ПРИЛОЖЕНИЕ

к статье О.Б. Добровольской, А.Е. Дресвянниковой, Е.Д. Бадаевой, К.И. Поповой, М. Травничковой, П. Мартинека «Изучение генетических факторов, определяющих признак "тетраостость" мягкой пшеницы»

Положение маркеров
на молекулярно-генетической карте хромосомы 5А

	Маркер	сМ
1	IACX5832	0.0
2	wsnp_Ex_c57094_58953404	0.0
3	*Ex_c95453_1499	0.0
4	BS00030991_51	11.3
5	*wsnp_BF201102A_Ta_2_1	11.3
6	wsnp_Ex_rep_c69526_68472787	11.8
7	wsnp_Ex_c19134_28056012	11.8
8	wsnp_CAP7_c2282_1107112	11.8
9	BS00099700_51	11.8
10	Ra_c7322_2294	11.8
11	wsnp_Ex_c31830_40573624	11.8
12	TA002772-0920	11.8
13	*Kukri_c8835_112	11.8
14	GENE-3321_201	13.6
15	BS00094095_51	13.6
16	BobWhite_rep_c50145_387	13.6
17	BS00077879_51	13.6
18	*Excalibur_rep_c90275_262	13.6
19	BS00057293_51	16.5
20	BS00094393_51	16.5
21	BS00056932_51	16.5
22	BS00021873_51	16.5
23	BS00056933_51	16.5
24	*BS00047242_51	16.5
25	BS00081120_51	17.6
26	RAC875_rep_c106118_339	17.6
27	wsnp_Ex_c356_698872	17.6
28	wsnp_CAP11_c951_572693	17.6
29	wsnp_Ex_c15046_23216392	17.6
30	*wsnp_Ku_c4389_7970859	17.6
31	BS00077990_51	22.5
32	*BobWhite_c5564_86	22.5
33	tplb0056h22_2113	23.6
34	wsnp_Ex_c2718_5038582	23.6
35	Kukri_rep_c107435_940	23.6
36	BS00046772_51	23.6
37	Tdurum_contig10128_593	23.6
38	wsnp_Ex_rep_c67394_65974276	23.6
39	*BS00021660_51	23.6
40	BS00065269_51	24.8
41	Excalibur_rep_c101324_1680	24.8
42	BobWhite_rep_c49176_485	24.8
43	wsnp_Ex_c6117_10704945	24.8
44	wsnp_Ra_c14112_22155312	24.8
45	RAC875_c29957_355	24.8
46	wsnp_Ra_c18459_27525981	24.8
47	wsnp_Ra_c17541_26430903	24.8
48	Ku_c69633_1873	24.8
49	RFL_Contig4653_1217	24.8
50	Kukri_c40804_171	24.8
51	wsnp_Ku_c328_679106	24.8

Продолжение таблицы

	Маркер	cM
52	wsnp_Ex_c31570_40343841	24.8
53	wsnp_Ra_c14112_22155451	24.8
54	wsnp_JD_c8448_9444839	24.8
55	wsnp_Ex_c130_258776	24.8
56	wsnp_JD_c20604_18293112	24.8
57	TA006001-0725	24.8
58	IAAV5061	24.8
59	BS00045284_51	24.8
60	Ex_c1344_1859	24.8
61	Ex_c13534_401	24.8
62	wsnp_Ku_c933_1913402	24.8
63	wsnp_Ex_c15084_23263641	24.8
64	Tdurum_contig81753_70	24.8
65	BS00064387_51	24.8
66	BS00064515_51	24.8
67	wsnp_Ra_c2228_4310870	24.8
68	wsnp_Ra_c10053_16636851	24.8
69	GENE-3500_336	24.8
70	wsnp_Ex_c130_259533	24.8
71	*wsnp_Ex_rep_c110023_92574403	24.8
72	BobWhite_rep_c49979_373	27.1
73	wsnp_RFL_Contig4136_4696148	27.1
74	RAC875_c103787_233	27.1
75	*Excalibur_c17553_84	27.1
76	Excalibur_c9356_783	28.2
77	*wsnp_Ex_c14812_22928900	28.2
78	RAC875_c13462_66	28.8
79	*BS00084580_51	28.8
80	wsnp_Ex_c4666_8349206	30.5
81	BS00063822_51	30.5
82	Kukri_c42466_392	30.5
83	Excalibur_c53930_53	30.5
84	Tdurum_contig49844_958	30.5
85	BS00070903_51	30.5
86	BS00066127_51	30.5
87	wsnp_Ex_rep_c68515_67349904	30.5
88	wsnp_Ex_rep_c70343_69286263	30.5
89	TA004818-0715	30.5
90	Ra_c33743_472	30.5
91	Tdurum_contig10546_273	30.5
92	wsnp_Ex_rep_c70343_69286072	30.5
93	tplb0031i04_452	30.5
94	RAC875_rep_c106700_77	30.5
95	wsnp_Ra_c13_24540	30.5
96	TA003225-0566	30.5
97	RAC875_c13_1589	30.5
98	Tdurum_contig45240_1309	30.5
99	*RAC875_c13_1458	30.5
100	IAAV2080	31.1
101	BS00034303_51	31.1
102	*BS00034304_51	31.1
103	RFL_Contig727_736	44.9
104	*Excalibur_c24638_380	44.9

