

SUPPLEMENTARY MATERIALS

to the article R.A. Abdullaev, T.V. Lebedeva, N.V. Alpatieva, B.A. Batasheva, I.N. Anisimova, E.E. Radchenko
 “Powdery mildew resistance of barley accessions from Dagestan”

Supplementary 1. Resistance of barley accessions from Dagestan to *Blumeria graminis* (DES VIR*, 2012–2014)

VIR catalogue number	Variety	Growth habit	Accession	Year of registration at VIR	Year of study	Resistance to <i>Blumeria graminis</i> (DES VIR, field), IT score
994	<i>Pallidum, Intermedium</i>	Winter	Landrace	1904	2012	3
					2013	1
					2014	5
1028	<i>Pallidum, Intermedium</i>	Winter	Landrace	1904	2012	3
					2013	1
					2014	3
1030	<i>Pallidum</i>	Spring	Landrace	1904	2012	3
					2013	1
					2014	3
1032	<i>Pallidum, Intermedium</i>	Winter	Landrace	1904	2012	3
					2013	7
					2014	5
1034	<i>Nigrum, Nigripallidum</i>	Winter	Landrace	1904	2012	3
					2013	5
					2014	5
1067	<i>Nigrum</i>	Winter	Landrace	1901	2012	3
					2013	5
					2014	5
1507	<i>Nudum, Pallidum</i>	Winter	Landrace		2012	5
					2013	5
					2014	5
3772	<i>Nudum</i>	Spring	Landrace	1918	2012	3
					2013	1
					2014	3

4461	<i>Pallidum</i>	Spring	Landrace		2012	5
					2013	5
					2014	5
4466	<i>Pallidum</i>	Winter	Landrace	1923	2012	5
					2013	5
					2014	5
4467	<i>Pallidum</i>	Winter	Landrace	1923	2012	5
					2013	5
					2014	5
4468	<i>Pallidum</i>	Winter	Landrace	1923	2012	5
					2013	5
					2014	7
10467	<i>Nigrum, Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	5
10468	<i>Pallidum</i>	Winter	Landrace	1926	2012	7
					2013	5
					2014	5
10469	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	7
					2014	5
10471	<i>Intermedium, Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	7
					2014	5
10473	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	5
11407	<i>Pallidum</i>	Winter	Landrace	1929	2012	5
					2013	5
					2014	5

11410	<i>Pallidum</i>	Winter	Landrace		2012	7
					2013	5
					2014	5
11434	<i>Pallidum</i>	Spring	Landrace	1929	2012	7
					2013	5
					2014	5
11438	<i>Pallidum</i>	Spring	Landrace	1929	2012	7
					2013	5
					2014	5
11439	<i>Pallidum</i>	Spring	Landrace	1929	2012	3
					2013	1
					2014	3
11440	<i>Pallidum</i>	Spring	Landrace	1929	2012	3
					2013	1
					2014	5
11458	<i>Pallidum</i>	Spring	Landrace	1929	2012	5
					2013	5
					2014	5
11462	<i>Nutans</i>	Spring	Landrace	1929	2012	5
					2013	5
					2014	5
11474	<i>Pallidum</i>	Spring		1929	2012	5
					2013	3
					2014	5
11475	<i>Nutans</i>	Spring		1929	2012	3
					2013	1
					2014	5
12214	<i>Pallidum</i>	Spring	Landrace	1931	2012	5
					2013	5
					2014	5

13114	<i>Pallidum</i>	Winter		1930	2012	5
					2013	5
					2014	5
13219	<i>Pallidum</i>	Spring, winter		1930	2012	5
					2013	5
					2014	5
13221	<i>Pallidum</i>	Winter		1930	2012	5
					2013	3
					2014	5
13222	<i>Intermedium</i>	Winter		1930	2012	5
					2013	5
					2014	5
13223	<i>Pallidum</i>	Winter		1930	2012	5
					2013	5
					2014	5
13224	<i>Intermedium</i>	Winter		1930	2012	5
					2013	5
					2014	5
13230	<i>Pallidum</i>	Winter		1930	2012	3
					2013	5
					2014	5
13232	<i>Pallidum</i>	Winter		1930	2012	3
					2013	1
					2014	5
13233	<i>Nigrum</i>	Winter		1930	2012	5
					2013	5
					2014	5
13234	<i>Nigrum</i>	Winter	Landrace	1930	2012	5
					2013	5
					2014	5

