

Supplementary Material

مواد تکمیلی

جدول تکمیلی ۱. شجره لاین‌ها و شماره مربوط به هر کدام از این ژنوتیپ‌ها

Supplementary Table 1. Pedigree of the evaluated genotypes along with their codes

شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
1	Bow"s"/Vee"s"//1-60-3/3/Cocoraque 75/4/Inia/5/Sirvan	IRW15-020331-3Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
2	Bow"s"/Vee"s"//1-60-3/3/Suweon 220/4/Chamran/5/Sirvan	IRW15-020333-1Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
3	Bow"s"/Vee"s"//1-60-3/3/Suweon 220/4/Chamran/5/Sirvan	IRW15-020333-1Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
4	Bow"s"/Vee"s"//1-60-3/3/Suweon 220/4/Chamran/5/Sirvan	IRW15-020333-6Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
5	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Baharan	IRW15-020335-2Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
6	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Baharan	IRW15-020335-5Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
7	W3918A/Jup//Shuha "s"/3/Shiraz/4/Rakhshan	IRW15-020341-1Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
8	W3918A/Jup//Shuha "s"/3/Shiraz/4/Rakhshan	IRW15-020341-1Kaj-0Kaj-0Kaj- 3Kaj	F6- Karaj-2022
9	W3918A/Jup//Shuha "s"/3/Shiraz/4/Rakhshan	IRW15-020341-3Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
10	MTRWA92.161/PRINIA/5/SERI*3//RL6010/4*YR/ 3/PASTOR/4/BAV92/6/Sirvan	IRW15-020351-2Kaj-0Kaj-0Kaj- 3Kaj	F6- Karaj-2022
11	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Sirvan	IRW15-020358-4Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
12	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Rakhshan	IRW15-020359-4Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
13	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Rakhshan	IRW15-020359-4Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
14	Nogal/Sirvan	IRW15-020380-3Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
15	Nogal/Sirvan	IRW15-020380-3Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
16	Tui//CMH 76-252/Pvn "s"/3/Flt/4/sirvan/5/Rakhshan	IRW15-020395-6Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
17	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Sirvan/6/Rakhshan	IRW15-020410-2Kaj-0Kaj-0Kaj- 3Kaj	F6- Karaj-2022
18	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Sirvan/6/Rakhshan	IRW15-020410-4Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
19	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Chamran/6/Rakhshan	IRW15-020414-5Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
21	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Mehregan/6/Rakhshan	IRW15-020416-6Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
22	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/VARIS/5/Pi shgam/6/Sirvan	IRW15-020430-1Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
23	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/VARIS/5/Pi shgam/6/Sirvan	IRW15-020430-1Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
24	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/PBW343*2/ KHVAKI/5/Mehregan/6/Parsi	IRW15-020439-6Kaj-0Kaj-0Kaj- 1Kaj	F6- Karaj-2022
25	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/PBW343*2/ KHVAKI/5/Mehregan/6/Parsi	IRW15-020439-6Kaj-0Kaj-0Kaj- 3Kaj	F6- Karaj-2022
26	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/PBW343*2/ KHVAKI/5/Mehregan/6/Parsi	IRW15-020439-6Kaj-0Kaj-0Kaj- 4Kaj	F6- Karaj-2022
27	SOKOLL//W15.92/WBLL1/3/Sirvan/4/Rakhshan	IRW15-020449-3Kaj-0Kaj-0Kaj- 2Kaj	F6- Karaj-2022
28	SOKOLL//W15.92/WBLL1/3/Sirvan/4/Rakhshan	IRW15-020449-3Kaj-0Kaj-0Kaj- 3Kaj	F6- Karaj-2022

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Supplementary Table 1. Pedigree of the evaluated genotypes along with their codes

شماره ژنوتیپ	اسم شجره	شجره	منبع
Genotype ID	Pedigree original name	Pedigree	sources
29	SOKOLL//W15.92/WBLL1/3/Sirvan/4/Rakhshan	IRW15-020449-4Kaj-0Kaj-0Kaj-1Kaj	F6- Karaj-2022
30	SOKOLL//W15.92/WBLL1/3/Sirvan/4/Rakhshan	IRW15-020449-6Kaj-0Kaj-0Kaj-1Kaj	F6- Karaj-2022
31	Celtic/Sirvan//Rakhshan	IRW15-020474-2Kaj-0Kaj-0Kaj-1Kaj	F6- Karaj-2022
32	Heilo/Parsi//Sirvan	IRW15-020483-1Kaj-0Kaj-0Kaj-3Kaj	F6- Karaj-2022
33	Shuha-8/Byt//Mehregan/3/Sirvan	IRW15-020388-0Ira-0Ard-0Ira-0A-1Kaj	F6- Karaj-2022
34	BORL14//BECARD/QUAIU #1	CMSS12Y00070S-099Y-099M-099NJ-099NJ-21Y-0WGY	43th ESWYT
35	SHA7//PRL/VEE#6/3/FASAN/4/HAAS8446/2*FASAN/5/CBRD/KAUZ/6/MILAN/AMSEL/7/FRET2*2/KUKUNA/8/KINGBIRD #1/9/2*BORL14	CMSS15Y01023T-099TOPM-099Y-099M-099NJ-099NJ-3Y-0WGY	43th ESWYT
36	KACHU/SAUAL/5/KACHU/3/WHEAR//2*PRL/2*PASTOR/4/BOKOTA	CMSS15B00179S-099M-099NJ-099NJ-15Y-0WGY	43th ESWYT
37	UP2338*2/VIVITSI/3/FRET2/TUKURU//FRET2/4/MISR 1/5/NADI CROSBILL	CMSS15B00243S-099M-099NJ-099NJ-18Y-0WGY	43th ESWYT
38	#1/DANPHE/7/CNDO/R143//ENTE/MEXI_2/3/AE GILOPS SQUARROSA (TAUS)/4/WEAVER/5/2*KAUZ/6/PRL/2*PASTOR/8/NADI	CMSS15B00503S-099M-099NJ-099NJ-33Y-0WGY	43th ESWYT
39	FRNCLN/3/ND643//2*PRL/2*PASTOR/4/FRANCOLIN #1*2/5/FRNCLN/NIINI #1//FRANCOLIN #1 PASTOR/KAUZ/6/CNDO/R143//ENTE/MEXI_2/3/AE GILOPS SQUARROSA	CMSS16Y00474T-099TOPM-099Y-099M-0SY-10M-0WGY	43th ESWYT
41	(TAUS)/4/WEAVER/5/2*KAUZ/7/2*PASTOR//PBW343*2/KUKUNA/8/2*BORL14	CMSS16Y00573T-099TOPM-099Y-099M-0SY-23M-0WGY	43th ESWYT
42	PASTOR//HXL7573/2*BAU/3/SOKOLL/WBLL1/4/HUW234+LR34/PRINIA//PBW343*2/KUKUNA/3/ROLF07/5/WHEAR/SOKOLL/6/BORL14/7/KASUKO	CMSS16Y00659T-099TOPM-099Y-099M-0SY-34M-0WGY	43th ESWYT
43	KACHU/SAUAL/3/TACUPETO F2001/BRAMBLING//KIRITATI*2/4/FRET2/TUKURU//FRET2/3/MUNAL #1 FRANCOLIN	CMSS16Y00714T-099TOPM-099Y-099M-0SY-37M-0WGY	43th ESWYT
44	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBIRD #1//INQALAB 91*2/TUKURU*2/5/MUCUY SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASIS/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE.SQ/4/2*OCI*2/7/BORL14	CMSS16Y00803T-099TOPM-099Y-099M-0SY-16M-0WGY	43th ESWYT
45	CMSS16Y00903T-099TOPM-099Y-099M-0SY-4M-0WGY		43th ESWYT
46	YR57#5474-6/3*BORL14	CMSS16B01875T-099Y-099M-099Y-32M-0WGY	43th ESWYT
47	YR57#5474-6/3*BORL14	CMSS16B01875T-099MABY-099M-099Y-1M-0WGY	43th ESWYT
48	Pavon 76, 20' + 1R.1D5+10-2(1D)/3*MUCUY	CMSS16B01903T-099Y-099M-099Y-24M-0WGY	43th ESWYT
49	CHAM-8/6/HUBARA-1/5/CHEN/AE GILOPS SQUARROSA(TAUS)//BCN/3/VEE#7/BOW/4/PASTOR 02W50807-	ISBW17-TR-0018-0TR-0TR-4MR-0MR	23th ESBWYT
50	1/4/PFAU/SERI.1B//AMAD/3/WAXWING/5/BECARD//KIRITATI/2*TRCH/3/BECARD/4/NEJMAH-6/PAVON SR24+SR26+SR31	ISBW17-TR-0066-0TR-0TR-7MR-0MR	23th ESBWYT

