetic 37	26:426	2389
501	msg38	msg,,jl		Male sterile genetic 38	26:427	2390
502	msg39	msg,,dm	3HL	Male sterile genetic 39	40:122	2391
503	msg40	msg,,ac	6H	Male sterile genetic 40	26:429	2393
504	msg41	msg,,aj		Male sterile genetic 41	26:430	2394
505	msg42	msg,,db	3H	Male sterile genetic 42	26:431	2395
506	msg43	msg,,br		Male sterile genetic 43	26:432	2396
507	msg44	msg,,cx		Male sterile genetic 44	26:433	2397
508	msg45	msg,,dp		Male sterile genetic 45	26:434	2398
509	msg46	msg,,ec		Male sterile genetic 46	26:435	2399
510	msg47	msg,,ep		Male sterile genetic 47	26:436	2400
511	Rpg1	T	7HS	Reaction to *Puccinia graminis* 1	26:437	701
512	Rpg2	T2		Reaction to *Puccinia graminis* 2	26:439	187
513	xnt2	x_b		Xantha seedling 2	26:440	2
515	Rsp1	Sep		Reaction to *Septoria passerinii* 1	26:441	2510
516	Rsp2	Sep2		Reaction to *Septoria passerinii* 2	37:275	2511
517	Rsp3	Sep3		Reaction to *Septoria passerinii* 3	37:276	2512
518	sdw1	denso	3HL	Semidwarf 1	41:176	2513
519	mnd1	m	2H	Many-noded dwarf 1	43:154	253
520	msg48	msg,,jt	1H	Male sterile genetic 48	40:123	2401
521	mtt1	mt. mt3	1HL	Mottled leaf 1	41:179	622
522	cer-yi	cer-yi	2H	Eceriferum-yi	41:180	1542
523	cer-yj	cer-yj	1HS	Eceriferum-yj	40:124	1543
524	cer-yk	cer-yk		Eceriferum-yk	26:451	1544
525	cer-yl	cer-yl	4HL	Eceriferum-yl	26:452	1545

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
526	cer-ym	cer-ym		Eceriferum-ym	26:453	1546
527	cer-yn	cer-yn	1H	Eceriferum-yn	40:125	1547
528	cer-yo	cer-yo		Eceriferum-yo	26:455	1548
529	cer-yp	cer-yp		Eceriferum-yp	26:456	1549
530	cer-yq	cer-yq		Eceriferum-yq	26:457	1550
531	cer-yr	cer-yr	5HL	Eceriferum-yr	43:155	1551
532	cer-ys	cer-ys		Eceriferum-ys	26:459	1552
533	cer-yt	cer-yt	1H/5H	Eceriferum-yt	40:126	1553
534	cer-yu	cer-yu	1H	Eceriferum-yu	40:127	1554
535	cer-yx	cer-yx	1H/3H /5H	Eceriferum-yx	40:128	1555
536	Cer-yy	Gle1	1HS	Eceriferum-yy	40:129	1556
537	cer-yz	cer-yz		Eceriferum-yz	26:464	1557
538	cer-xa	cer-xa		Eceriferum-xa	26:465	1558
539	cer-xb	cer-xb		Eceriferum-xb	26:466	1559
540	cer-xc	cer-xc		Eceriferum-xc	26:467	1560
541	cer-xd	cer-xd		Eceriferum-xd	26:468	1561
542	Dwf2	Dwf2		Dominant dwarf 2	24:170	
543	int-f	int-f		Intermedium spike-f	26:469	1767
544	int-h	int-h		Intermedium spike-h	26:470	1768
545	int-i	int-i	2HS	Intermedium spike-i	41:181	1769
546	int-k	int-k	7H	Intermedium spike-k	37:279	1770
547	int-m	int-m		Intermedium spike-m	37:280	1772
548	Fol-b	Ang	1HS	Angustifolium-b	40:131	17
549	Lga1	Log		Long glume awn 1	26:475	835
550	ari-b	ari-b		Breviaristatum-b	26:476	1649
551	ari-f	ari-f	7H	Breviaristatum-f	41:182	1654
552	ari-j	ari-j		Breviaristatum-j	26:478	1658
553	ari-k	ari-k		Breviaristatum-k	26:479	1659
554	ari-m	ari-m	7HS	Breviaristatum-m	41:184	1661
555	ari-n	ari-n	7H	Breviaristatum-n	41:185	1662
556	ari-o	ari-o	7HL	Breviaristatum-o	41:186	1663
557	ari-p	ari-p		Breviaristatum-p	40:132	1664
558	ari-q	ari-q		Breviaristatum-q	26:484	1665

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
559	ari-r	ari-r	5H	Breviaristatum-r	41:187	1666
560	ert-f	ert-f	1H	Erectoides-f	40:133	478
561	ert-h	ert-h		Erectoides-h	26:487	481
562	ert-k	ert-k	6H	Erectoides-k	43:156	485
563	ert-l	ert-l		Erectoides-l	26:489	486
564	ert-p	ert-p		Erectoides-p	26:490	490
565	ert-s	ert-s		Erectoides-s	26:491	493
566	ert-t	ert-t, brh3	2HS	Erectoides-t	40:134	494
567	ert-v	ert-v	6H	Erectoides-v	41:188	497
568	ert-x	ert-x	1H/7H	Erectoides-x	40:136	498
569	ert-y	ert-y		Erectoides-y	26:495	499
570	ert-z	ert-z		Erectoides-z	26:496	500
571	ert-za	ert-za		Erectoides-za	26:497	501
572	ert-zb	ert-zb		Erectoides-zb	26:498	502
573	ert-zc	ert-zc		Erectoides-zc	26:499	503
574	ert-ze	ert-ze		Erectoides-ze	26:500	505
575	Rph6	Pa6		Reaction to *Puccinia hordei* 6	26:501	1598
576	Rph8	Pa8		Reaction to *Puccinia hordei* 8	26:502	1600
577	Rsg2	Rsg2		Reaction to *Schizaphis graminum* 2	37:283	2513
578	mat-b	mat-b		Praematurum-b	26:584	1788
579	mat-c	mat-c		Praematurum-c	26:506	1789
580	mat-d	mat-d		Praematurum-d	26:507	1790
581	mat-e	mat-e		Praematurum-e	26:508	1791
582	mat-f	mat-f	1H	Praematurum-f	40:137	1792
583	mat-g	mat-g		Praematurum-g	26:510	1793
584	mat-h	mat-h	4HL	Praematurum-h	42:662	1794
585	mat-i	mat-i		Praematurum-i	26:512	1795
586	bra-d	bra-d	1HL	Bracteatum-d	40:139	1696
587	abo3	a2, alb-za		Albino seedling 3	26:514	165
588	abo10	a_{t2}		Albino seedling 10	26:515	57
589	abo11	a_{t3}, alb^{t}		Albino seedling 11	26:516	233
590	Rph13	Rph13		Reaction to *Puccinia hordei* 13	28: 31	1591
591	Rph14	Rph14		Reaction to *Puccinia hordei* 14	28: 32	1592