13235	<i>Pallidum</i>	Winter	Landrace	1930	2012	5
					2013	7
					2014	5
13236	<i>Pallidum</i>	Winter	Landrace	1930	2012	5
					2013	5
					2014	5
13237	<i>Pallidum</i>	Winter	Landrace	1930	2012	5
					2013	5
					2014	5
13238	<i>Pallidum</i>	Winter	Landrace	1930	2012	5
					2013	5
					2014	7
13495	<i>Pallidum</i>	Spring	Landrace		2012	5
					2013	5
					2014	5
13496	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	5
13497	<i>Pallidum</i>	Winter	Landrace	1926	2012	3
					2013	3
					2014	–
13500	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	7
13502	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	5
13503	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	3
					2014	5

13505	<i>Pallidum</i>	Winter	Landrace	1926	2012	5
					2013	5
					2014	5
13506	<i>Pallidum</i>	Spring	Landrace	1926	2012	5
					2013	5
					2014	7
13988	<i>Pallidum</i>	Winter	Landrace	1927	2012	3
					2013	1
					2014	5
13991	<i>Pallidum</i>	Winter	Landrace	1927	2012	3
					2013	1
					2014	3
13992	<i>Pallidum</i>	Winter	Landrace	1927	2012	5
					2013	5
					2014	5
13993	<i>Pallidum</i>	Winter	Landrace	1927	2012	5
					2013	5
					2014	5
13995	<i>Pallidum</i>	Winter, spring	Landrace	1927	2012	5
					2013	5
					2014	5
13996	<i>Pallidum</i>	Winter	Landrace	1927	2012	3
					2013	5
					2014	5
13999	<i>Pallidum</i>	Winter	Landrace	1927	2012	3
					2013	3
					2014	5
14145	<i>Pallidum</i>	Winter	Landrace	1932	2012	5
					2013	5
					2014	5
14147	<i>Pallidum</i>	Spring	Landrace		2012	3
					2013	3
					2014	5

14148	<i>Pallidum</i>	Winter	Samurikum 3263	1932	2012	5
					2013	5
					2014	5
14149	<i>Pallidum</i>	Winter	602 (line)	1932	2012	5
					2013	5
					2014	5
14154	<i>Pallidum</i>	Winter	Landrace	1932	2012	3
					2013	5
					2014	5
14891	<i>Nudum</i>	Spring	Landrace	1934	2012	5
					2013	3
					2014	5
14893	<i>Nudideficiens</i>	Spring, winter	Landrace	1934	2012	–
					2013	1
					2014	5
14894	<i>Nudum</i>	Spring	Landrace	1934	2012	3
					2013	1
					2014	5
14999	<i>Pallidum</i>	Winter	Landrace	1935	2012	5
					2013	5
					2014	5
15002	<i>Nudum</i>	Spring	Landrace	1935	2012	3
					2013	5
					2014	5
15004	<i>Pallidum, Nutans</i>	Winter	Landrace	1935	2012	5
					2013	5
					2014	7
15007	<i>Atratum</i>	Winter	Landrace	1935	2012	5
					2013	7
					2014	7