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شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
51	RHINO 1A.1D5+10-4/TILHI//NEJMAH-14/4/SUDAN#3/SHUHA-6//FLAG-5/3/PFAU/MILAN	ISBW17-MR-677-0KUL-4MR-0MR	23th ESBWYT
52	Misr-1/Angi-1	ISBW17-MR-52-0KUL-3MR-0MR	23th ESBWYT
53	QUAIU*2/KINDE/4/PFAU/MILAN/3/BABAX/LR42//BABAX UTIQUE 96/FLAG-	ISBW16MR-70-040MR-6MR-0MR	23th ESBWYT
54	1//SR22CO1213/7/SERI.1B//KAUZ/HEVO/3/AMAD/4/PYN/BAU//MILAN/5/OPATA/RAYOM//KAUZ/6/SR50+SR45#1/8/TERBOL/9/DEBEIRA//MILAN/PASTOR/4/URES/BOW//OPATA/3/HT3306/HORRKS'	ISBW17S-TR-0125-0TR-0TR-4MR-0MR	23th ESBWYT
55	COPIO*2/3/KINGBIRD#1//INQALAB91*2/TUKURU/4/BSKINA-8BONITO-36 DOY1/AE.SUARROSA(1026)/5/SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/ANGI-	ISBWS18-TR-1228-0TR-0TR-6TR-0TR	23th ESBWYT
56	26/6/PFAU/MILAN//ABIER-2/3/SHUHA-3//TURACO/CHIL	ISBW17-MR-187-0MR-5MR	23th ESBWYT
57	KAUZ'S/SERI//PFAU/MILAN/3/KFA/2*KACHU*2//WAXBI	ISBWS18-TR-0188-0TR-0TR-6TR-0TR	23th ESBWYT
58	SAUAL/YANAC//SAUAL/3/BECARD/QUAIU#1/4/THELIN/WAXWING//ATTILA*2/PASTOR/3/INQALAB91*2/TUKURU9Y-0B	ISBWS18-TR-0531-0TR-0TR-1TR-0TR	23th ESBWYT
59	KABILU #1	CMSS10Y00374S-099Y-099M-1WGY-0B	55th IBWSN
61	COPIO/MUCUY	CMSS15Y00360S-099Y-099M-099NJ-099NJ-16Y-0WGY	55th IBWSN
62	FRNCLN/4/WHEAR/KUKUNA/3/C80.1/3*BATAVIA//2*WBLL1/5/2*SUP152*2/TECUE #1	CMSS15Y00684T-099TOPM-099Y-099M-099NJ-099NJ-4Y-0WGY	55th IBWSN
63	KACHU/SAUAL//CIRO16*2/4/WBLL1*2/BRAMBLING//TAM200/TUI/3/VILLA JUAREZ F2009	CMSS15Y01083T-099TOPM-099Y-099M-099NJ-099NJ-24Y-0WGY	55th IBWSN
64	BORL14/5/MUTUS/DANPHE #1/4/C80.1/3*BATAVIA//2*WBLL1/3/C80.1/3*QT4522//2*PASTOR	CMSS15B00150S-099M-099NJ-099NJ-41Y-0WGY	55th IBWSN
65	CHIPAK/3/SWSR22T.B./2*BLOUK #1//WBLL1*2/KURUKU	CMSS15B00259S-099M-099NJ-099NJ-42Y-0WGY	55th IBWSN
66	CHIPAK/4/KACHU/3/WHEAR//2*PRL/2*PASTOR	CMSS15B00261S-099M-099NJ-099NJ-15Y-0WGY	55th IBWSN
67	KACHU//WBLL1*2/BRAMBLING/3/MUCUY	CMSS15B00266S-099M-099NJ-099NJ-23Y-0WGY	55th IBWSN
68	PBW343*2/KUKUNA//PBW343*2/KUKUNA/3/WBLL1*2/SHAMA//KACHU/4/KASUKO	CMSS15B00619S-099M-099NJ-099NJ-42Y-0WGY	55th IBWSN
69	SHA7//PRL/VEE#6/3/FASAN/4/HAAS8446/2*FASAN/5/CBRD/KAUZ/6/MILAN/AMSEL/7/FRET2*2/KUKUNA/8/TRCH/SRTU//KACHU/9/TRCH/HUIRIVIS #1/10/BORL14	CMSS15B00920S-099M-099NJ-099NJ-18Y-0WGY	55th IBWSN
70	KACHU/KIRITATI//BORL14/4/BECARD/AKURI*2/3/PBW343*2/KUKUNA*2//FRTL/PIFED	CMSS15B01367S-099M-099NJ-099NJ-17Y-0WGY	55th IBWSN
71	MISR 1*2/3/KACHU//KIRITATI/2*TRCH	CMSS15B01901T-099TOPY-099M-099NJ-099NJ-17Y-0WGY	55th IBWSN
72	MUTUS*2/KIRITATI//BORL14/3/MOKUE #1	CMSS16Y00592T-099TOPM-099Y-099M-0SY-13M-0WGY	55th IBWSN