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
592	yhd2	yh2		Yellow head 2	28: 33	757
593	adp1	adp	3HL	Awned palea 1	43:158	1618
594	ant3	rub		Anthocyanin-deficient 3	29: 82	1641
595	ant4	ant4	4H	Anthocyanin-deficient 4	41:189	1642
596	ant5	rs2		Anthocyanin-deficient 5	29: 84	1643
597	ant6	ant6		Anthocyanin-deficient 6	29: 85	1644
598	ant13	ant13	6HL	Proanthocyanin-free 13	29: 86	1624
599	ant17	ant17	3HS	Proanthocyanin-free 17	37:286	
600	ant18	ant18	7HL	Proanthocyanin-free 18	29: 90	1630
601	ant19	ant19		Proanthocyanin-free 19	29: 92	1631
602	ant20	ant20		Anthocyanin-rich 20	29: 93	1633
603	ant21	ant21	6H	Proanthocyanin-free 21	29: 94	1634
604	ant22	ant22	2HL	Proanthocyanin-free 22	41:191	1635
605	ant25	ant25		Proanthocyanin-free 25	29: 96	1638
606	ant26	ant26		Proanthocyanin-free 26	29: 97	1639
607	ant27	ant27		Proanthocyanin-free 27	29: 98	1640
608	ant28	ant28	3HL	Proanthocyanin-free 28	29: 99	
609	ant29	ant29		Proanthocyanin-free 29	29:100	
610	ant30	ant30		Proanthocyanin-free 30	29:101	
611	Nec6	Sp	7HS	Necrotic leaf spot 6	43:159	977
612	gig2	gig2		Gigas 2	32:113	1750
613	brc1	brc-5	2HS	Branched 1	32:114	
614	Zeo2	Mo1, Zeo3	2HL	Zeocriton 2	41:193	637
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
618	mnd3	mn3, m3	3H	Many noded dwarf 3	32:119	1797
619	bra-a	bra-a	7HS	Bracteatum-a	32:120	1693
620	cal-b	cal-b	5H	Calcaroides-b	32:121	1697
621	Cal-c	Cal-c	5HL	Calcaroides-c	41:195	1567
622	cal-e	cal-23	5HS	Calcaroides-e	32:123	
623	eli-a	lig-a		Eligulum-a	43:164	3647

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
624	ops1	op-3	7HS	Opposite spikelets 1	43:165	2427
625	sci-a	sci-3		Scirpoides 1	32:126	
626	scl-a	scl-6	1HL	Scirpoides leaf-a	40:142	
627	viv-a	viv-5		Viviparoides-a	32:128	2498
628	sex7	sex.i	5HL	Shrunken endosperm 7	32:129	2470
629	mtt6	mtt6		Mottled leaf 6	32:130	2411
630	Ari-s	ari-265	5H/7H	Breviaristatum-s	41:197	
631	brh3	brh.g, ert-t		Brachytic 3	32:132	1672
632	mnd5	mnd5		Many noded dwarf 5	32:133	
633	mnd6	den-6	5HL	Many noded dwarf 6	37:291	1713
634	pmr2	nec-50		Premature ripe 2	32:135	2421
635	nec7	nec-45	1H/6H /7H	Necroticans 7	43:166	2420
636	tst2		4HL	Tip sterile 2	43:167	1781
637	nar1	nar1	6HS	NADH nitrate reductase-deficient 1	35:194	2431
638	nar2	nar2	5HL	NADH nitrate reductase-deficient 2	35:195	2415
639	nar3	nar3	7HS	NADH nitrate reductase-deficient 3	35:196	2416
640	nar4	nar4	2Hl	NADH nitrate reductase-deficient 4	35:197	
641	nar5	nar5	5HL	NADH nitrate reductase-deficient 5	35:198	2417
642	nar6	nar6	2HL	NADH nitrate reductase-deficient 6	35:199	
643	nar7	nar7	6HL	NADH nitrate reductase-deficient 7	35:200	2418
644	nar8	nar8	6HS	NADH nitrate reductase-deficient 8	35:201	
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

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	GSHO no.‡
	Rec.	Prev.				
651	lam1	lam1		Late maturity 1	43:174	3653
652	ylf1	ylf1	7HS	Yellow leaf 1	43:175	
653	brh10	brh.l	2HS	Brachytic 10	37:293	1677
654	brh11	brh.n	5HS	Brachytic 11	37:294	1679
655	brh12	brh.o	5HS	Brachytic 12	37:295	1680
656	brh13	brh.p	5HS	Brachytic 13	37:296	1681
657	brh15	brh.u		Brachytic 15	37:297	1685
658	brh17	brh.ab	5HS	Brachytic 17	37:298	1669
659	brh18	brh.ac	5HS	Brachytic 18	37:299	1670
660	nld2		5H/6H /7H	Narrow leafed dwarf 2	43:176	3645
661	dub1		5HL	Double seed 1	37:301	
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
673	cst1	cs	5HL	Corn stalk	41:199	
674	mtt8	Mut 1661		Mottled leaf 8	43:182	3597
675	mtt9	Mut 2721		Mottled leaf 9	43:183	3598
676	fch16	clo.117	2HS	Chlorina seedling 16	40:144	
677	mtt7	mtt.h	2HS	Mottled leaf 7	42:753	
678	ari-u	ari-245	2HS	Breviaristatum-u	41:200	
679	acr4	acr-3	2H/ 6HL	Accordion rachis 4	41:201	
680	ari-v	ari-137	5HS	Breviaristatum-v	41:202	
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

Table 2. (continued)

BGS no.	Locus symbol*		Chr. loc.†	Locus name or phenotype	Descr. vol. p.	BGS no.
	Rec.	Prev.				
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
707	Rpr1		4H	Required for *Puccinia graminis* resistance 1	42:757	
711	Rpt3	QRptts2	2HS	Reaction to *Pyrenophora teres* 3	43:208	
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 5 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 August 05 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 Small Grains Germplasm Research Facility, Aberdeen, Idaho, USA.

Table 3. An alphabetic listing of recently published Barley Genetic Stock (BGS) descriptions for loci in barley (*Hordeum vulgare*), including information on chromosomal locations, recommended locus names, and original cultivars.

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
abo1	a_t	207	1HL	Albino seedling 1	26:210	Trebi
abo2	a2	53	2HS	Albino seedling 2	26: 89	Nilsson-Ehle No 2
abo3	alb-za	587		Albino seedling 3	26:514	Unknown cultivar
abo4	a4	94	2H	Albino seedling 4	26:133	Unknown cultivar
abo6	a_c	106	3HS	Albino seedling 6	26:140	Colsess
abo8	a_{c2}	4	7HS	Albino seedling 8	26: 47	Coast
abo9	a_n	112	3HS	Albino seedling 9	26:146	Nigrinudum
abo10	a_{t2}	588		Albino seedling 10	26:515	Canadian Thorpe
abo11	a_{t3}	589		Albino seedling 11	26:516	Trebi
abo12	alb,,o	341	5HS	Albino seedling 12	26:290	Titan
abo13	alb,,p	95	2HL	Albino seedling 13	26:134	Titan
abo14	alb,,q	270	6HL	Albino seedling 14	26:250	Shabet
abo15	alb,,t	271	6HS	Albino seedling 15	26:251	Betzes
abr1	abr	472	2HL	Accordion basal rachis internode 1	26:419	Bonus
acr1	acr	97	2HL	Accordion rachis 1	40: 56	ACBV89B229
Acr2	Acr,lax	189	4HL	Accordion rachis 2	40: 65	CIho 6164
Acr3	acr	241	1HL	Accordion rachis 3	40: 85	Burma Girl
acr4	acr-3	679	2H/ 6HL	Accordion rachis 4	41:201	Bonus
adp1	adp	593	3HL	Awned palea 1	43:158	Unknown line
alm1	al	108	3HS	Albino lemma 1	43: 76	Russia 82
als1	als	101	3HL	Absent lower laterals 1	43: 74	Montcalm
ant1	rs	33	7HS	Anthocyanin-less 1	42: 89	Bonus
ant2	pr	80	2HL	Anthocyanin-less 2	26:118	Foma
ant3		594		Anthocyanin-deficient 3	29: 82	Bonus
ant4	rub	595	4H	Anthocyanin-deficient 4	41:189	Foma
ant5		596		Anthocyanin-deficient 5	29: 84	Bonus
ant6		597		Anthocyanin-deficient 6	29: 85	Foma