15008	<i>Nudum</i>	Spring	Landrace	1935	2012	3
					2013	1
					2014	5
15009	<i>Nudum</i>	Spring	Landrace	1935	2012	–
					2013	1
					2014	3
15011	<i>Pallidum</i>	Spring, winter	Landrace	1935	2012	3
					2013	3
					2014	5
15013	<i>Nudum, Viride, Pallidum, Nutans</i>	Spring	Landrace	1935	2012	3
					2013	1
					2014	5
15014	<i>Nudum</i>	Spring	Landrace	1935	2012	–
					2013	3
					2014	5
15015	<i>Nudum</i>	Spring	Landrace	1935	2012	–
					2013	1
					2014	5
15017	<i>Nudum</i>	Spring			2012	–
					2013	1
					2014	5
15018	<i>Nudum, Nudideficiens</i>	Spring	Landrace	1935	2012	5
					2013	3
					2014	5
15019	<i>Nudum</i>	Spring	Landrace	1935	2012	3
					2013	3
					2014	5
15020	<i>Nudum</i>	Spring	Landrace	1935	2012	3
					2013	5
					2014	5

15021	<i>Daghestanicum, Nudum, Nutans, Nudideficiens</i>	Spring	Landrace	1935	2012	5
					2013	1
					2014	5
15022	<i>Nudum</i>	Spring	Landrace	1935	2012	1
					2013	1
					2014	5
15025	<i>Nudum, Viride</i>	Spring	Landrace	1935	2012	3
					2013	3
					2014	5
15027	<i>Nudum, Viride</i>	Spring	Landrace	1935	2012	–
					2013	3
					2014	5
15031	<i>Nudideficiens, Dahestanicum, Nudum</i>	Spring	Landrace	1935	2012	5
					2013	5
					2014	7
15032	<i>Daghestanicum, Nudideficiens</i>	Spring	Landrace	1935	2012	3
					2013	1
					2014	5
15033	<i>Nudum</i>	Spring	Landrace	1935	2012	3
					2013	1
					2014	3
15034	<i>Nutans</i>	Spring	Landrace	1935	2012	3
					2013	3
					2014	5
15036	<i>Nutans</i>	Spring	Landrace	1935	2012	1
					2013	3
					2014	5
15037	<i>Nudum, Dahestanicum, Viride, Nudideficiens</i>	Spring	Landrace	1935	2012	1
					2013	1
					2014	3

15038	<i>Nudideficiens, Dahestanicum</i>	Winter	Landrace	1935	2012	–
					2013	1
					2014	3
15039	<i>Nudum, Dahestanicum</i>	Spring	Landrace	1935	2012	5
					2013	5
					2014	5
15040	<i>Nudum</i>	Spring	Landrace	1935	2012	1
					2013	1
					2014	3
15047	<i>Nudum</i>	Spring	Landrace	1936	2012	5
					2013	7
					2014	7
15052	<i>Pallidum</i>	Spring	Landrace		2012	5
					2013	7
					2014	5
15056	<i>Nudideficiens, (Pallidum)</i>	Spring	Landrace		2012	5
					2013	5
					2014	5
15088	<i>Nudum</i>	Spring			2012	–
					2013	5
					2014	5
15177	<i>Pallidum</i>	Spring	Landrace	1936	2012	5
					2013	3
					2014	5
15181	<i>Nigrum</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5
15182	<i>Pallidum</i>	Winter	Landrace	1936	2012	7
					2013	5
					2014	5
15183	<i>Pallidum</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5

15184	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5
15185	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5
15186	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5
15187	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	3
					2014	3
15188	<i>Nutans</i>	Spring	Landrace	1936	2012	3
					2013	3
					2014	3
15189	<i>Medicum</i>	Spring	Landrace	1936	2012	5
					2013	5
					2014	5
15190	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	3
					2014	5
15191	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	3
					2014	5
15192	<i>Nutans</i>	Spring	Landrace	1936	2012	5
					2013	3
					2014	5
15240	<i>Pallidum</i>	Winter	Dagestanskij 239	1935	2012	5
					2013	5
					2014	7