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شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
73	SAUAL/WHEAR//SAUAL/3/PBW343*2/KUKUNA*2//FRTL/PIFED/4/BORL14/5/BECARD//ND643/2*WBL1/4/ND643/2*WBL1//ATTLA*2/PBW65/3/MUNAL FRANCOLIN	CMSS16Y00768T-099TOPM-099Y-099M-0SY-13M-0WGY	55th IBWSN
74	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBI RD #1//INQALAB 91*2/TUKURU*2/5/BORL14	CMSS16Y00793T-099TOPM-099Y-099M-0SY-22M-0WGY	55th IBWSN
75	MUCUY/5/PBW65/2*PASTOR/3/KIRITATI//PBW 65/2*SERI.1B/4/DANPHE #1/6/MOKUE #1 FRANCOLIN	CMSS16Y00362T-099TOPM-099Y-099M-099NJ-099NJ-8Y-0WGY	17th STEMRRSN
76	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBI RD #1//INQALAB 91*2/TUKURU*2/5/BORL14 FRANCOLIN	CMSS16Y00793T-099TOPM-099Y-099M-099NJ-099NJ-25Y-0WGY	17th STEMRRSN
77	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBI RD #1//INQALAB 91*2/TUKURU*2/5/MUNAL #1	CMSS16Y00796T-099TOPM-099Y-099M-099NJ-099NJ-9Y-0WGY	17th STEMRRSN
78	SUP152/FRNCLN//KASUKO	CMSS16B00100S-099M-0SY-099M-37Y-0WGY	17th STEMRRSN
79	MUNAL*2/CHONTE//KASUKO	CMSS16B00134S-099M-0SY-099M-12Y-0WGY	17th STEMRRSN
81	GLADIUS/3/2*KA/NAC//TRCH/4/KUTZ//KFA/2* KACHU	CMSS16B00147S-099M-099NJ-099NJ-4Y-0WGY	17th STEMRRSN
82	KACHU*2/3/ND643//2*PRL/2*PASTOR/4/KASUK O	CMSS16B00170S-099M-0SY-099M-38Y-0WGY	17th STEMRRSN
83	KACHU*2/3/ND643//2*PRL/2*PASTOR/4/MOKU E #1	CMSS16B00173S-099M-0SY-099M-13Y-0WGY	17th STEMRRSN
84	KACHU*2/3/ND643//2*PRL/2*PASTOR/4/MOKU E #1	CMSS16B00173S-099M-099NJ-099NJ-1Y-0WGY	17th STEMRRSN
85	KACHU/3/WHEAR//2*PRL/2*PASTOR/4/KASUK O FRANCOLIN	CMSS16B00230S-099M-0SY-099M-13Y-0WGY	17th STEMRRSN
86	#1//WBL1*2/KURUKU/3/WBL1*2/BRAMBLIN G//CHYAK/4/SUP152//WBL1*2/BRAMBLING*2 /3/KSW/SAUAL//SAUAL WAXWING/4/BL 1496/MILAN/3/CROC_1/AE.SQUARROSA (205)//KAUZ/5/FRNCLN/6/KINGBIRD	CMSS16B00859S-099M-0SY-099M-8Y-0WGY	17th STEMRRSN
87	#1//INQALAB 91*2/TUKURU/7/BECARD/QUAIU #1/8/2*KACHU//WBL1*2/BRAMBLING*2/3/KA CHU/KIRITATI KACHU//WBL1*2/BRAMBLING*2/6/ROLF07*2 /5/REH/HARE//2*BCN/3/CROC_1/AE.SQUARRO SA (213)//PGO/4/HUITES*2/7/KUTZ//KFA/2*KACHU KACHU #1/3/T.DICOCCON PI94624/AE.SQUARROSA	CMSS17Y00664T-099TOPM-099Y-099M-13Y-0WGY	17th STEMRRSN
88	(409)//BCN/4/2*KACHU/5/MUTUS*2/TECUE #1/6/MUTUS*2/TECUE #1*2/7/NELOKI*2//KACHU/KIRITATI KACHU #1/3/T.DICOCCON PI94624/AE.SQUARROSA	CMSS17Y00861T-099TOPM-099Y-099M-18Y-0WGY	17th STEMRRSN
89	(409)//BCN/4/2*KACHU/5/MUTUS*2/TECUE #1/6/MUTUS*2/TECUE #1*2/7/NELOKI*2//KACHU/KIRITATI KACHU #1/3/T.DICOCCON PI94624/AE.SQUARROSA	CMSS17Y00997T-099TOPM-099Y-099M-11Y-0WGY	17th STEMRRSN
90	(409)//BCN/4/2*KACHU/5/MUTUS*2/TECUE #1/6/MUTUS*2/TECUE #1*2/7/NELOKI*2//KACHU/KIRITATI	CMSS17Y00997T-099TOPM-099Y-099M-29Y-0WGY	17th STEMRRSN

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91	SAUAL*2/6/CNDO/R143//ENTE/MEXI_2/3/AEGI LOPS SQUARROSA (TAUS)/4/WEAVER/5/2*PASTOR/7/PBW343*2/K UKUNA*2//FRTL/PIFED/8/BORL14/9/KASUKO TACUPETO F2001/6/CNDO/R143//ENTE/MEXI_2/3/AEGILOP S SQUARROSA	CMSS16Y00769T-099TOPM- 099Y-099M-099NJ-099NJ-29Y- ORGY	17th STEMRRSN
92	(TAUS)/4/WEAVER/5/PASTOR/7/ROLF07*2/8/SA UAL/YANAC//SAUAL/9/SUP152//WBLL1*2/BRA MBLING*2/3/KSW/SAUAL//SAUAL	CMSS16B00781S-099M-099NJ- 099NJ-3Y-ORGY	17th STEMRRSN
93	BORL14*2//BECARD/QUAIU #1/3/MOKUE #1	CMSS16B00955S-099M-099NJ- 099NJ-10Y-ORGY	17th STEMRRSN
94	GRACK/CHYAK/6/ROLF07*2/5/FCT/3/GOV/AZ// MUS/4/DOVE/BUC/7/SUP152//WBLL1*2/BRAMB LING*2/3/KSW/SAUAL//SAUAL BLOUK #1/MUNAL/3/WBLL1*2/SHAMA//BAJ #1/4/SUP152/BAJ	CMSS16B01057S-099M-0SY- 099M-11Y-ORGY	17th STEMRRSN
95	#1/5/2*SUP152//WBLL1*2/BRAMBLING*2/3/KS W/SAUAL//SAUAL	CMSS17Y00907T-099TOPM- 099Y-099M-2Y-ORGY	17th STEMRRSN
96	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Parsi	4-402-11	PWSN Zaeghan
97	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Parsi	4-402-12	PWSN Zaeghan
98	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Parsi	4-402-13	PWSN Zaeghan
99	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Parsi	4-402-14	PWSN Zaeghan
101	CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/3/BAV92/4/BERKUT/5/Sirvan	4-402-17	PWSN Zaeghan
102	Nogal/Sivand	4-402-25	PWSN Zaeghan
103	Tui//CMH 76-252/Pvn "s"/3/Flt/4/Parsi/5/Rakhshan	4-402-32	PWSN Zaeghan
104	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Pishgam/6/Parsi	4-402-42	PWSN Zaeghan
105	PRL/2*PASTOR/4/CHOIX/STAR/3/HE1/3*CNO79/ /2*SERI/5/Chamran2/6/Parsi	4-402-45	PWSN Zaeghan
106	WHEAR/KUKUNA/3/C80.1/3*BATAVIA//2*WBL L1/4/Parsi/5/Rakhshan	4-402-53	PWSN Zaeghan
107	WHEAR/KUKUNA/3/C80.1/3*BATAVIA//2*WBL L1/4/Parsi/5/Rakhshan	4-402-54	PWSN Zaeghan
108	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/VARIS/5/Si rvan/6/Rakhshan	4-402-62	PWSN Zaeghan
109	SERI.1B*2/3/KAUZ*2/BOW//KAUZ/4/PBW343*2/ KHVAKI/5/Chamran2/6/Rakhshan	4-402-70	PWSN Zaeghan
110	ATTILA*2/PBW65//BERKUT/3/Pishgam/4/Sirvan	4-402-81	PWSN Zaeghan
111	SOKOLL//W15.92/WBLL1/3/Sirvan/4/Rakhshan	4-402-91	PWSN Zaeghan
112	PASTOR//SITE/MO/3/CHEN/AEGILOPS SQUARROSA (TAUS)//BCN/4/WBLL1/5/Pishgam/6/Sirvan	4-402-101	PWSN Zaeghan
113	KS82W418/SPN/3/CHEN/AE.SQ//2*OPATA/4/FRE T2/5/Parsi/6/Sirvan	4-402-103	PWSN Zaeghan
114	Heilo/Pishtaz//Parsi	4-402-122	PWSN Zaeghan
115	Heilo/Chamran2//Parsi	4-402-124	PWSN Zaeghan
116	WEAVER/TSC//WEAVER/3/WEAVER/4/2*WAX WING/5/Baharan	4-402-145	PWSN Zaeghan

