

**S2 Table. A list of 56 wheat accessions found to possess multiple disease resistance to rusts and spot blotch.** Disease scores were determined by taking into account the severity of disease (R – resistant and MR – moderately resistant) at three disease hotspots (Wellington, Gurdaspur and Cooch Behar). Additional information on source and year of acquisition are given as available in genebank databases. The seedling resistance was recorded as resistant either to only one rust disease leaf/brown (R), stem/black (B) or stripe/yellow (Y) or a combination of two or all the three rust diseases; 'O' indicates susceptible to all rusts and N means no data. Additional information on source and year of acquisition are given as available. NA: absence of verified information. Accessions shown as sourced from Mexico mainly include those from CIMMYT.

#	Genebank_ID	Species	Stripe rust Gurdaspur	Spot blotch Cooch Behar	Stripe rust Wellington	Stem rust Wellington	Leaf rust Wellington	YEAR	Source	Seedling Resistance	Resistance genotype (based on marker assay)
1	EC11159	<i>T.aestivum</i>	R	MR	R	R	R	1956	USA	O	NA
2	EC178071-282	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	Y	Lr19Lr22aLr32Lr46Lr50Lr67Lr68Yr5Yr15Yr36Yr48Sr13Sr24
3	EC178071-339	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	Y	Lr19Lr22aLr46Lr50Lr67Lr68Yr5Yr15Yr36Yr48Sr24
4	EC276646	<i>T.durum</i>	R	R	R	R	R	1988	MEXICO	O	NA
5	EC276740	<i>T.durum</i>	R	MR	R	R	R	1988	MEXICO	NA	NA
6	EC276771	<i>T.durum</i>	R	MR	R	R	R	1988	MEXICO	O	NA
7	EC277088	<i>T.aestivum</i>	R	MR	R	R	R	1988	MEXICO	R	NA
8	EC277098	<i>T.aestivum</i>	R	MR	R	R	R	1988	MEXICO	R	NA
9	EC277119	<i>T.durum</i>	R	MR	R	R	R	1988	MEXICO	R	NA
10	EC277189	<i>T.durum</i>	R	MR	R	R	R	1988	MEXICO	R	NA
11	EC277211	<i>T.durum</i>	R	MR	R	R	R	1988	MEXICO	BR	Lr19Lr22aLr32Lr46Yr5Yr15Yr36Yr48Sr13Sr2
12	EC299242	<i>T.durum</i>	R	MR	R	R	R	1989	SYRIA	O	NA
13	EC299270	<i>T.durum</i>	R	MR	R	R	R	1989	SYRIA	Y	Lr22aLr46Lr50Lr67Yr15Yr48Sr13Sr2Sr24
14	EC339599	<i>T.aestivum</i>	R	MR	R	R	R	1992	USA	B	NA
15	EC339604	<i>T.aestivum</i>	R	MR	R	R	R	1992	USA	Y	Lr22aLr46Lr67Yr5Yr15Yr48Sr13
16	EC339606	<i>T.aestivum</i>	R	MR	R	R	R	1992	USA	O	NA
17	EC339612	<i>T.aestivum</i>	R	R	R	R	R	1992	USA	O	NA
18	EC444889	<i>T.durum</i>	R	MR	R	R	R	1999	MEXICO	R	NA
19	EC445197	<i>T.durum</i>	R	MR	R	R	R	1999	MEXICO	B	NA
20	EC445290	<i>T.durum</i>	R	MR	R	R	R	1999	MEXICO	R	NA
21	EC445357	<i>T.durum</i>	R	MR	R	R	R	1999	MEXICO	BR	NA
22	EC574430	<i>T.aestivum</i>	R	MR	R	R	R	2006	NA	O	NA
23	EC574831	<i>T.aestivum</i>	R	MR	R	R	R	2006	NA	O	NA
24	EC576062	<i>T.aestivum</i>	R	MR	R	R	R	2006	NA	YB	Lr19Lr22aLr46Lr50Yr5Yr48Sr13Sr24
25	EC577531	<i>T.durum</i>	R	R	R	R	R	2006	NA	O	NA
26	EC578070	<i>T.aestivum</i>	R	MR	R	R	R	2006	NA	Y	Lr46Lr50Lr67Yr15Yr48Sr2
27	EC578084	<i>T.aestivum</i>	R	R	R	R	R	2006	NA	Y	Lr22aLr46Lr67Yr15Yr48Sr13Sr2
28	EC578103	<i>T.aestivum</i>	R	R	R	R	R	2006	NA	YB	Lr19Lr22aLr46Lr50Lr67Yr15Yr48Sr13
29	EC582263	<i>T.aestivum</i>	R	MR	R	R	R	2006	USA	YB	Lr22aLr32Lr46Lr50Lr67Lr68Yr15Yr36Yr48Sr13Sr2Sr24
30	EC582265	<i>T.aestivum</i>	R	MR	R	R	R	2006	USA	N	NA
31	EC592964	<i>T.durum</i>	R	MR	R	R	R	2006	MEXICO	BR	NA
32	EC592966	<i>T.durum</i>	R	MR	R	R	R	2006	MEXICO	R	NA
33	IC401998	<i>T.aestivum</i>	R	MR	R	R	R	2004	India	N	NA
34	IC402025	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	N	NA
35	IC415859	<i>T.aestivum</i>	R	MR	R	R	R	2003	India	R	NA
36	IC416364	<i>T.durum</i>	R	MR	R	R	R	2003	NA	BR	Lr19Lr22aLr46Lr50Lr68Sr2
37	IC49752	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	N	NA
38	IC528922	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA
39	IC528923	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	O	NA
40	IC528997	<i>T.aestivum</i>	R	R	R	R	R	2005	India	N	NA
41	IC529017	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA

42	IC529030	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA
43	IC529035	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA
44	IC529036	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA
45	IC529311	<i>T.aestivum</i>	R	R	R	R	R	2005	India	N	NA
46	IC529353	<i>T.aestivum</i>	R	R	R	R	R	2005	India	N	NA
47	IC529644	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	N	NA
48	IC535001	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	N	NA
49	IC535119	<i>T.dicoccum</i>	R	MR	R	R	R	NA	NA	N	NA
50	IC539173	<i>T.aestivum</i>	R	MR	R	R	R	2005	India	YBR	Lr19Lr22aLr46Lr68Yr48Sr13
51	IC542125	<i>T.durum</i>	R	MR	R	R	R	NA	India	B	NA
52	IC542818	<i>T.durum</i>	R	MR	R	R	R	NA	NA	R	NA
53	IC543020	<i>T.durum</i>	R	MR	R	R	R	NA	NA	O	NA
54	IC543116	<i>T.durum</i>	R	MR	R	R	R	NA	NA	Y	Lr22aLr46Yr5Yr15Yr48Sr13Sr2
55	IC543233	<i>T.durum</i>	R	R	R	R	R	NA	NA	Y	Lr22aLr46Yr15Yr36Yr48Sr13Sr2
56	IC543360	<i>T.aestivum</i>	R	MR	R	R	R	NA	NA	N	NA