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признак «тетраостость» мягкой пшеницы

2020
24•6

Продолжение таблицы

	Маркер	cM
105	BS00067797_51	46.0
106	IACX12578	46.0
107	BS00069980_51	46.0
108	BS00078242_51	46.0
109	BS00067895_51	46.0
110	BobWhite_c10901_578	46.0
111	BobWhite_c46338_76	46.0
112	RAC875_c7186_1147	46.0
113	Ku_c6319_201	46.0
114	IACX3154	46.0
115	BS00066916_51	46.0
116	wsnp_JD_c9510_10342089	46.0
117	RAC875_c19105_498	46.0
118	GENE-3316_106	46.0
119	wsnp_Ex_c19647_28632659	46.0
120	Excalibur_c63344_424	46.0
121	Kukri_c30875_283	46.0
122	RAC875_rep_c110032_448	46.0
123	BS00022509_51	46.0
124	RAC875_c42037_363	46.0
125	Kukri_c2326_659	46.0
126	wsnp_JD_c6160_7327405	46.0
127	wsnp_Ex_c24594_33843836	46.0
128	Excalibur_c97639_173	46.0
129	Kukri_c75644_104	46.0
130	GENE-3455_115	46.0
130	IAAV1417	46.0
131	IACX3152	46.0
132	Tdurum_contig57742_400	46.0
133	GENE-3440_199	46.0
134	*RAC875_c79944_269	46.0
135	BS00100178_51	46.6
136	wsnp_Ex_c6314_10992814	46.6
137	Excalibur_rep_c74009_217	46.6
138	wsnp_Ra_c57838_59796310	46.6
139	RAC875_c7291_388	46.6
140	Jagger_c1611_158	46.6
141	Jagger_c5915_58	46.6
142	Kukri_rep_c68263_453	46.6
143	Tdurum_contig69079_300	46.6
144	Kukri_c5460_1063	46.6
145	RAC875_c2498_600	46.6
146	wsnp_Ku_c14958_23427256	46.6
147	BS00080090_51	46.6
148	RAC875_c2498_837	46.6
149	RFL_Contig4500_912	46.6
150	Tdurum_contig4567_1290	46.6
151	wsnp_Ex_rep_c66900_65314631	46.6
152	wsnp_Ex_rep_c66900_65314012	46.6
153	BobWhite_c34650_141	46.6
154	IACX11633	46.6
155	Ra_c66628_801	46.6
156	BS00013563_51	46.6

Продолжение таблицы

	Маркер	cM
157	Tdurum_contig4567_172	46.6
158	*BobWhite_c34650_78	46.6
159	Kukri_c1106_1489	48.3
160	*RAC875_c232_1895	48.3
161	IAAV6488	50.0
162	Tdurum_contig59338_1902	50.0
163	wsnp_Ex_c1279_2451699	50.0
164	RAC875_c99519_227	50.0
165	Tdurum_contig76136_404	50.0
166	wsnp_Ex_c7168_12311649	50.0
167	CAP8_c1066_309	50.0
168	*Tdurum_contig43844_1266	50.0
169	BS00094342_51	51.2
170	*BS00094343_51	51.2
171	RAC875_c28819_281	54.7
172	Excalibur_c6567_845	54.7
173	Kukri_rep_c103857_458	54.7
174	BobWhite_c5457_1440	54.7
175	TA004548-0753	54.7
176	RAC875_c49940_385	54.7
177	GENE-3314_78	54.7
178	*GENE-3791_463	54.7
179	wsnp_Ex_c49211_53875600	55.3
180	*Excalibur_rep_c69868_123	55.3
181	Excalibur_c2598_2052	55.9
182	BobWhite_c11512_157	55.9
183	Excalibur_c12332_161	55.9
184	BS00061387_51	55.9
185	BS00022761_51	55.9
186	RAC875_c31670_389	55.9
187	wsnp_Ku_c51039_56457361	55.9
188	Ex_c5317_662	55.9
189	RAC875_c61597_327	55.9
190	RAC875_c68120_285	55.9
191	BS00065313_51	55.9
192	Kukri_c63163_141	55.9
193	*wsnp_Ex_c3670_6694480	55.9
194	tplb0060m15_257	57.0
195	Tdurum_contig48760_112	57.0
196	*Excalibur_c39303_144	57.0
197	Kukri_c14889_1086	58.8
198	BS00072156_51	58.8
199	GENE-3318_556	58.8
200	*Kukri_c14889_116	58.8
201	BS00065549_51	60.5
202	Ex_c21738_1175	60.5
203	*BobWhite_rep_c63943_76	60.5
204	wsnp_Ra_c17216_26044790	61.0
205	BS00022215_51	61.0
206	*BS00110075_51	61.0
207	RAC875_c61493_327	67.8
208	RAC875_rep_c116420_103	92.2
209	BS00074299_51	93.3