15242	<i>Pallidum</i>	Winter	Gibernakulyum 2664	1935	2012	5
					2013	5
					2014	7
15246	<i>Pallidum</i>	Winter	Gibernakulyum 9006	1935	2012	5
					2013	5
					2014	5
15252	<i>Pallidum</i>	Spring, winter	Terskij	1935	2012	5
					2013	3
					2014	5
15273	<i>Pallidum</i>	Winter	04287	1935	2012	5
					2013	5
					2014	7
15287	<i>Nigrum</i>	Facultative	04862	1935	2012	5
					2013	5
					2014	5
15288	<i>Nigrum</i>	Winter	04721	1935	2012	5
					2013	5
					2014	5
15289	<i>Nigrum</i>	Winter	09264	1935	2012	3
					2013	5
					2014	5
15291	<i>Nutans</i>	Spring	164-47	1935	2012	5
					2013	5
					2014	5
15292	<i>Nutans</i>	Spring	181-19	1935	2012	5
					2013	5
					2014	5
15293	<i>Nutans</i>	Spring	164-57	1935	2012	3
					2013	1
					2014	5

15294	<i>Pallidum, Pyramidatum</i>	Spring	180-25	1935	2012	5
					2013	5
					2014	5
15295	<i>Nutans</i>	Spring	182-21	1935	2012	3
					2013	5
					2014	5
15296	<i>Atratum</i>	Spring	159-109		2012	5
					2013	5
					2014	5
15978	<i>Nutans</i>	Spring		1938	2012	5
					2013	5
					2014	5
15979	<i>Pallidum</i>	Spring		1938	2012	5
					2013	5
					2014	5
15981	<i>Nutans</i>	Spring		1938	2012	3
					2013	5
					2014	5
16095	<i>Pallidum</i>	Spring	Landrace	1938	2012	3
					2013	3
					2014	3
16376	<i>Pallidum</i>	Spring, winter		1938	2012	5
					2013	3
					2014	5
16377	<i>Pallidum</i>	Spring		1938	2012	5
					2013	5
					2014	5
17428	<i>Pallidum</i>	Spring		1948	2012	5
					2013	5
					2014	5
17429	<i>Nudum</i>	Spring		1948	2012	3
					2013	3
					2014	5

17430	<i>Nutans</i>	Spring		1948	2012	5
					2013	3
					2014	5
17431	<i>Nutans, Pallidum</i>	Spring		1948	2012	5
					2013	3
					2014	5
17432	<i>Nudum, Nudideficiens</i>	Spring		1948	2012	3
					2013	1
					2014	5
17433	<i>Nudum</i>	Spring		1948	2012	3
					2013	1
					2014	5
17434	<i>Nutans, Pallidum</i>	Spring		1948	2012	5
					2013	5
					2014	7
17436	<i>Pallidum</i>	Winter	Landrace	1948	2012	5
					2013	5
					2014	5
17437	<i>Nutans</i>	Spring	Landrace	1948	2012	5
					2013	5
					2014	5
17438	<i>Pallidum, Nutans</i>	Spring	Landrace	1948	2012	5
					2013	5
					2014	5
17439	<i>Atratum</i>	Winter	Landrace		2012	7
					2013	5
					2014	7
17907	<i>Pallidum</i>	Spring	Landrace	1950	2012	7
					2013	5
					2014	5

17908	<i>Nudideficiens</i>	Spring	Landrace	1950	2012	5
					2013	1
					2014	5
17909	<i>Nudideficiens</i>	Spring	Landrace	1950	2012	5
					2013	1
					2014	5
17910	<i>Pallidum</i>	Spring	Landrace	1950	2012	5
					2013	3
					2014	5
17928	<i>Pallidum</i>	Spring	Landrace		2012	7
					2013	5
					2014	5
18025	<i>Pallidum</i>	Spring	Landrace	1951	2012	5
					2013	5
					2014	3
18171	<i>Pallidum</i>	Spring		1951	2012	5
					2013	3
					2014	5
18172	<i>Pallidum</i>	Spring		1951	2012	5
					2013	5
					2014	5
18173	<i>Pallidum</i>	Winter		1951	2012	5
					2013	5
					2014	5
18175	<i>Pallidum</i>	Winter		1951	2012	5
					2013	5
					2014	5
18176	<i>Pallidum</i>	Winter		1951	2012	5
					2013	5
					2014	5