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
ant13		598	6HL	Proanthocyanidin-free 13	29: 86	Foma
ant17		599	3HS	Proanthocyanidin-free 17	37:286	Nordal
ant18		600	7HL	Proanthocyanidin-free 18	29: 90	Nordal
ant19		601		Proanthocyanidin-free 19	29: 92	Alf
ant20		602		Anthocyanidin-rich 20	29: 93	Foma
ant21		603	6H	Proanthocyanidin-free 21	29: 94	Georgie
ant22		604	2HL	Proanthocyanidin-free 22	41:191	Hege 802
ant25		605		Proanthocyanidin-free 25	29: 96	Secobra 18193
ant26		606		Proanthocyanidin-free 26	29: 97	Grit
ant27		607		Proanthocyanidin-free 27	29: 98	Zebit
ant28		608	3HL	Proanthocyanidin-free 28	29: 99	Grit
ant29		609		Proanthocyanidin-free 29	29:100	Ca 708912
ant30		610		Proanthocyanidin-free 30	29:101	Gunhild
ari-a		132	3HS	Breviaristatum-a	41:106	Bonus
ari-b		550		Breviaristatum-b	26:476	Bonus
ari-e		328	5HL	Breviaristatum-e	41:131	Bonus
ari-f		551	7H	Breviaristatum-f	41:182	Bonus
ari-g		89		Breviaristatum-g	26:128	Bonus
ari-h		329	5HL	Breviaristatum-h	26:277	Foma
ari-j		552		Breviaristatum-j	26:478	Bonus
ari-k		553		Breviaristatum-k	26:479	Bonus
ari-m		554	7HS	Breviaristatum-m	41:184	Bonus
ari-n		555	7H	Breviaristatum-n	41:185	Bonus
ari-o		556	7HL	Breviaristatum-o	41:186	Bonus
ari-p		557		Breviaristatum-p	40:132	Foma
ari-q		558		Breviaristatum-q	26:484	Kristina
ari-r		559	5H	Breviaristatum-r	41:187	Bonus
Ari-s	ari-265	630	5H/7H	Breviaristatum-s	41:197	Kristina
Ari-t	ari-25	238	1H	Breviaristatum-t	40: 82	Bonus
ari-u	ari-245	678	2HS	Breviaristatum-u	41:200	Foma
ari-v	ari-137	680	5HS	Breviaristatum-v	41:202	Foma
ari-w	ari-153	721	7H	Breviaristatum-w	43:216	Foma
ari-x	ari-22	274	6H	Breviaristatum-x	43:124	Bonus
ari-y	ari-9	722	5H	Breviaristatum-y	43:217	Bonus

Table 3. (continued)

Locus symbol*		BGS no.	Chr. Loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
asp1		649		Aborted spike 1	43:172	Steptoe
blf1	bb	326	2HL	Broad leaf 1	41:130	Bonus
blf2	bb2	337	5HL	Broad leaf 2	41:137	Hannchen
Blp1	B	203	1HL	Black lemma and pericarp 1	40: 69	Nigrinudum
blx1	bl	15	4HL	Non-blue aleurone xenia 1	26: 60	Goldfoil
blx2	bl2	19	7HS	Non-blue aleurone xenia 2	26: 65	Nepal
blx3	bl3	173	4HL	Non-blue aleurone xenia 3	26:198	Blx
blx4	bl4	174	4HL	Non-blue (pink) aleurone xenia 4	26:199	Ab 6
blx5	bl5	454	7HL	Non-blue aleurone xenia 5	26:404	BGM 122
bra-a		619	7HS	Bracteatum-a	32:120	Bonus
bra-d		586	1HL	Bracteatum-d	40:139	Foma
brc1	brc-5	613	2HS	Branched 1	32:114	
brh1	br	1	7HS	Brachytic 1	43: 48	Himalaya
brh2	br2	157	4HL	Brachytic 2	37:235	Svanhals
brh3	brh.g, ert-t	631		Brachytic 3	32:132	Birgitta
brh4	brh.j	349	2HL	Brachytic 4	42:407	Birgitta
brh5	brh.m	185	4HS	Brachytic 5	37:242	Birgitta
brh6	brh.s	350	5HL	Brachytic 6	42:408	Akashinriki
brh7	brh.w	41	7H	Brachytic 7	42: 98	Volla
brh8	brh.ad	142	3HL	Brachytic 8	42:232	Birgitta
brh9	brh.k	187	4HL	Brachytic 9	43: 99	Birgitta
brh10	brh.l	653	2HS	Brachytic 10	37:293	Birgitta
brh11	brh.n	654	5HS	Brachytic 11	37:294	Birgitta
brh12	brh.o	655	5HS	Brachytic 12	37:295	Birgitta
brh13	brh.p	656	5HS	Brachytic 13	37:296	Birgitta
brh14	brh.q	148	3HL	Brachytic 14	37:231	Akashinriki
brh15	brh.u	657		Brachytic 15	37:297	Julia
brh16	brh.v	44	7HL	Brachytic 16	37:204	Korál
brh17	brh.ab	658	5HS	Brachytic 17	37:298	Morex
brh18	Brh.ac	659	5HS	Brachytic 18	37:299	Triumph
bsp1		645		Bushy spike 1	43:168	Morex
btr1	bt1	115	3HS	Non-brittle rachis 1	43: 78	A 222

Table 3. (continued)

Locus symbol*		BGS no.	Chr. Loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
btr2	bt2	116	3HS	Non-brittle rachis 2	43: 80	Sakigoke
cal-b		620	5H	Calcaroides-b	32:121	Bonus
Cal-c		621	5HL	Calcaroides-c	41:195	Bonus
cal-d		146	3H	Calcaroides-d	40: 58	Foma
cal-e		622	5HS	Calcaroides-e	32:123	Semira
cer-d		399	5HL	Eceriferum-d + ++ ++	41:153	Bonus
cer-e		400	1HL	Eceriferum-e -/+ ++ ++	40:102	Bonus
cer-f		401	1H	Eceriferum-f + + ++	40:104	Bonus
cer-g		402	2HL	Eceriferum-g + + ++	41:155	Bonus
cer-h		403	4HS	Eceriferum-h - ++ ++	41:157	Bonus
cer-i		404	5HL	Eceriferum-i - ++ ++	41:158	Bonus
cer-k		405	4HL	Eceriferum-k + ++ ++	41:160	Bonus
cer-l		406		Eceriferum-l + ++ ++	26:355	Bonus
cer-m		407	1H/3H	Eceriferum-m +/++ + ++	41:161	Bonus
cer-n	gs9	408	2HL	Eceriferum-n - - ++ & - +/- ++	26:357	Bonus
cer-o		409	1HL	Eceriferum-o -/+ ++ ++	40:106	Bonus
cer-p		410	7HL	Eceriferum-p ++ ++ +	41:162	Bonus
cer-r		411	3HL	Eceriferum-r +/- + ++	26:361	Bonus
cer-t		412	5HL	Eceriferum-t +/- ++ ++	41;164	Bonus
cer-v		414	2HS	Eceriferum-v +/- ++ ++	26:366	Bonus
cer-w		415	5HL	Eceriferum-w +/- ++ ++	41:166	Bonus
cer-xa		538		Eceriferum-xa ++ ++ -	26:465	Foma
cer-xb		539		Eceriferum-xb - ++ ++	26:466	Bonus
cer-xc		540		Eceriferum-xc + + ++	26:467	Bonus
cer-xd		541		Eceriferum-xd + + ++	26:468	Bonus
cer-y		417		Eceriferum-y + +/++ ++	26:368	Bonus
cer-ya		444	3HS	Eceriferum-ya ++ ++ -	26:396	Bonus
cer-yb		445	2HL	Eceriferum-yb ++ ++ -	41:171	Bonus
cer-yc		446	6H/ 7HS	Eceriferum-yc - ++ ++	41:172	Bonus
cer-yd		447	3HS	Eceriferum-yd - ++ ++	26:399	Bonus
cer-ye		448	4H	Eceriferum-ye ++ ++ -	43:149	Foma
cer-yf		449		Eceriferum-yf ++ ++ +	37:271	Bonus