جدول تکمیلی ۱. شجره لاین‌ها و شماره مربوط به هر کدام از این ژنوتیپ‌ها

Supplementary Table 1. Pedigree of the evaluated genotypes along with their codes

شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
117	PRL/2*PASTOR//Baharan	4-402-151	PWSN Zaeghan
118	QAFZAH-14/ASFOOR-1//Baharan	4-402-159	PWSN Zaeghan
119	PASTOR/KAUZ/6/CNDO/R143//ENTE/MEXI_2/3/ AEGILOPS SQUARROSA (TAUS)/4/WEAVER/5/2*KAUZ/7/SOKOLL/WBLL 1	4-402-172	PWSN Zaeghan
121	HUBARA- 8/3/MON'S//ALD'S//BOW'S//4/SOKOLL/WBLL1	4-402-173	PWSN Zaeghan
122	QAFZAH-33/FLORKWA-2//SOKOLL/WBLL1	4-402-175	PWSN Zaeghan
123	HAALA-1//SOKOLL/WBLL1	4-402-180	PWSN Zaeghan
124	HAALA-1//SOKOLL/WBLL1	4-402-181	PWSN Zaeghan
125	HAALA-37//SOKOLL/WBLL1	4-402-182	PWSN Zaeghan
126	BABAGA-3//SOKOLL/WBLL1	4-402-194	PWSN Zaeghan
127	REBWAH-12/ZEMAMRA-8//Pishtaz	4-402-196	PWSN Zaeghan
128	REBWAH-12/ZEMAMRA-8//Pishtaz	4-402-199	PWSN Zaeghan
129	SETTAT-69/Pishtaz	4-402-201	PWSN Zaeghan
130	SETTAT-76/Pishtaz	4-402-203	PWSN Zaeghan
131	SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASI S/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE. SQ/4/2*OCI KACHU	CMSA10M00159T-050Y- 099ZTM-099NJ-099NJ-5WGY- 0B	40th SAWSN
132	#1//WBLL1*2/KUKUNA/3/BRBT1*2/KIRITATI/6/ ROLF07*2/5/REH/HARE//2*BCN/3/CROC_1/AE.S QUARROSA (213)//PGO/4/HUITES/7/BORL14	CMSS12B01029T-099TOPY- 099M-099NJ-099NJ-20Y-0WGY	40th SAWSN
133	KABILU #1*2/TAITA	CMSS15Y01080T-099TOPM- 099Y-099M-099NJ-099NJ-26Y- 0WGY	40th SAWSN
134	CNDO/R143//ENTE/MEXI_2/3/AEGILOPS SQUARROSA (TAUS)/4/WEAVER/5/2*JANZ/6/SKAUZ/BAV92/ 7/TRCH/3/ROLF07/YANAC//TACUPETO F2001/BRAMBLING/4/PRL/2*PASTOR	CMSS15B00758S-099M-099NJ- 099NJ-22Y-0WGY	40th SAWSN
135	SOKOLL/3/PASTOR//HXL7573/2*BAU/4/SHAMA //PARUS/PASTOR/5/BORL14	CMSS15B01036S-099M-099NJ- 099NJ-4Y-0WGY	40th SAWSN
136	WBLL1*2/KUKUNA*2//WHEAR/8/2*TACUPETO F2001/6/CNDO/R143//ENTE/MEXI_2/3/AEGILOP S SQUARROSA (TAUS)/4/WEAVER/5/PASTOR/7/ROLF07/9/KFA/ 2*KACHU/3/PBW343*2/KUKUNA*2//FRTL/PIFE D/4/KFA/2*KACHU	CMSS15B01305S-099M-099NJ- 099NJ-7Y-0WGY	40th SAWSN
137	BECARD/AKURI*2/4/MUU #1//PBW343*2/KUKUNA/3/MUU/5/KUTZ//KFA/2 *KACHU	CMSS15B01320S-099M-099NJ- 099NJ-42Y-0WGY	40th SAWSN
138	NADI//KACHU/KIRITATI/3/NADI#2	CMSS15B01958T-099TOPY- 099M-099NJ-099NJ-17Y-0WGY	40th SAWSN
139	MUNAL #1/SUJATA//CHIPAK	CMSS15B02016T-099TOPY- 099M-099NJ-099NJ-15Y-0WGY	40th SAWSN
141	ATTILA*2/PBW65/5/PRL/2*PASTOR/4/CHOIX/S TAR/3/HE1/3*CNO79//2*SERI/6/PFUNYE #1/7/BORL14/8/MELON//FILIN/MILAN/3/FILIN/4 /TRCH/SRTU//KACHU	CMSS16Y00562T-099TOPM- 099Y-099M-0SY-13M-0WGY	40th SAWSN
142	MUTUS*2/KIRITATI//BORL14/3/MOKUE #1	CMSS16Y00592T-099TOPM- 099Y-099M-0SY-16M-0WGY	40th SAWSN

جدول تکمیلی ۱. شجره لاینها و شماره مربوط به هر کدام از این ژنوتیپها

Supplementary Table 1. Pedigree of the evaluated genotypes along with their codes

شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
143	MUNAL #1/CIRO16*2//KACHU/KIRITATI	CMSS16Y00694T-099TOPM-099Y-099M-0SY-16M-0WGY	40th SAWSN
144	SAUAL*2/6/CNDO/R143//ENTE/MEXI_2/3/AEGI LOPS SQUARROSA	CMSS16Y00769T-099TOPM-099Y-099M-0SY-17M-0WGY	40th SAWSN
145	(TAUS)/4/WEAVER/5/2*PASTOR/7/PBW343*2/K UKUNA*2//FRTL/PIFED/8/BORL14/9/KASUKO KACHU/SAUAL*2/4/ATTILA*2/PBW65//PIHA/3/ ATTILA/2*PASTOR/5/SOKOLL/3/PASTOR//HXL 7573/2*BAU/4/SOKOLL//PBW343*2/KUKUNA/3/ NAVJ07/8/OASIS/5*BORL95/5/CNDO/R143//ENTE E/MEXI75/3/AE.SQ/4/2*OCI/6/SOKOLL//SUNCO/ 2*PASTOR/7/SOKOLL//SUNCO/2*PASTOR WAXWING/KIRITATI//FISCAL/3/HUW234+LR34 /PRINIA//UP2338*2/VIVITSI/4/HUW234+LR34/P RINIA*2//YANAC*2/5/FRANCOLIN	CMSS16Y00862T-099TOPM-099Y-099M-0SY-33M-0WGY	40th SAWSN
146	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBI RD #1//INQALAB 91*2/TUKURU	CMSS16Y00867T-099TOPM-099Y-099M-0SY-1M-0WGY	40th SAWSN
147	SOKOLL/3/PASTOR//HXL7573/2*BAU/4/SHAMA //PARUS/PASTOR/5/BORL14/7/SOKOLL/3/PAST OR//HXL7573/2*BAU*2/6/OASIS/5*BORL95/5/C NDO/R143//ENTE/MEXI75/3/AE.SQ/4/2*OCI OASIS/5*BORL95/5/CNDO/R143//ENTE/MEXI75/ 3/AE.SQ/4/2*OCI/6/SOKOLL//SUNCO/2*PASTOR /7/SOKOLL//SUNCO/2*PASTOR*2/8/CROSBILL	CMSS16Y00887T-099TOPM-099Y-099M-0SY-24M-0WGY	40th SAWSN
148	#1/DANPHE/7/CNDO/R143//ENTE/MEXI_2/3/AE GILOPS SQUARROSA	CMSS16Y00897T-099TOPM-099Y-099M-0SY-9M-0WGY	40th SAWSN
149	(TAUS)/4/WEAVER/5/2*KAUZ/6/PRL/2*PASTOR SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASI S/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE. SQ/4/2*OCI*2/7/FRANCOLIN	CMSS16Y00901T-099TOPM-099Y-099M-0SY-1M-0WGY	40th SAWSN
150	#1/3/PBW343*2/KUKUNA*2//YANAC/4/KINGBI RD #1//INQALAB 91*2/TUKURU	CMSS16Y00903T-099TOPM-099Y-099M-0SY-16M-0WGY	40th SAWSN
151	SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASI S/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE. SQ/4/2*OCI*2/7/BORL14 CROC_1/AE.SQUARROSA	CMSS16Y00911T-099TOPM-099Y-099M-0SY-33M-0WGY	40th SAWSN
152	(224)//OPATA/3/PASTOR/4/2*SOKOLL/3/PASTO R//HXL7573/2*BAU/5/MUTUS*2/TECUE #1/6/MOKUE #1	CMSS16B01875T-099MABY-099M-099Y-1M-0WGY	40th SAWSN
153	YR57#5474-6/3*BORL14	CMSS16B01888T-099Y-099M-099Y-11M-0WGY	40th SAWSN
154	SR47/5/3*SHORTENED SR26	CMSS16B01892T-099Y-099M-099Y-22M-0WGY	40th SAWSN
155	TRANSLOCATION/4/3*CHIBIA//PRLII/CM65531/ 3/MISR 2	CMSS16B01903T-099Y-099M-099Y-1M-0WGY	40th SAWSN
156	CHUAN NONG 19/3*MISR 1	CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
157	Pavon 76, 20'' + 1R.1D5+10-2(1D)/3*MUCUY	CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
158	Pavon 76, 20'' + 1RSe.1AL/BORL14/3/2*BORL14//KFA/2*KACHU SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASI S/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE. SQ/4/2*OCI	CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
159	SUP152/BAJ	CMSS16B01903T-099Y-099M-099Y-1M-0WGY	40th SAWSN
160	#1/5/PBW65/2*PASTOR/3/KIRITATI//PBW65/2*S ERI.1B/4/DANPHE #1	CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
161		CMSS16B01903T-099Y-099M-099Y-1M-0WGY	40th SAWSN
162		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
163		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
164		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
165		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
166		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
167		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
168		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
169		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
170		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
171		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
172		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
173		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
174		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
175		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
176		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
177		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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179		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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181		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
182		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
183		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
184		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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186		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
187		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
188		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
189		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
190		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
191		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
192		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
193		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
194		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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196		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
197		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
198		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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201		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
202		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
203		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
204		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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206		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
207		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
208		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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210		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
211		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
212		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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214		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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218		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
219		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
220		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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223		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
224		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
225		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
226		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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228		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
229		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
230		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
231		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
232		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
233		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
234		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
235		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
236		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
237		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
238		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
239		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
240		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
241		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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243		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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245		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
246		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
247		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
248		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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250		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
251		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
252		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
253		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
254		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
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260		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
261		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
262		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
263		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
264		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
265		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
266		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
267		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
268		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
269		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
270		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
271		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
272		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
273		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
274		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
275		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
276		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
277		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
278		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
279		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
280		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
281		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
282		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
283		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
284		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
285		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
286		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
287		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
288		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
289		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
290		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
291		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
292		CMSS16B01905T-099Y-099M-099Y-6M-0WGY	40th SAWSN
293		CMSS16B01905T-099Y-099M-099Y-6M-	

جدول تکمیلی ۱. شجره لاینها و شماره مربوط به هر کدام از این ژنوتیپها

Supplementary Table 1. Pedigree of the evaluated genotypes along with their codes