18177	<i>Pallidum, Nutans</i>	Spring		1951	2012	5
					2013	5
					2014	5
18182	<i>Nudum, Pallidum</i>	Spring		1951	2012	3
					2013	1
					2014	3
18183	<i>Pallidum</i>	O3		1951	2012	5
					2013	5
					2014	5
18185	<i>Nutans</i>	Spring		1951	2012	5
					2013	5
					2014	5
18186	<i>Nutans, Submedicum</i>	Spring		1951	2012	5
					2013	3
					2014	5
18187	<i>Nutans, Submedicum, Pallidum</i>	Spring		1951	2012	5
					2013	5
					2014	5
18188	<i>Pallidum</i>	Spring		1951	2012	5
					2013	5
					2014	5
18190	<i>Pallidum</i>	Winter		1951	2012	5
					2013	5
					2014	5
18371	<i>Nudum</i>	Spring		1954	2012	5
					2013	5
					2014	5
18373	<i>Nudum</i>	Spring		1954	2012	3
					2013	5
					2014	5
18374	<i>Nudum</i>	Spring			2012	–
					2013	3
					2014	5

18375	<i>Pallidum, Nutans</i>	Winter		1954	2012	5
					2013	5
					2014	5
18376	<i>Nudum</i>	Spring		1954	2012	3
					2013	5
					2014	5
18377	<i>Nudum</i>	Spring		1954	2012	3
					2013	3
					2014	5
18464	<i>Nutans</i>	Spring		1955	2012	5
					2013	3
					2014	5
18465	<i>Nudum</i>	Spring		1956	2012	5
					2013	1
					2014	3
19330	<i>Pallidum</i>	Spring, winter	Hasavyurtovskij	1963	2012	5
					2013	5
					2014	5
21744	<i>Nutans, Pallidum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21745	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21746	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21747	<i>Nudum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5

21748	<i>Nudum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21749	<i>Medicum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	3
					2014	5
21750	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21752	<i>Pallidum, Nutans, Nudum, Erectum, Viride</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21754	<i>Pallidum, Medicum, Erectum, Nutans, Viride</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21755	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	3
					2013	3
					2014	5
21756	<i>Pallidum, Viride, Nutans</i>	Spring	Landrace	1969	2012	3
					2013	1
					2014	3
21757	<i>Pallidum, Viride, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	3
					2014	5
21758	<i>Viride, Nudum, Nova, Pallidum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21759	<i>Viride, Pallidum, Nutans</i>	Spring	Landrace	1969	2012	7
					2013	5
					2014	5

21760	<i>Nutans, Pallidum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21761	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	–
					2013	5
					2014	5
21763	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21764	<i>Nutans, Pallidum</i>	Spring	Landrace	1969	2012	3
					2013	5
					2014	5
21765	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	3
					2014	5
21766	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21767	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21768	<i>Nutans</i>	Spring	Landrace	1969	2012	7
					2013	5
					2014	5
21770	<i>Nutans, Pallidum</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21771	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5

21772	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21773	<i>Pallidum</i>	Spring	Landrace	1969	2012	3
					2013	3
					2014	5
21774	<i>Nudum, Nutans, Pallidum</i>	Spring	Landrace	1969	2012	5
					2013	3
					2014	5
21775	<i>Nutans</i>	Spring	Landrace	1969	2012	3
					2013	7
					2014	5
21776	<i>Nudum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21777	<i>Nudum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21779	<i>Pallidum, Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21780	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21782	<i>Nutans</i>	Spring	Landrace	1969	2012	5
					2013	5
					2014	5
21803	<i>Pallidum, Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21804	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	7
					2013	5
					2014	7