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
cer-yg		450	7HS	Eceriferum-yg - - -	26:402	Carlsberg II
cer-yh		451	3HS	Eceriferum-yh - ++ ++	26:403	Bonus
cer-yi		522	2H	Eceriferum-yi ++ ++ -	41:180	Foma
cer-yj		523	1HS	Eceriferum-yj ++ ++ -	40:124	Bonus
cer-yk		524		Eceriferum-yk + + ++	26:451	Bonus
cer-yl		525		Eceriferum-yl - - ++	26:452	Bonus
cer-ym		526		Eceriferum-ym - - -	26:453	Bonus
cer-yn		527	1H	Eceriferum-yn + + ++	40:125	Kristina
cer-yo		528		Eceriferum-yo ++ ++ +	26:455	Bonus
cer-yp		529		Eceriferum-yp ++ ++ +	26:456	Bonus
cer-yq		530		Eceriferum-yq ++ ++ -	26:457	Kristina
cer-yr		531	5HL	Eceriferum-yr -/+ + ++	43:155	Foma
cer-ys		532		Eceriferum-ys ++ ++ -	26:459	Bonus
cer-yt		533	1H/5H	Eceriferum-yt - ++ ++	40:126	Bonus
cer-yu		534	1H	Eceriferum-yu ++ ++ -	40:127	Bonus
cer-yx		535	1H/3H/ 5H	Eceriferum-yx + + ++	40:128	Foma
Cer-yy	Gle1	536	1HS	Eceriferum-yy - ++ ++	40:129	Bonus
cer-yz		537		Eceriferum-yz + + ++	26:464	Bonus
cer-z		418	7HS	Eceriferum-z - - ++	26:369	Bonus
cer-za		419	5HL	Eceriferum-za ++ ++ -	43:144	Foma
cer-zb		420	5HS	Eceriferum-zb - ++ ++	42:508	Bonus
cer-zc		421	4HL/ 2HS	Eceriferum-zc +/- ++ ++	42:510	Bonus
cer-zd		422	3HL	Eceriferum-zd ++ ++ -	40:110	Bonus
cer-ze	gl5	423	7HS	Eceriferum-ze ++ ++ -	42:514	Bonus
cer-zf		424	3H/ 7HS	Eceriferum-zf ++ ++ +	42:516	Bonus
cer-zg		425	4HL	Eceriferum-zg ++ ++ +	26:377	Foma
cer-zi		427	1HL	Eceriferum-zi + + ++	41:168	Bonus
cer-zj		428	5HL	Eceriferum-zj ++ ++ -	42:520	Bonus
cer-zk		429	2H	Eceriferum-zk + + +/-	26:381	Bonus
cer-zl		430		Eceriferum-zl - - ++	26:382	Bonus
cer-zn		431	1H	Eceriferum-zn +/- ++ ++	40:112	Foma
cer-zo		432	3HS	Eceriferum-zo - ++ ++	43:148	Foma

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
cer-zp		433	5HL	Eceriferum-zp ++ ++ -	26:385	Bonus
cer-zq		434		Eceriferum-zq ++ ++ -	26:386	Foma
cer-zr		435		Eceriferum-zr +/- ++ ++	26:387	Foma
cer-zs		436		Eceriferum-zs + ++ ++	26:388	Foma
cer-zt		437	2HS	Eceriferum-zt + ++ ++	37:270	Foma
cer-zu		438	1HS	Eceriferum-zu - + ++	41:170	Foma
cer-zv		439		Eceriferum-zv - - -	26:391	Foma
cer-zw		440		Eceriferum-zw + + ++	26:392	Foma
cer-zx		441		Eceriferum-zx + + ++	26:393	Bonus
cer-zy		442	1HS	Eceriferum-zy ++ ++ +	40:116	Bonus
cer-zz		443		Eceriferum-zz ++ ++ -	26:395	Bonus
clh1	clh	225	7H/5H	Curled leaf dwarf 1	40: 76	Hannchen
com1	bir1	473	5HL	Compositum 1	40:118	Foma
com2	bir2	71	2HS	Compositum 2	40: 53	CIMMYT freak
crl1	cl	325	6H	Curly lateral 1	41:129	Montcalm
crm1	cm	305	5HL	Cream seedling 1	26:256	Black Hulless
cst1	cs	673	5HL	Corn stalk	41:199	Husky
cud1	cud	324	5HL	Curly dwarf 1	26:272	Akashinriki
cud2		229	1HL	Curly dwarf 2	26:227	Akashinriki
cul2	uc2	253	6HL	Uniculm 2	43:112	Kindred
cul3	cul3	616	3HL	Uniculme 3	43:161	Donaria
cul4	uc-5	617	3HL	Uniculme 4	43:162	Bonus
cur1	cu1	262	6HL	Curly 1	26:242	48-cr cr-17
cur2	cu2	114	3HL	Curly 2	26:148	Choshiro
cur3	cu3	263	6HL	Curly 3	41:125	Akashinriki
cur4	cu4	460	2HL	Curly 4	26:406	Asahi 5
cur5	cu5	231	2HS	Curly 5	41:120	Glenn
ddt1	ddt	317	5HS	Reaction to DDT 1	26:266	Spartan
des1	lc	12	7H	Desynapsis 1	42: 58	Mars
des2	ds	119	3H	Desynapsis 2	43: 84	Husky
des3		386	2H/ 5HL	Desynapsis 3	43:140	Betzes
des4		13	7H	Desynapsis 4	41: 71	Betzes
des5		14	7HL	Desynapsis 5	41: 73	Betzes

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
des6		215	1HL	Desynapsis 6	43:106	Betzes
des7		64	3H	Desynapsis 7	43: 67	Betzes
des8		387	3H	Desynapsis 8	41:151	Betzes
des9		388		Desynapsis 9	26:336	Betzes
des10		389	3HL	Desynapsis 10	41:152	Betzes
des11		390		Desynapsis 11	26:338	Betzes
des12		391		Desynapsis 12	26:339	Betzes
des13		392		Desynapsis 13	26:340	Betzes
des14		393		Desynapsis 14	26:341	Betzes
des15		394		Desynapsis 15	26:342	Ingrid
dex1	sex2	311	5HS	Defective endosperm xenia 1	26:260	BTT 63-j-18-17
dsk1	dsk	322	5HL	Dusky 1	41:128	Chikurin-Ibaraki 1
dsp1	l	9	7HS	Dense spike 1	43: 50	Honen 6
dsp9	l9, ert-e	258	6HL	Dense spike 9	43:114	Akashinriki
dsp10	l_c	111	3HS	Dense spike 10	41: 99	Club Mariout
dsp11	dsp	244	1HL	Dense spike 11	41:121	Akashinriki
dub1		661	6HL	Double seed 1	37:301	Bonus
Dwf2		542		Dominant dwarf 2	24:170	Klages / Mata
Eam1	Ppd-H1, Ea	65	2HS	Early maturity 1	26:101	Estate
Eam5	Ea5	348	5HL	Early maturity 5	37:260	Higuerilla*2/ Gobernadora
eam6	Ea6, Ea	98	2HS	Early maturity 6	37:216	Morex
eam7	ea7	252	6HS	Early maturity 7	41:123	California Mariout
eam8	ea_k,ert-o	214	1HL	Early maturity 8	41:116	Kinai 5
eam9	ea,,c	181	4HL	Early maturity 9	26:204	Tayeh 8
eam10	ea_{sp}	130	3HL	Early maturity 10	37:226	Super Precoz
eli-a	lig-a	623		Eligulum-a	43:164	Foma
eog 1	e	57	2HL	Elongated outer glume 1	43: 64	Triple Bearded Club Mariout
ert-a	ert-6	28	7HS	Erectoides-a	41: 76	Gull
ert-b	ert-2	224	1HL	Erectoides-b	40: 74	Gull