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Изучение генетических факторов, определяющих
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2020
24•6

Продолжение таблицы

	Маркер	сМ
210	BS00074301_51	93.3
211	BS00022069_51	93.3
212	BS00076246_51	93.3
213	Tdurum_contig86202_175	93.3
214	wsnp_Ra_c12183_19587379	93.3
215	BS00065481_51	93.3
216	RAC875_c11404_610	93.3
217	Kukri_c29560_455	93.3
218	wsnp_Ku_c20011_29589089	93.3
219	wsnp_Ku_c20011_29589514	93.3
220	BS00044408_51	93.3
221	BobWhite_c23736_153	93.3
222	GENE-3601_145	93.3
223	Excalibur_c37943_221	93.3
224	Tdurum_contig52695_388	93.3
225	Ra_c14657_678	93.3
226	IACX10100	93.3
227	Ku_c19858_2078	93.3
228	Ku_c21002_1075	93.3
229	wsnp_Ex_c11120_18022932	93.3
230	*Ku_c21002_908	93.3
231	wsnp_Ex_rep_c66689_65010988	95.7
232	BobWhite_c10385_374	95.7
233	BS00022071_51	95.7
234	RAC875_c9984_1003	95.7
235	*TG0020	95.7
236	wsnp_AJ612027A_Ta_2_1	96.2
237	TG0041	96.2
238	RAC875_c26353_719	96.2
239	wsnp_BF293620A_Ta_2_1	96.2
240	Excalibur_c26671_57	96.2
241	*IAAV8629	96.2
242	BS00066447_51	97.4
243	Tdurum_contig10843_745	97.4
244	wsnp_Ex_c44164_50292954	97.4
245	GENE-2794_70	97.4
246	wsnp_Ex_c2185_4094843	97.4
247	wsnp_Ex_c17476_26190830	97.4
248	wsnp_Ex_c55777_58153636	97.4
249	BobWhite_c658_377	97.4
250	wsnp_Ex_rep_c101994_87256479	97.4
251	Excalibur_c24051_502	97.4
252	CAP11_c3209_76	97.4
253	wsnp_Ku_c6977_12078791	97.4
254	Excalibur_c41710_417	97.4
255	Excalibur_c31769_793	97.4
256	wsnp_Ex_c18754_27630557	97.4
257	wsnp_RFL_Contig2265_1693968	97.4
258	wsnp_Ku_c6977_12078885	97.4
259	*BS00041063_51	97.4
260	BS00059098_51	98.5
261	BS00100510_51	98.5
262	*tplb0044j06_689	98.5

Продолжение таблицы

	Маркер	сМ
1	BS00003088_51	0.0
2	Excalibur_c60150_107	0.0
3	BS00076948_51	0.0
4	*BobWhite_c42349_99	0.0
5	wsnp_Ex_c54211_57168122	3.0
6	*wsnp_CAP8_c7723_3536264	3.0
7	wsnp_Ex_c12684_20157261	8.4
8	*BS00068435_51	8.4
9	BobWhite_c6966_236	24.6
10	*BS00036851_51	24.6
11	wsnp_Ex_c2171_4072774	32.8
12	BobWhite_c8266_227	32.8
13	BS00021860_51	32.8
14	TA003210-1094	32.8
15	wsnp_Ex_c2171_4073721	32.8
16	GENE-2673_1010	32.8
17	RAC875_c48885_107	32.8
18	*BS00023138_51	32.8
19	*b1.ag*	35.8