21805	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	5
					2013	3
					2014	5
21806	<i>Nutans, Pallidum, Viride</i>	Spring	Landrace	1972	2012	3
					2013	5
					2014	5
21807	<i>Pallidum, Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21808	<i>Pallidum, Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21809	<i>Viride, Nudum, Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21810	<i>Nudum, Viride</i>	Spring	Landrace	1972	2012	3
					2013	5
					2014	5
21811	<i>Nudum</i>	Spring	Landrace	1972	2012	–
					2013	3
					2014	3
21812	<i>Nudum, Viride, Nudideficiens</i>	Spring	Landrace	1972	2012	3
					2013	3
					2014	3
21814	<i>Nudum, Viride</i>	Spring	Landrace	1972	2012	3
					2013	5
					2014	5
21815	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5

21816	<i>Nutans, Pallidum, Nudum</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21817	<i>Pallidum, Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	–
21818	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21819	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21820	<i>Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21821	<i>Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
21822	<i>Nutans, Pallidum</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	3
21823	<i>Nutans</i>	Spring	Landrace	1972	2012	5
					2013	5
					2014	5
23785	<i>Nutans</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23786	<i>Nutans, Nudum, Viride</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5

23787	<i>Nutans, Nudum, Viride</i>	Spring	Landrace	1977	2012	7
					2013	7
					2014	9
23788	<i>Nudum, Viride</i>	Spring	Landrace	1977	2012	3
					2013	3
					2014	3
23789	<i>Nudum, Nutans, Viride</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23819	<i>Nutans, Pallidum</i>	Spring	Landrace	1977	2012	5
					2013	3
					2014	3
23820	<i>Pallidum, Nudum</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23821	<i>Pallidum, Nudum, Nutans</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23822	<i>Nutans, Pallidum</i>	Spring	Landrace	1977	2012	5
					2013	3
					2014	5
23823	<i>Nutans, Pallidum</i>	Spring	Landrace	1977	2012	5
					2013	3
					2014	3
23824	<i>Nudum</i>	Spring	Landrace	1977	2012	5
					2013	3
					2014	3
23826	<i>Nutans</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23827	<i>Nutans, Pallidum</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5

23830	<i>Nutans, Deficiens</i>	Spring		1977	2012	5
					2013	5
					2014	5
23831	<i>Pallidum</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
23834	<i>Nutans</i>	Spring	Landrace	1977	2012	5
					2013	5
					2014	5
25067	<i>Trofimovskajae</i>	Spring, winter		1977	2012	5
					2013	5
					2014	5
25068	<i>Zuleichate</i>	Winter	Mutant KNIISH × PF-24	1977	2012	7
					2013	5
					2014	5
25069	<i>Patimatae</i>	Winter	KNIISH128 × k-17828	1977	2012	7
					2013	5
					2014	5
25615	<i>Horsfordianum</i>	Winter	F8 Dagestanskij × k-17348	1978	2012	7
					2013	7
					2014	5
25616	<i>Tonsum</i>	Winter	F8 k-3307 × Dagestanskij	1978	2012	5
					2013	5
					2014	7
26289	<i>Nutans</i>	Spring	Landrace	1980	2012	7
					2013	5
					2014	5
26290	<i>Nutans</i>	Spring	Landrace	1980	2012	5
					2013	5
					2014	5

26291	<i>Nutans</i>	Spring	Landrace	1980	2012	5
					2013	5
					2014	5
26292	<i>Nutans</i>	Spring	Landrace	1980	2012	5
					2013	3
					2014	5
26293	<i>Nutans</i>	Spring	Landrace	1980	2012	5
					2013	5
					2014	5
26294	<i>Nutans, Pallidum</i>	Spring	Landrace	1980	2012	5
					2013	5
					2014	3
26295	<i>Nutans, Deficiens</i>	Spring	Landrace	1980	2012	5
					2013	5
					2014	5
26296	<i>Nutans</i>	Spring	Landrace	1980	2012	–
					2013	5
					2014	5
28209	<i>Abdulbashirovi</i>	Winter		1985	2012	7
					2013	5
					2014	5
28210	<i>Bachteevi</i>	Winter		1985	2012	5
					2013	7
					2014	5
28211	<i>Lukyanovae</i>	Winter		1985	2012	7
					2013	7
					2014	5
28212	<i>Lvovi</i>	Winter		1985	2012	7
					2013	7
					2014	7