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
ert-c	ert-1	134	3HL	Erectoides-c	41:108	Gull
ert-d	ert-7	29	7HS	Erectoides-d	42: 82	Gull
ert-e	dsp9	266	6HL	Erectoides-e	43:118	Bonus
ert-f	ert-18	560	1H	Erectoides-f	40:133	Bonus
ert-g	ert-g	330	1HL	Erectoides-g	41:133	Bonus
ert-h	ert-25	561		Erectoides-h	26:487	Bonus
ert-ii	ert-79	135	3HL	Erectoides-ii	26:172	Bonus
ert-j	ert-31	90	2H	Erectoides-j	43: 70	Bonus
ert-k	ert-32	562	6H	Erectoides-k	43:156	Bonus
ert-l	ert-12	563		Erectoides-l	26:489	Maja
ert-m	ert-34	30	7HS	Erectoides-m	26: 78	Bonus
ert-n	ert-51	331	5HL	Erectoides-n	26:279	Bonus
ert-p	ert-44	564		Erectoides-p	26:490	Bonus
ert-q	ert-101	91	6H	Erectoides-q	43: 71	Bonus
Ert-r	Ert-52	332	2HL	Erectoides-r	41:135	Bonus
ert-s	ert-50	565		Erectoides-s	26:491	Bonus
ert-t	brh3	566	2HS	Erectoides-t	40:134	Bonus
ert-u	ert-56	92	2H	Erectoides-u	26:131	Bonus
ert-v	ert-57	567	6H	Erectoides-v	41:188	Bonus
ert-x	ert-58	568	1H/7H	Erectoides-x	40:136	Bonus
ert-y	ert-69	569		Erectoides-y	26:495	Bonus
ert-z	ert-71	570		Erectoides-z	26:496	Bonus
ert-za	ert-102	571		Erectoides-za	26:497	Bonus
ert-zb	ert-132	572		Erectoides-zb	26:498	Bonus
ert-zc	ert-149	573		Erectoides-zc	26:499	Bonus
ert-zd	ert-159	93	7HL	Erectoides-zd	41: 91	Bonus
ert-ze	ert-105	574		Erectoides-ze	26:500	Bonus
fch1	f, lg	55	2HS	Chlorina seedling 1	40: 49	Minn 84-7
fch2	f2	117	3HL	Chlorina seedling 2	26:151	28-3398
fch3	f3	220	1HS	Chlorina seedling 3	40: 71	Minn 89-4
fch4	f4	17	7HL	Chlorina seedling 4	43: 54	Montcalm
fch5	f5	18	7HS	Chlorina seedling 5	43: 56	Gateway
fch6	f6	313	5HL	Chlorina seedling 6	26:262	Himalaya
fch7	f7	201	1HL	Chlorina seedling 7	41:113	Smyrna

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
fch8	f8	5	7HS	Chlorina seedling 8	41: 62	Comfort
fch9	f9	151	4HS	Chlorina seedling 9	26:178	Ko A
fch10		177	4H	Chlorina seedling 10	43: 95	Unknown cultivar
fch11	f11	260	6HL	Chlorina seedling 11	26:240	Himalaya
fch12	f_c	2	7HS	Chlorina seedling 12	41: 60	Colsess
fch13	f13	86		Chlorina seedling 13	26:124	Nigrinudum
fch14	f14	87	2HL	Chlorina seedling 14	37:211	Shyri
fch15	or	52	2HS	Chlorina seedling 15	40: 48	Trebi IV
fch16	clo.117	676	2HS	Chlorina seedling 16	40:144	Bonus
fch17	vy	191	1H/3H	Chlorina seedling 17	40: 68	Himalaya / Ingrescens
flo-a		182	6H	Extra floret-a	41:112	Foma
flo-b		327	5HL	Extra floret-b	26:275	Foma
flo-c		74	2HS	Extra floret-c	26:111	Foma
fol-a		73	2HL	Angustifolium-a	43: 69	Proctor
Fol-b	Ang	548	1HS	Angustifolium-b	40:131	Unknown
fst1	fs	301	5HL	Fragile stem 1	26:252	Kamairazu
fst2	fs2	208	1HL	Fragile stem 2	41:114	Oshichi
fst3	fs3	24	7HS	Fragile stem 3	41: 74	Kobinkatagi 4
fxp1		728		Fenoxaprop-p-ethyl reaction 1	43:223	Morex
gig1	gig	463	2H?	Gigas 1	26:410	Tochigi Golden Melon
gig2		612		Gigas 2	32:113	ND12463
glf1	gl,cer-zh	155	4HL	Glossy leaf 1 ++ ++ -	40: 61	Himalaya
glf3	gl3,cer-j	165	4HL	Glossy leaf 3 ++ ++ -	43: 92	Goseshikoku
glo-a		168	4HS	Globosum-a	26:194	Proctor
glo-b		336	5HL	Globosum-b	26:284	Villa
glo-c	glo-c	72	2H	Globosum-c	43: 68	Villa
glo-e		230	1HL	Globosum-e	26:228	Foma
glo-f		342	5HL	Globosum-f	26:291	Damazy
gpa1	gp	59	2HL	Grandpa 1	26:95	Lyallpur
gra-a	gran-a	131	7H	Granum-a	42:216	Donaria

Table 3. (continued)

Locus symbol* Rec.	Prev.	BGSno.	Chr. loc.†	Locus name or phenotype	Descr. vol. p	Parental cultivar
gsh1	gs1, cer-q	351	2HS	Glossy sheath 1 - - ++	43:131	PI 195285
gsh2	gs2	352	3HL	Glossy sheath 2 - - ++	41:141	Atlas
gsh3	gs3	353	7HS	Glossy sheath 3 - - ++	41:143	Mars
gsh4	gs4	354	6HL	Glossy sheath 4 - - ++	41:146	Gateway
gsh5	gs5	355	2HL	Glossy sheath 5 + - ++	41:149	Jotun
gsh6	cer-c, gs6	356	2HS	Glossy sheath 6 - - ++	43:135	Betzes
gsh7	gs7	81	1H/2H/5H	Glossy sheath 7 - - ++	40: 55	Akashinriki
gsh8	cer-u, gs8	413	2HS	Glossy sheath 8 + + ++	43:141	Akashinriki
Gth1	G	69	2HL	Toothed lemma 1	26:106	Machine (Wexelsen)
hcm1	h	77	2HL	Short culm 1	26:115	Morex
Hln1	Hn	164	4HL	Hairs on lemma nerves 1	26:189	Kogane-mugi
Hsh1	Hs	179	4HL	Hairy leaf sheath 1	37:240	Kimugi
int-b		320	5HL	Intermedium spike-b	26:268	Bonus
int-c	i	178	4HS	Intermedium spike-c	37:237	Gamma 4
int-f		543		Intermedium spike-f	26:469	Foma
int-h		544		Intermedium spike-h	26:470	Kristina
int-i		545	2HS	Intermedium spike-i	41:181	Kristina
int-k		546	7H	Intermedium spike-k	37:279	Kristina
int-m		547		Intermedium spike-m	37:280	Bonus
Kap1	K	152	4HS	Hooded lemma 1	26:179	Colsess
lam1		651		Late maturity 1	43:174	Steptoe
lax-a		474	5HL	Laxatum-a	40:120	Bonus
lax-b		268	6HL	Laxatum-b	26:248	Bonus
lax-c		475	6HL	Laxatum-c	41:174	Bonus
lbi1	lb	308	5HL	Long basal rachis internode 1	43:125	Wisconsin Pedigree 38
lbi2	lb2	156	4HL	Long basal rachis internode 2	26:183	Montcalm
lbi2	lb2	156	4HL	Long basal rachis internode 2	26:183	Montcalm

Table 3. (continued)

Locus symbol*		BGSno.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
lbi3	lb3	27	7HL	Long basal rachis internode 3	42: 79	Montcalm
lel1	lel	235	1HL	Leafy lemma 1	32:103	G7118
Lfb1	Lfb	343	5HL	Leafy bract 1	41:140	Montcalm
Lga1	Log	549		Long glume awn 1	26:475	Guy Mayle
lgn2	lg2	169	4HS	Light green 2	42:264	Minn 75
lgn3	lg3	170	4HL	Light green 3	26:195	No 154
lgn4	lg4	171	4HL	Light green 4	26:196	Himalaya / Ingrescens
lig1	li	60	2HL	Liguleless 1	42:116	Muyoji
lin1	s, rin	99	2HS	Lesser internode number 1	41: 92	Natural occurrence
Lks1	Lk	75	2HL	Awnless 1	41: 84	*Hordeum inerme*
lks2	lk2	10	7HL	Short awn 2	41: 66	Honen 6
lks5	lk5	172	4HL	Short awn 5	41:110	CIho 5641
lks6	lks.q	724	1H/5H/6H	Short awn 6	43:219	Morex
lnt1	rnt	118	3HL	Low number of tillers 1	43: 82	Mitake
lys1	lys	338	5HL	High lysine 1	26:286	Hiproly
lys3	sex3	339	5HL	High lysine 3	43:127	Bomi
Lys4	sex5	232	1HS	High lysine 4	26:230	Bomi
lys6		269	6H	High lysine 6	26:249	Bomi
lzd1	dw4	125	3H	Lazy dwarf 1	43: 87	Akashinriki
mat-b		578		Praematurum-b	26:504	Bonus
mat-c		579		Praematurum-c	26:506	Bonus
mat-d		580		Praematurum-d	26:507	Bonus
mat-e		581		Praematurum-e	26:508	Bonus
mat-f		582	1H	Praematurum-f	40:137	Bonus
mat-g		583		Praematurum-g	26:510	Bonus
mat-h		584	4HL	Praematurum-h	42:662	Bonus
mat-i		585		Praematurum-i	26:512	Bonus
min1	min	161	4HL	Semi-minute dwarf 1	26:187	Taisho-mugi
min2	en-min	160		Enhancer of minute 1	26:186	Kaiyo Bozu
mnd1	m	519	2H	Many-noded dwarf 1	43:154	Mesa
mnd3	m3	618	3H	Many noded dwarf 3	32:119	Montcalm