شماره ژنوتیپ Genotype ID	اسم شجره Pedigree original name	شجره Pedigree	منبع sources
159	BAJ #1*2/WHEAR*2/3/PRL/2*PASTOR*2//FH6-1-7	CMSS15Y00623T-099TOPM-099Y-099M-099NJ-099NJ-13Y-0WGY	30th SAWYT
161	MUTUS*2/TECUE #1*2//KFA/2*KACHU	CMSS15Y00674T-099TOPM-099Y-099M-099NJ-099NJ-30Y-0WGY	30th SAWYT
162	KABILU #1*2/TAITA	CMSS15Y01080T-099TOPM-099Y-099M-099NJ-099NJ-26Y-0WGY	30th SAWYT
163	BORL14/5/MUTUS/DANPHE #1/4/C80.1/3*BATAVIA//2*WBL1/3/C80.1/3*QT 4522//2*PASTOR	CMSS15B00150S-099M-099NJ-099NJ-21Y-0WGY	30th SAWYT
164	CHIPAK/3/SWSR22T.B./2*BLOUK #1//WBL1*2/KURUKU	CMSS15B00259S-099M-099NJ-099NJ-42Y-0WGY	30th SAWYT
165	KACHU/BECARD//WBL1*2/BRAMBLING/3/KACHU//KIRITATI/2*TRCH	CMSS15B00325S-099M-099NJ-099NJ-14Y-0WGY	30th SAWYT
166	KACHU//KIRITATI/2*TRCH/3/CHIPAK	CMSS15B00350S-099M-099NJ-099NJ-24Y-0WGY	30th SAWYT
167	TRCH/3/ROLF07/YANAC//TACUPETO F2001/BRAMBLING/4/PRL/2*PASTOR/5/BORL14 BECARD/AKURI*2/4/MUU	CMSS15B00822S-099M-099NJ-099NJ-29Y-0WGY	30th SAWYT
168	#1//PBW343*2/KUKUNA/3/MUU/5/KUTZ//KFA/2 *KACHU	CMSS15B01320S-099M-099NJ-099NJ-42Y-0WGY	30th SAWYT
169	WBL1*2/SHAMA//BAJ #1/3/BORL14/4/KASUKO	CMSS15B01359S-099M-099NJ-099NJ-10Y-0WGY	30th SAWYT
170	SOKOLL/3/PASTOR//HXL7573/2*BAU/4/SHAMA //PARUS/PASTOR/5/BORL14/7/SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASIS/5*BORL95/5/C NDO/R143//ENTE/MEXI75/3/AE.SQ/4/2*OCI	CMSS16Y00887T-099TOPM-099Y-099M-099Y-24M-0WGY	30th SAWYT
171	SOKOLL/3/PASTOR//HXL7573/2*BAU*2/6/OASIS/5*BORL95/5/CNDO/R143//ENTE/MEXI75/3/AE.SQ/4/2*OCI*2/7/BORL14	CMSS16Y00903T-099TOPM-099Y-099M-099Y-16M-0WGY	30th SAWYT
172	YR57#5474-6/3*BORL14	CMSS16B01875T-099Y-099M-099Y-36M-0WGY	30th SAWYT
173	SWSR22T.B./5/KAUZ//ALTAR 84/AOS/3/KAUZ/4/SW94.15464/6/2*PRL/2*PASTOR/7/WA8124/8/BAJ #1/CIRO16	CMSS16Y01136T-099TOPM-099Y-099M-099Y-45M-0WGY	30th SAWYT

جدول تکمیلی ۲. مقدار شاخص‌های تنش محاسبه شده به همراه عملکرد آن‌ها در شرایط تنش و نرمال برای هر ژنوتیپ

Supplementary Table 2. Stress indices along with the grain yield for all evaluated genotypes

genotype	GM	GMP	HARM	MP	SSI	STI	TOL	YI	YR	YSI	Normal	Stress
1	9.82	4.61	4.49	4.73	0.66	0.63	2.16	0.69	0.37	0.63	5.82	3.65
2	12.01	5.78	5.62	5.95	0.84	0.62	2.78	0.86	0.38	0.62	7.34	4.56
3	16.7	6.44	6.33	6.56	0.88	0.68	2.49	1	0.32	0.68	7.81	5.32
4	17.31	5.63	5.56	5.71	0.65	0.72	1.83	0.9	0.28	0.72	6.63	4.79
5	23.76	6.46	6.4	6.52	0.74	0.76	1.75	1.06	0.24	0.76	7.39	5.64
6	35.35	7.37	7.33	7.41	0.93	0.81	1.53	1.25	0.19	0.81	8.17	6.64
7	17.32	7.01	6.87	7.16	1.07	0.67	2.84	1.08	0.33	0.67	8.58	5.74
8	14.76	6.41	6.26	6.56	0.92	0.65	2.78	0.98	0.35	0.65	7.95	5.17
9	12.42	6.23	6.04	6.42	0.94	0.61	3.13	0.92	0.39	0.61	7.99	4.86
10	13.38	6.74	6.53	6.95	1.07	0.61	3.39	0.99	0.39	0.61	8.64	5.25
11	12.24	6.38	6.17	6.59	0.99	0.6	3.33	0.93	0.4	0.6	8.26	4.93
12	103.5	5.98	5.97	5.98	0.19	0.94	0.34	1.1	0.06	0.94	6.15	5.81
13	30.19	6.17	6.14	6.2	0.56	0.82	1.26	1.05	0.18	0.82	6.83	5.57
14	39.23	5.67	5.66	5.69	0.37	0.87	0.82	1	0.13	0.87	6.1	5.28
15	32.48	5.8	5.78	5.82	0.45	0.84	1.04	1	0.16	0.84	6.34	5.31
16	15.32	6.8	6.64	6.97	1.04	0.64	3.02	1.03	0.36	0.64	8.48	5.46
17	18.19	6.11	6.02	6.19	0.75	0.72	2.05	0.98	0.28	0.72	7.22	5.17
18	40.22	6.8	6.78	6.83	0.63	0.84	1.15	1.18	0.16	0.84	7.4	6.25
19	181.9	6.63	6.63	6.63	0.17	0.96	0.24	1.23	0.04	0.96	6.76	6.51
21	24.76	6.53	6.47	6.58	0.74	0.77	1.72	1.08	0.23	0.77	7.44	5.72
22	50.75	6.5	6.49	6.51	0.45	0.88	0.83	1.15	0.12	0.88	6.93	6.1
23	22.81	6.39	6.33	6.45	0.73	0.76	1.79	1.05	0.24	0.76	7.34	5.56
24	12.61	5.97	5.81	6.14	0.87	0.63	2.83	0.89	0.37	0.63	7.55	4.72
25	19.77	6.73	6.63	6.83	0.91	0.71	2.29	1.07	0.29	0.71	7.97	5.68
26	14.2	6.54	6.38	6.72	0.98	0.63	3.02	0.98	0.37	0.63	8.22	5.21
27	12.71	7.08	6.82	7.34	1.2	0.58	3.94	1.01	0.42	0.58	9.31	5.38
28	7.62	5.53	5.2	5.88	0.95	0.49	4.01	0.73	0.51	0.49	7.88	3.88
29	6.38	5.18	4.8	5.59	0.94	0.45	4.2	0.66	0.55	0.45	7.69	3.49
30	6.93	5.34	4.98	5.72	0.95	0.47	4.11	0.69	0.53	0.47	7.78	3.67
31	9.17	5.83	5.55	6.12	0.95	0.54	3.7	0.81	0.46	0.54	7.97	4.26
32	8.16	5.69	5.37	6.03	0.96	0.5	3.97	0.76	0.5	0.5	8.01	4.04
33	13.66	5.69	5.57	5.81	0.76	0.66	2.37	0.87	0.34	0.66	6.99	4.63
34	7.69	5.47	5.16	5.81	0.94	0.5	3.89	0.73	0.5	0.5	7.75	3.86
35	7.94	5.36	5.08	5.65	0.9	0.52	3.61	0.73	0.48	0.52	7.46	3.85
36	11.15	6.09	5.88	6.32	0.95	0.58	3.33	0.88	0.42	0.58	7.98	4.65
37	10.01	5.93	5.69	6.19	0.95	0.56	3.52	0.84	0.44	0.56	7.95	4.43
38	12.13	5.81	5.65	5.98	0.84	0.62	2.78	0.87	0.38	0.62	7.37	4.58
39	7.15	5.73	5.32	6.17	1.02	0.46	4.59	0.73	0.54	0.46	8.46	3.88
41	6.17	5.08	4.7	5.5	0.93	0.45	4.19	0.64	0.55	0.45	7.59	3.4
42	10.68	6.38	6.11	6.65	1.04	0.56	3.81	0.9	0.44	0.56	8.56	4.75
43	12.09	6.29	6.08	6.5	0.97	0.6	3.27	0.92	0.4	0.6	8.13	4.86
44	9.42	5.5	5.28	5.73	0.87	0.56	3.21	0.78	0.44	0.56	7.34	4.13