28213	<i>Valentinae</i>	Spring, winter		1985	2012	5
					2013	5
					2014	3
29956	<i>Saidii</i>	Spring		1992	2012	5
					2013	7
					2014	5
29957	<i>Galinae</i>	Winter		1992	2012	5
					2013	5
					2014	5
29980	<i>Pallidum</i>	Winter	DASHI-1	1993	2012	7
					2013	5
					2014	5
30082	<i>Subinerme</i>	Spring	F8 (k-17826 × Nahcyvandany)	1993	2012	7
					2013	5
					2014	5
30085	<i>Parallelum</i>	Spring	GB-18 × Polyarnyj 14	1993	2012	3
					2013	1
					2014	1
30086	<i>Subcornutum</i>	Spring	GB-18 × Viner	1993	2012	5
					2013	5
					2014	5
30087	<i>Duplipseudoangustispicatum</i>	Spring	GB-18 × Viner	1993	2012	5
					2013	5
					2014	5
30091	<i>Erectum</i>	Winter	DASHI-2	1993	2012	5
					2013	7
					2014	5
30781	<i>Nutans</i>	Spring	Dagestanskij zolotistyj	2001	2012	7
					2013	7
					2014	5
22055	<i>Nutans</i>	Spring	Temp (control)		2012	3
					2013	3
					2014	3

Note: DES VIR* – Dagestan Experiment Station of VIR.

Supplementary 2. Resistance of barley isogenic lines to *Blumeria graminis*

VIR catalogue number	Variety	Accession	Origin	DES VIR*, 2013, filed	DES VIR, 2014, field	PPL VIR**, 2014, field	PPL VIR, 2015, field	Greenhouse 27.03.14	Greenhouse 01.04.14	Climatic chamber 9.04.19, seedlings	Climatic chamber 14.05.19, seedlings
30215	Nutans	H - 3502 <i>mlo2</i>	Denmark	no data	5	7	1	3	3	4	no data
30217	Nutans	Isogenic line Ingrid <i>Mlg</i>	Germany	5	5	7	5	3	3	4	3
30218	Nutans	Isogenic line Ingrid <i>mlo1</i>	Germany	7	7	9	7	1	1	1	0
30219	Nutans	Isogenic line Ingrid <i>mlo3</i>	Germany	7	7	9	7	0	0	1	0-1
30220	Nutans	Isogenic line Ingrid <i>mlo4</i>	Germany	7	7	9	7	0	0	0	0-1
30221	Nutans	Isogenic line Ingrid <i>mlo5</i>	Germany	7	7	9	7	0	0	0	0-1
30222	Nutans	Isogenic line Ingrid <i>mlo8</i>	Germany	7	7	9	7	1	1	0	0
30223	Nutans	Isogenic line Ingrid <i>mlo9</i>	Germany	7	7	9	7	0	1	0	0-1
30224	Nutans	Isogenic line Ingrid <i>mlo10</i>	Germany	7	7	9	7	0	0	1	0
30225	Nutans	Isogenic line Ingrid <i>mlo11</i>	Germany	9	7	9	7	0	0	0	0-1
30237	Nutans	Diamant × IB-54B <i>Mla16</i>	Germany	7	7	9	7	0	0-1	0	1
30238	Nutans	Diamant × 1B-86B <i>Mla19</i>	Germany	7	7	9	7	0	1	0	0
30239	Nutans	RS170-47 × Kiebitz <i>Mla17</i>	Germany	7	5	7	5	3	3	3	3
30240	Nutans	RS20-1 × Kiebitz B <i>Mla18</i>	Germany	7	7	7	5	1	2	2	2-3
30296	Nutans	Korina <i>Mla3 Mla9 Mla12</i>	Germany	no data	7	9	5	3	3	3	3
31005	Nutans	<i>Mla16</i>	Israel	no data	7	9	5	1	1	3	2-3
31006	Nutans	<i>Mla17</i>	Israel	no data	5	7	5	2	3	3	3
31007	Nutans	<i>Mla18</i>	Israel	no data	7	9	7	0	1	1	1
31008	Nutans	<i>Mla19</i>	Israel	no data	7	7	5	1-3	2	2-3	2
31009	Nutans	<i>Mla20</i>	Israel	no data	7	7	3	2-3	3	3	2-3
31010	Nutans	<i>Mla21</i>	Israel	no data	5	9	5	3	3	3	3
31011	Nutans	<i>Mlai</i>	Israel	9	7	9	7	1	1	1	1-2
31012	Nutans	P 01 <i>Mla+</i>	Great Britain	7	5	5	5	3	3	4	4
31013	Nutans	P 02 <i>Mla3</i>	Great Britain	7	5	5	7	3	3	4	4
31014	Nutans	P 03 <i>Mla6 Mla14</i>	Great Britain	5	5	5	3	3	3	3	3
31015	Nutans	P 04 (A) <i>Mla7 Mlk+</i>	Great Britain	5	5	5	3	3	3	3	3
31016	Nutans	P 04 (B) <i>Mla7+</i>	Great Britain	3	5	5	3	3	3	4	4