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
mnd4	m4	347	5HL	Many noded dwarf 4	32:108	Akashinriki
mnd5		632		Many noded dwarf 5	32:133	C2-95-199
mnd6	den-6	633	5HL	Many noded dwarf 6	37:291	Bonus
mnd7		726		Many noded dwarf 7	43:221	Steptoe
mov1	mo5	43	7HL	Multiovary 1	43: 59	Steptoe
mov2	mo	147	3HS	Multiovary 2	43: 91	Steptoe
mov3	mo-a	234	1H	Multiovary 3	32:102	Akashinriki
mov4	mo8	648		Multiovary 4	43:171	Steptoe
mov5	mov.o	723		Multiovary 5	43:218	Morex
msg1		357	1HL	Male sterile genetic 1	40: 98	CIho 5368
msg2		358	2HL	Male sterile genetic 2	42:428	Manchuria
msg3		359	2HS	Male sterile genetic 3	26:307	Gateway
msg4		360	1H	Male sterile genetic 4	40:100	Freja
msg5		361	3HS	Male sterile genetic 5	26:309	Carlsberg II
msg6		362	6HS	Male sterile genetic 6	26:310	Hanna
msg7		363	5HL	Male sterile genetic 7	26:311	Dekap
msg8		364	5HL	Male sterile genetic 8	26:312	Betzes
msg9		365	2HS	Male sterile genetic 9	26:313	Vantage
msg10		366	7HS	Male sterile genetic 10	26:314	Compana
msg11		367		Male sterile genetic 11	26:315	Gateway
msg13		368		Male sterile genetic 13	26:316	Haisa II
msg14		369	7HS	Male sterile genetic 14	26:317	Unitan
msg15		370		Male sterile genetic 15	26:318	Atlas/2*Kindred
msg16		371	5HS	Male sterile genetic 16	26:319	Betzes
msg17		372		Male sterile genetic 17	26:320	Compana
msg18		373	5HL	Male sterile genetic 18	26:321	Compana
msg19		374	5HS	Male sterile genetic 19	26:322	CIho 14393
msg20	msg,,ad	375	4HL	Male sterile genetic 20	43:139	Hannchen
msg21		376	1HL	Male sterile genetic 21	40:101	Midwest Bulk
msg22		383	7H	Male sterile genetic 22	26:331	Glacier / Compana
msg23		384	7HL	Male sterile genetic 23	26:332	Betzes
msg24		385	4HL	Male sterile genetic 24	26:333	Betzes
msg25		166	4HL	Male sterile genetic 25	26:192	Betzes

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
msg26		395	7HS	Male sterile genetic 26	26:343	Unitan
msg27		464	2HL	Male sterile genetic 27	26:411	Firlbecks III
msg28		465	2HS	Male sterile genetic 28	41:173	York
msg29		466	5HL	Male sterile genetic 29	26:413	Ackermans MGZ
msg30		467	7HL	Male sterile genetic 30	26:414	Compana
msg31		468	1HL	Male sterile genetic 31	40:117	51Ab4834
msg32		469	7H	Male sterile genetic 32	26:416	Betzes
msg33		470	2HS	Male sterile genetic 33	26:417	Betzes
msg34		471	6H	Male sterile genetic 34	26:418	Paragon
msg35		498	2HL	Male sterile genetic 35	26:424	Karl
msg36		499	6HS	Male sterile genetic 36	26:425	Betzes
msg37		500		Male sterile genetic 37	26:426	Clermont
msg38		501		Male sterile genetic 38	26:427	Ingrid
msg39		502	3H	Male sterile genetic 39	40:122	P11
msg40		503	6H	Male sterile genetic 40	26:429	Conquest
msg41		504		Male sterile genetic 41	26:430	Betzes
msg42		505	3H	Male sterile genetic 42	26:431	Betzes
msg43		506		Male sterile genetic 43	26:432	Betzes
msg44		507		Male sterile genetic 44	26:433	HA6-33-02
msg45		508		Male sterile genetic 45	26:434	RPB439-71
msg46		509		Male sterile genetic 46	26:435	Hector
msg47		510		Male sterile genetic 47	26:436	Sel12384CO
msg48		520	1H	Male sterile genetic 48	40:123	Simba
msg49		335	5HL	Male sterile genetic 49	26:283	ND7369
msg50	msg,,hm	34	7HL	Male sterile genetic 50	43: 57	Berac
mss1	mss	84	2H	Midseason stripe 1	26:122	Montcalm
mss2		39	7HS	Midseason stripe 2	32: 79	ND11258
mtt1	mt	521	1HS	Mottled leaf 1	41:179	Montcalm
mtt2	mt2	302	5HL	Mottled leaf 2	41:127	Montcalm
mtt4	mt,,e	78	2HL	Mottled leaf 4	41: 86	Victorie

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
mtt5	mt,,f	264	6HL	Mottled leaf 5	41:126	Akashinriki
mtt6		629		Mottled leaf 6	32:130	ND6809
mtt7	mtt.h	677	2HS	Mottled leaf 7	42:753	Morex
mtt8	Mut 1661	674		Mottled leaf 8	43:182	Bowman Rph3.c
mtt9	Mut 2721	675		Mottled lead 9	43:183	Bowman Rph3.c
mul2		251	6HL	Multiflorus 2	26:232	Montcalm
nar1		637	6HS	NADH nitrate reductase-deficient 1	35:194	Steptoe
nar2		638	5HL	NADH nitrate reductase-deficient 2	35:196	Steptoe
nar3		639	7HS	NADH nitrate reductase-deficient 3	35:197	Winer
nar4		640	2HL	NADH nitrate reductase-deficient 4	35:198	Steptoe
nar5		641	5HL	NADH nitrate reductase-deficient 5	35:199	Steptoe
nar6		642	2HL	NADH nitrate reductase-deficient 6	35:200	Steptoe
nar7		643	6HL	NADH nitrate reductase-deficient 7	35:201	Steptoe
nar8		644	6HS	NADH nitrate reductase-deficient 8	35:202	Steptoe
nec1	sp,,b	222	1HL	Necrotic leaf spot 1	43:108	Carlsberg II
nec2	nec2	261	6HS	Necrotic leaf spot 2	26:241	Carlsberg II
nec3	nec3	265	6HS	Necrotic leaf spot 3	43:116	Proctor
nec4	nec4	138	3H	Necrotic leaf spot 4	43: 88	Proctor
nec5	nec5	139	3H	Necrotic leaf spot 5	43: 89	Diamant
Nec6	Sp	611	7HS	Necrotic leaf spot 6	43:159	Awnless Atlas
nec7	nec-45	635	1H/6H/ 7H	Necroticans 7	43:166	Kristina
nec8	nec.w	671	5HL	Necrotic leaf spot 8	43:179	Bowman Rph3.c
nec9	Mut 3091	672	3HL	Necrotic leaf spot 9	43:181	Bowman Rph3.c
nec10	necS 1-1	681	3H	Necroticans 10	43:184	Steptoe
nec11		682	1H	Necroticans 11	43:185	Steptoe
nec12		683		Necroticans 12	43:186	Steptoe
nec13		684		Necroticans 13	43:187	Steptoe