genotype	GM	GMP	HARM	MP	SSI	STI	TOL	YI	YR	YSI	Normal	Stress
45	13.8	5.97	5.84	6.11	0.83	0.65	2.59	0.91	0.35	0.65	7.41	4.82
46	18.94	6.14	6.06	6.22	0.74	0.72	1.99	0.99	0.28	0.72	7.21	5.22
47	21.95	6.52	6.45	6.59	0.79	0.74	1.94	1.06	0.26	0.74	7.56	5.63
48	11.2	5.77	5.59	5.96	0.86	0.6	2.97	0.84	0.4	0.6	7.44	4.47
49	20.04	6.09	6.02	6.16	0.71	0.74	1.85	0.99	0.26	0.74	7.09	5.24
50	13.35	6.28	6.11	6.45	0.93	0.63	2.95	0.94	0.37	0.63	7.93	4.97
51	18	6.12	6.03	6.21	0.76	0.71	2.08	0.98	0.29	0.71	7.25	5.17
52	20.54	6.31	6.24	6.39	0.76	0.74	1.94	1.02	0.26	0.74	7.36	5.42
53	19.94	6.7	6.61	6.79	0.89	0.72	2.25	1.07	0.28	0.72	7.92	5.67
54	10.78	6.43	6.16	6.71	1.05	0.56	3.83	0.9	0.44	0.56	8.62	4.79
55	28.26	7.61	7.54	7.68	1.18	0.76	2.05	1.26	0.24	0.76	8.7	6.65
56	29.99	7.58	7.52	7.64	1.14	0.78	1.91	1.26	0.22	0.78	8.6	6.68
57	17.07	7.36	7.2	7.53	1.22	0.65	3.18	1.12	0.35	0.65	9.12	5.94
58	18.25	7.77	7.6	7.95	1.42	0.66	3.31	1.19	0.34	0.66	9.6	6.29
59	17.48	7.62	7.45	7.8	1.34	0.65	3.32	1.16	0.35	0.65	9.46	6.14
61	16.24	7.31	7.13	7.49	1.21	0.64	3.29	1.1	0.36	0.64	9.14	5.85
62	18.5	8.22	8.03	8.43	1.73	0.64	3.66	1.25	0.36	0.64	10.25	6.6
63	20.3	7.21	7.1	7.32	1.09	0.7	2.56	1.14	0.3	0.7	8.6	6.04
64	21.09	7.33	7.22	7.44	1.13	0.71	2.55	1.16	0.29	0.71	8.71	6.17
65	11.97	6.53	6.3	6.77	1.04	0.58	3.56	0.94	0.42	0.58	8.55	4.99
66	13.24	6.62	6.42	6.82	1.03	0.61	3.31	0.98	0.39	0.61	8.47	5.17
67	16.36	6.9	6.75	7.05	1.05	0.66	2.91	1.06	0.34	0.66	8.51	5.6
68	14.3	7.08	6.87	7.29	1.16	0.61	3.5	1.05	0.39	0.61	9.05	5.54
69	20.07	7.27	7.15	7.38	1.12	0.7	2.63	1.15	0.3	0.7	8.7	6.07
70	18.28	7.22	7.08	7.35	1.13	0.68	2.85	1.12	0.32	0.68	8.78	5.93
71	17.22	8.03	7.82	8.25	1.59	0.63	3.75	1.2	0.37	0.63	10.12	6.38
73	11.75	7.62	7.25	8.01	1.42	0.53	4.95	1.05	0.47	0.53	10.49	5.54
74	18.27	7.71	7.54	7.87	1.38	0.66	3.25	1.18	0.34	0.66	9.5	6.25
75	13.83	7.45	7.19	7.72	1.32	0.59	4.01	1.08	0.41	0.59	9.72	5.71
76	11.42	7.69	7.29	8.12	1.44	0.52	5.18	1.04	0.48	0.52	10.71	5.53
77	30.29	7.64	7.58	7.7	1.17	0.78	1.93	1.27	0.22	0.78	8.66	6.74
78	18.35	6.71	6.6	6.83	0.93	0.69	2.46	1.06	0.31	0.69	8.05	5.6
79	12.49	6.97	6.71	7.24	1.17	0.58	3.89	1	0.42	0.58	9.18	5.29
81	12.63	6.62	6.41	6.85	1.05	0.6	3.47	0.97	0.4	0.6	8.58	5.11
82	13.39	7.21	6.97	7.47	1.23	0.59	3.89	1.04	0.41	0.59	9.42	5.53
83	15.97	6.97	6.81	7.13	1.08	0.65	3.04	1.06	0.35	0.65	8.65	5.61
84	21.06	7.29	7.19	7.4	1.12	0.71	2.53	1.16	0.29	0.71	8.66	6.14
85	9.37	6.83	6.41	7.26	1.2	0.49	4.97	0.9	0.51	0.49	9.75	4.78
86	15.3	6.78	6.62	6.95	1.03	0.64	3.01	1.03	0.36	0.64	8.45	5.44
87	22.72	5.99	5.94	6.04	0.63	0.77	1.58	0.99	0.23	0.77	6.83	5.25
88	10.88	6.48	6.21	6.76	1.06	0.56	3.86	0.91	0.44	0.56	8.7	4.83
89	12.1	5.95	5.78	6.13	0.88	0.61	2.93	0.88	0.39	0.61	7.6	4.67
90	13.14	6.73	6.52	6.95	1.07	0.6	3.45	0.99	0.4	0.6	8.67	5.22
91	12.18	6.71	6.47	6.96	1.09	0.58	3.69	0.97	0.42	0.58	8.81	5.11