31017	Nutans	P 06 <i>Mla7 MI (LG 2)</i>	Great Britain	5	5	5	3	2	3	4	4
31018	Nutans	P 07 <i>Mla9 MIk</i>	Great Britain	5	5	5	5	3	3	3	2
31019	Nutans	P 08 (A) <i>Mla9 MIk</i>	Great Britain	5	5	5	3	3	3	3	3
31020	Nutans	P 08 (B) <i>Mla9</i>	Great Britain	3	5	5	5	3	3	4	4
31021	Nutans	P 09 <i>Mla10 MI (Du)</i>	Great Britain	3	5	5	5	3	3	2	3
31022	Nutans	P 10 <i>Mla13</i>	Great Britain	5	5	5	5	3	3	4	4
31023	Nutans	P 11 <i>Mla13 MI (Ru)</i>	Great Britain	5	5	5	5	3	3	3	3
31024	Nutans	P 12 <i>MIc</i>	Great Britain	5	5	5	5	3	3	4	4
31025	Nutans	P 13 <i>MI - 1402</i>	Great Britain	5	5	7	5	2	3	2	2
31026	Nutans	P 14 <i>MI (41/45)</i>	Great Britain	5	5	5	3	3	3	4	4
31027	Nutans	P 15 <i>MI (Ru 2)</i>	Great Britain	5	5	5	3	3	4	no data	4
31028	Nutans	P 17 <i>MIk</i>	Great Britain	5	5	5	3	4	4	2	2
31029	Nutans	P 18 <i>MIlnn</i>	Great Britain	5	5	3	5	4	4	4	4
31030	Nutans	P 19 <i>MIp</i>	Great Britain	5	5	5	3	3	3	2	2
31031	Nutans	P 20 <i>MIat</i>	Great Britain	5	3	5	3	3	3	no data	4
31032	Nutans	P 21 <i>MIg MI (CP)</i>	Great Britain	5	5	5	3	3	3	4	4
31033	Nutans	P 22 <i>MI 05</i>	Great Britain	5	3	5	1	3	3	4	4
31034	Nutans	P 23 <i>MI (La)</i>	Great Britain	5	3	5	1	3	4	4	4
31035	Nutans	P 24 <i>MIh</i>	Great Britain	3	3	5	1	4	4	4	4
31036	Pallidum	Iwate Mensyry C <i>MI nz</i>	Japan	5	5	3	1	4	4	4	4
22055	Nutans	Temp (control)	Krasnodar territory	3	3	3	3	no data	no data	no data	no data
22089	Pallidum	Belogorsky (control)	Leningrad region	no data	no data	3	1	4	4	4	4

Note: DES VIR* – Dagestan Experiment Station of VIR; PPL VIR** – Pushkin and Pavlovsk Laboratories of VIR.