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
nec14		685		Necroticans 14	43:188	Steptoe
nec15		686		Necroticans 15	43:189	Steptoe
nec16t		687		Necroticans 16	43:190	Steptoe
nec17		688		Necroticans 17	43:191	Steptoe
nec18		689		Necroticans 18	43:192	Steptoe
nec19		690		Necroticans 19	43:193	Steptoe
nec20		691		Necroticans 20	43:194	Steptoe
nec21		692		Necroticans 21	43:195	Steptoe
Nec22		693		Necroticans 22	43:196	Steptoe
nec23		694		Necroticans 23	43:197	Steptoe
Nec24		695		Necroticans 24	43:198	Steptoe
nec25		696		Necroticans 25	43:199	Steptoe
Nec26		697		Necroticans 26	43:200	Steptoe
nec27		698		Necroticans 27	43:201	Steptoe
nec28		699		Necroticans 28	43:202	Morex
nec29		700		Necroticans 29	43:203	Morex
nec30		701		Necroticans 30	43:204	Morex
nec31		702		Necroticans 31	43:205	Morex
nec32		703		Necroticans 32	43:206	Morex
nec33		704		Necroticans 33	43:207	CIho 4196
nec34	nec.k	197	4HS	Necroticans 34	43:104	ND13917
nld1	nld	323	5HL	Narrow leafed dwarf 1	26:271	Nagaoka
nld2		660	5H/6H/ 7H	Narrow leafed dwarf 2	43:176	Steptoe
nud1	n, nud	7	7HL	Naked caryopsis 1	37:195	Himalaya
ops1	op-3	624	7HS	Opposite spikelets 1	43:165	Bonus
ops2	op-2	718	5HL	Opposite spikelets 2	43:213	Foma
ops3	op-1	719	5HS	Opposite spikelets 3	43:214	Bonus
ovl1		176	4H	Ovaryless 1	35:191	Kanto Bansei Gold
ovl2	ovl2	646		Ovaryless 2	43:169	Harrington
ovl3		725		Ovaryless 3	43:220	Harrington
pmr1	pmr	40	7HS	Premature ripe 1	32: 80	Glenn
pmr2	nec-50	634		Premature ripe 2	32:135	Bonus

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
Pre2	Re2	76	2HL	Red lemma and pericarp 2	26:113	Buckley 3277
Pub1	Pub	127	3HL	Pubescent leaf blade 1	26:163	Multiple Dominant
Pvc1	P_c	68	2HL	Purple veined lemma 1	26:105	Buckley 2223-6
Pyr1	Pyr.g	42	3HL	Pyramidatum 1	41: 78	Pokko/Hja80001
raw1	r	312	5HL	Smooth awn 1	26:261	Lion
raw2	r2	340	5HL	Smooth awn 2	26:289	Lion
raw5	r,,e	257	6HL	Smooth awn 5	26:238	Akashinriki
raw6	r6	334	5HL	Smooth awn 6	26:282	Glenn
rob1	o	254	6HS	Orange lemma 1	37:255	CIho 5649
Rpc1		149	3H	Reaction to *Puccinia coronata* var. *hordei* 1	37:232	Hor 2596
Rpg1	T	511	7HS	Reaction to *Puccinia graminis* 1	26:437	Chevron
Rpg2	T2	512		Reaction to *Puccinia graminis* 2	26:439	Hietpas 5
rpg4		319	5HL	Reaction to *Puccinia graminis* 4	26:267	Q21861
Rph1	Pa	70	2H	Reaction to *Puccinia hordei* 1	26:107	Oderbrucker
Rph2	Pa2	88	5HS	Reaction to *Puccinia hordei* 2	37:212	Peruvian
Rph3	Pa3	121	7HL	Reaction to *Puccinia hordei* 3	26:156	Estate
Rph4	Pa4	218	1HS	Reaction to *Puccinia hordei* 4	42:302	Gull
Rph5	Pa5	122	3HS	Reaction to *Puccinia hordei* 5	37:224	Magnif 102
Rph6	Pa6	575	3HS	Reaction to *Puccinia hordei* 6	26:501	Bolivia
Rph7	Pa7	136	3HS	Reaction to *Puccinia hordei* 7	37:228	Cebada Capa
Rph8	Pa8	576		Reaction to *Puccinia hordei* 8	26:502	Egypt 4
Rph9	Pa9	32	5HL	Reaction to *Puccinia hordei* 9	37:201	HOR 2596
Rph10		137	3HL	Reaction to *Puccinia hordei* 10	26:174	Clipper C8

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
Rph11		267	6HL	Reaction to *Puccinia hordei* 11	26:247	Clipper C67
Rph12		333	5HL	Reaction to *Puccinia hordei* 12	26:281	Triumph
Rph13		590		Reaction to *Puccinia hordei* 13	28: 31	PI 531849
Rph14		591		Reaction to *Puccinia hordei* 14	28: 32	PI 584760
Rph15	Rph16	96	2HL	Reaction to *Puccinia hordei* 15	37:214	PI 355447
rpr1		707	4H	Required for *Puccinia graminis* resistance 1	42:757	Morex
Rpt1	Pt	667	3HL	Reaction to *Pyrenophora teres* 1	43:177	Tifang
Rpt2	Rpt2c	237	1HS	Reaction to *Pyrenophora teres* 2	43:110	CIho 9819
Rpt3	QRptts2	711	2HS	Reaction to *Pyrenophora teres* 3	43:208	Tennessee Awnless D22-5
Rpt4	QRpt7	48	7HL	Reaction to *Pyrenophora teres* 4	43: 61	Galleon
Rpt5	Rpt_a	272	6HL	Reaction to *Pyrenophora teres* 5	43:120	CIho 5791, CIho 9819
Rpt6		713	5HL	Reaction to *Pyrenophora teres* 6	43:210	CIho 9819
Rpt7	Qrpts4	714	4HL	Reaction to *Pyrenophora teres* 7	43:211	Halcyon
Rpt8	QRpts4	198	4HS	Reaction to *Pyrenophora teres* 8	43:105	Q21861
Rsg1	Grb	22	7H	Reaction to *Schizaphis graminum* 1	37:199	Omugi
Rsg2		577		Reaction to *Schizaphis graminum* 2	37:283	PI 426756
rsm1	sm	35	7HS	Reaction to BSMV 1	26: 84	Modjo 1
Rsp1	Sep	515		Reaction to *Septoria passerinii* 1	26:441	CIho 14300
Rsp2	Sep2	516		Reaction to *Septoria passerinii* 2	37:275	PI 70837
Rsp3	Sep3	517		Reaction to *Septoria*	37:276	CIho 10644

passerinii 3

Table 3. (continued)

Locus symbol*		BGS	Chr.	Locus name or phenotype	Descr.	Parental cultivar
Rec.	Prev.	no.	loc.†		vol. p.	
rtt1	rt	51	2HS	Rattail spike 1	26: 87	Goldfoil
Run1	Un	21	7HS	Reaction to *Ustilago nuda* 1	26: 67	Trebi
rvl1	rvl	226	1HL	Revoluted leaf 1	40: 77	Hakata 2
Ryd2	Yd2	123	3HL	Reaction to BYDV 2	26:158	CIho 2376
Rym1	Ym	167	4HL	Reaction to BaYMV 1	32: 96	Mokusekko 3
Rym2	Ym2	20	7HL	Reaction to BaYMV 2	26: 66	Mihori Hadaka 3
rym3	ym3	345	5HS	Reaction to BaYMV 3	32:105	Chikurin Ibaraki
rym5	Ym	141	3HL	Reaction to BaYMV 5	32: 90	Mokusekko 3
sbk1	sk, cal-a	62	2HS	Subjacent hood 1	40: 51	Tayeh 13
sca1	sca	128	3HS	Short crooked awn 1	26:164	Akashinriki
sci-a	sci-3	625		Scirpoides-a	32:126	Bonus
sci-b	sci-4	239	1H/6H	Scirpoides-b	40: 83	Bonus
scl-a	scl-6	626	1HL	Scirpoides leaf-a	40:142	Foma
scl-b	scl.5	150	3H/6H	Scirpoides leaf-b	40: 60	Bonus
sdw1	sdw	518	3HL	Semidwarf 1	41:176	M21
sdw2	sdw-b	133	3HL	Semidwarf 2	26:169	Mg2170
sdw4		45	7HL	Semidwarf 4	41: 80	
sdw6	sdw.f	240	1H/7H	Semidwarf 6	40: 84	Vada
sdw7	sdw.u	196	4HL	Semidwarf 7	43:103	Glenn
seg1	se1	377	7HL	Shrunken endosperm genetic 1	37:264	Betzes
seg2	se2	378	7HS	Shrunken endosperm genetic 2	26:326	Betzes
seg3	se3	379	3H	Shrunken endosperm genetic 3	37:265	Compana
seg4	se4	380	7HL	Shrunken endosperm genetic 4	37:267	Compana
seg5	se5	381	7HS	Shrunken endosperm genetic 5	26:329	Sermo / 7*Glacier
seg6	se6	396	3HL	Shrunken endosperm genetic 6	37:268	Ingrid
seg7	se7	397		Shrunken endosperm genetic 7	37:269	Ingrid
seg8	seg8	455	7H	Shrunken endosperm genetic 8	43:150	60Ab1810-53

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
sex1	lys5	382	6HL	Shrunken endosperm xenia 1	26:330	Compana
sex6		31	7HS	Shrunken endosperm xenia 6	26: 80	K6827
sex7	sex.i	628	5HL	Shrunken endosperm xenia 7	32:129	I90-374
sex8	sex.j	143	3HS	Shrunken endosperm xenia 8	43: 90	I89-633-1
sex9	sex.1	195	4HL	Shrunken endosperm xenia 9	43:102	Alf
sgh1	sh1	163	4HL	Spring growth habit 1	26:188	Iwate Mensury C
Sgh2	Sh2	309	5HL	Spring growth habit 2	26:259	Indian Barley
Sgh3	Sh3	213	1HL	Spring growth habit 3	26:212	Tammi / Hayakiso 2
sid1	nls	180	4HL	Single internode dwarf 1	43: 97	Akashinriki
Sil1	Sil	228	1H	Subcrown internode length 1	40: 79	NE 62203
sld1	dw-1	126	3HL	Slender dwarf 1	41:103	Akashinriki
sld2		83	2HS	Slender dwarf 2	26:121	Akashinriki
sld3	ant-567	186	4HS	Slender dwarf 3	40: 63	Manker
sld4	sld.d	100	2HS	Slender dwarf 4	43: 72	Glacier
sld5		144	3HS	Slender dwarf 5	32: 94	Indian Dwarf
sld6	sld.gs	242	1H	Slender dwarf 6	40: 87	Glenn
sld7	sld.f	194	4HL	Slender dwarf 7	43:101	Glenn
sld8	sld.i	49	7HS/ 4HL	Slender dwarf 8	43: 63	Wisconsin Pedigree 38
sls1	sls	227	1HS	Small lateral spikelet 1	40: 78	Morex
smn1	smn	38	3H/5H	Seminudoides 1	43: 58	Haisa
snb1	sb	26	7HS	Subnodal bract 1	26: 72	L50-200
srh1	s	321	5HL	Short rachilla hair 1	26:269	Lion
sun1	sun1	650		Sensitivity to *Ustilago nuda* 1	43:173	Steptoe
tfm1		190	1HL	Thick filament 1	40: 67	Volla
trd1	trd	202	1HL	Third outer glume 1	26:207	Valki
trp1	tr	61	4HL	Triple awned lemma 1	41: 82	CIho 6630
tst1	tst1	647	6HL	Tip sterile 1	43:170	Steptoe
tst2		636	4HL	Tip sterile 2	43:167	Donaria

ubs4	u4	11	7HL	Unbranched style 4	41: 69	Ao-Hadaka

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Locus symbol*
Rec.	Prev.					
ubs5		727		Unbranched style 5	43:222	Harrington
uzu1	uz	102	3HL	Uzu 1 or semi brachytic 1	41: 94	Baitori
var1	va	306	5HL	Variegated 1	37:259	Montcalm
var2	va2	344	5HL	Variegated 2	32:104	Montcalm
var3	va3	303	5HL	Variegated 3	26:254	Montcalm
viv-a	viv-5	627		Viviparoides-a	32:128	Foma
viv-b	viv-6	193	4HS	Viviparoides-b	43:100	Foma
viv-c	viv-1	720	5H	Viviparoides-c	43:215	Foma
vrs1	v	6	2HL	Six-rowed spike 1	37:192	Trebi
vrs1	lr	58	2HL	Six-rowed spike 1	26: 94	Nudihaxtoni
vrs1	V^d	66	2HL	Two-rowed spike 1	26:103	Svanhals
vrs1	V^t	67	2HL	Deficiens 1	26:104	White Deficiens
vrs2	v2	314	5HL	Six-rowed spike 2	26:263	Svanhals
vrs3	v3	315	1HL	Six-rowed spike 3	40: 90	Hadata 2
vrs4	v4	124	3HL	Six-rowed spike 4	41:101	MFB 104
wax1	wx	16	7HS	Waxy endosperm 1	42: 65	Oderbrucker
wnd1	wnd	23	4Hl	Winding dwarf 1	42: 74	Kogen-mugi
wst1	wst	107	3HL	White streak 1	41: 97	CIho 11767
wst2		304	5HL	White streak 2	26:255	Manabe
wst4		56	2HL	White streak 4	26: 91	Kanyo 7
wst5		221	1HL	White streak 5	26:219	Carlsberg II
wst6	wst,,j	129	3HL	White streak 6	41:105	Akashinriki
wst7	rb	79	2HL	White streak 7	41: 87	GS397
wxs1	wxs	615	7H/ 2HL	Waxy spike 1	43:160	Steptoe
Xnt1	X_a	25	7HL	Xantha seedling 1	26: 71	Akashinriki
xnt2	x_b	513		Xantha seedling 2	26:440	Black Hulless
xnt3	x_c	105	3HS	Xantha seedling 3	26:139	Colsess
xnt4	x_{c2}	36	7HL	Xantha seedling 4	26: 85	Coast
xnt5	x_n	255	6HL	Xantha seedling 5	26:237	Nepal
xnt6	x_s	113	3HS	Xantha seedling 6	26:147	Smyrna

Table 3. (continued)

Locus symbol*		BGS no.	Chr. loc.†	Locus name or phenotype	Descr. vol. p.	Parental cultivar
Rec.	Prev.					
xnt7	xan,,g	233	1HL	Xantha seedling 7	26:231	Erbet
xnt8	xan,,h	140	3HS	Xantha seedling 8	26:177	Carlsberg II
xnt9	xan,,i	37	7HL	Xantha seedling 9	26: 86	Erbet
yhd1	yh	158	4HL	Yellow head 1	42:250	Kimugi
yhd2	yh2	592		Yellow head 2	28: 34	Compana
ylf1	ylf1	652	7HS	Yellow leaf 1	43:175	Villa
Ynd1	Yn	183	4HS	Yellow node 1	32: 98	Morex
yst1	yst	104	3HS	Yellow streak 1	42:178	Gateway
yst2		109	3HS	Yellow streak 2	26:144	Kuromugi 148 / Mensury C
yst3	yst,,c	462	3HS	Yellow streak 3	26:409	Lion
yst4		85	2HL	Yellow streak 4	37:210	Glenn
yst5	yst5	346	7HS	Yellow streak 5	43:130	Bowman / ant10.30
yvs1	y_x	63	2HS	Virescent seedling 1	26: 99	Minn 71-8
yvs2	y_c	3	7HS	Virescent seedling 2	26: 46	Coast
zeb1	zb	120	3HL	Zebra stripe 1	43: 86	Mars
zeb2	zb2,f10	461	4HL	Zebra stripe 2	43:152	Unknown cultivar
zeb3	zb3,zb	223	1HL	Zebra stripe 3	40: 72	Utah 41
Zeo1	Knd	82	2HL	Zeocriton 1	41: 89	Donaria
Zeo2	Mo1	614	2HL	Zeocriton 2	41:193	36Ab51
Zeo3	Mo1	184	4HL	Zeocriton 3	32: 99	Morex

* 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 the Triticeae system. Utilization of this system for naming of barley chromosomes was 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.