genotype	GM	GMP	HARM	MP	SSI	STI	TOL	YI	YR	YSI	Normal	Stress
92	9.74	7.26	6.8	7.75	1.32	0.48	5.41	0.95	0.52	0.48	10.45	5.04
93	12.74	6.85	6.61	7.09	1.12	0.59	3.68	0.99	0.41	0.59	8.93	5.25
94	11.19	6.85	6.55	7.17	1.16	0.55	4.2	0.96	0.45	0.55	9.27	5.07
95	14.33	7.58	7.32	7.84	1.37	0.59	4	1.1	0.41	0.59	9.84	5.83
96	11.64	7.14	6.82	7.47	1.24	0.55	4.38	1	0.45	0.55	9.65	5.28
97	13.41	6.61	6.42	6.81	1.03	0.61	3.26	0.98	0.39	0.61	8.44	5.18
98	15.76	7.4	7.2	7.6	1.26	0.63	3.47	1.11	0.37	0.63	9.33	5.86
99	11.25	6.4	6.16	6.65	1.03	0.57	3.64	0.91	0.43	0.57	8.48	4.83
101	14.59	6.17	6.03	6.3	0.86	0.66	2.61	0.94	0.34	0.66	7.61	5
102	21.1	7.15	7.05	7.25	1.05	0.71	2.42	1.14	0.29	0.71	8.47	6.04
103	27.76	7.91	7.83	7.99	1.42	0.75	2.25	1.3	0.25	0.75	9.11	6.86
104	14.02	7.39	7.15	7.64	1.29	0.59	3.9	1.08	0.41	0.59	9.59	5.69
105	13.07	7.43	7.14	7.72	1.32	0.57	4.22	1.06	0.43	0.57	9.83	5.61
106	11.3	7.76	7.34	8.21	1.47	0.51	5.34	1.05	0.49	0.51	10.88	5.54
107	19.89	7.73	7.59	7.88	1.38	0.68	3.01	1.2	0.32	0.68	9.38	6.38
108	22.11	7.54	7.43	7.65	1.23	0.71	2.57	1.2	0.29	0.71	8.93	6.36
109	13.3	7.16	6.91	7.41	1.21	0.59	3.85	1.04	0.41	0.59	9.34	5.49
110	20.89	7.13	7.03	7.23	1.04	0.71	2.43	1.14	0.29	0.71	8.45	6.01
111	28.76	7.33	7.28	7.39	1.01	0.78	1.87	1.22	0.22	0.78	8.33	6.46
112	16.06	7.2	7.02	7.38	1.17	0.64	3.23	1.09	0.36	0.64	8.99	5.76
113	24.42	7.32	7.24	7.4	1.07	0.74	2.19	1.19	0.26	0.74	8.5	6.31
114	24.63	7.48	7.4	7.57	1.15	0.74	2.27	1.21	0.26	0.74	8.7	6.43
115	17.96	6.71	6.59	6.82	0.94	0.69	2.5	1.05	0.31	0.69	8.07	5.57
116	20.23	6.23	6.16	6.31	0.74	0.74	1.92	1.01	0.26	0.74	7.27	5.35
117	19.56	6.45	6.36	6.53	0.82	0.72	2.13	1.03	0.28	0.72	7.6	5.47
118	18.33	7.4	7.25	7.55	1.22	0.67	2.99	1.14	0.33	0.67	9.04	6.06
119	15.46	6.52	6.38	6.67	0.94	0.66	2.75	1	0.34	0.66	8.04	5.29
121	17.66	5.77	5.69	5.84	0.68	0.72	1.88	0.93	0.28	0.72	6.79	4.9
122	15.62	6.72	6.57	6.88	1	0.65	2.89	1.03	0.35	0.65	8.32	5.43
123	14.09	6.76	6.58	6.96	1.06	0.62	3.25	1.01	0.38	0.62	8.58	5.33
124	11.68	6.51	6.27	6.76	1.04	0.58	3.63	0.93	0.42	0.58	8.57	4.94
125	11.89	7.5	7.15	7.87	1.37	0.54	4.73	1.04	0.46	0.54	10.23	5.5
126	10.15	7.02	6.63	7.43	1.24	0.51	4.86	0.94	0.49	0.51	9.86	5
127	12.12	7.15	6.86	7.46	1.24	0.56	4.22	1.01	0.44	0.56	9.57	5.35
128	8.4	6.32	5.91	6.75	1.1	0.48	4.75	0.83	0.52	0.48	9.13	4.38
129	14.86	6.51	6.36	6.66	0.95	0.65	2.85	0.99	0.35	0.65	8.09	5.24
130	19.8	6.57	6.48	6.66	0.85	0.72	2.18	1.05	0.28	0.72	7.75	5.57
131	8.5	6.19	5.82	6.59	1.06	0.49	4.51	0.82	0.51	0.49	8.84	4.33
132	16.57	6.19	6.08	6.29	0.81	0.69	2.31	0.97	0.31	0.69	7.45	5.14
133	13.94	5.83	5.7	5.95	0.79	0.66	2.44	0.89	0.34	0.66	7.17	4.74
134	14.65	6.36	6.21	6.5	0.91	0.65	2.76	0.97	0.35	0.65	7.88	5.13
135	11.92	6.05	5.87	6.24	0.91	0.61	3.07	0.89	0.39	0.61	7.78	4.71
136	6.4	5.54	5.08	6.03	1.01	0.43	4.79	0.69	0.57	0.43	8.43	3.64
137	10.11	6.8	6.45	7.18	1.17	0.52	4.57	0.92	0.48	0.52	9.46	4.89

genotype	GM	GMP	HARM	MP	SSI	STI	TOL	YI	YR	YSI	Normal	Stress
138	10.63	6.93	6.59	7.28	1.2	0.53	4.51	0.95	0.47	0.53	9.54	5.03
139	8.1	6.89	6.34	7.49	1.25	0.44	5.86	0.86	0.56	0.44	10.42	4.56
141	9.93	5.8	5.57	6.04	0.92	0.56	3.39	0.82	0.44	0.56	7.73	4.35
142	12.02	6.52	6.29	6.75	1.04	0.59	3.54	0.94	0.41	0.59	8.52	4.99
143	11.93	6.41	6.19	6.64	1.01	0.59	3.45	0.93	0.41	0.59	8.37	4.92
144	24.44	6.52	6.46	6.58	0.75	0.77	1.74	1.08	0.23	0.77	7.45	5.71
145	13.76	6.22	6.07	6.38	0.9	0.64	2.81	0.94	0.36	0.64	7.79	4.97
147	12.8	6.08	5.92	6.25	0.89	0.62	2.89	0.91	0.38	0.62	7.7	4.81
148	9.53	5.3	5.11	5.5	0.82	0.58	2.95	0.76	0.42	0.58	6.98	4.03
149	8.83	5.71	5.43	6	0.94	0.53	3.69	0.78	0.47	0.53	7.84	4.15
150	19.7	6.23	6.15	6.3	0.75	0.73	1.97	1	0.27	0.73	7.29	5.32
151	29.79	6.66	6.62	6.7	0.71	0.8	1.49	1.12	0.2	0.8	7.45	5.96
152	22.9	6.74	6.67	6.81	0.85	0.75	1.98	1.1	0.25	0.75	7.8	5.82
154	19.06	6.74	6.64	6.84	0.93	0.7	2.38	1.07	0.3	0.7	8.04	5.65
155	18.11	7.49	7.33	7.64	1.26	0.66	3.1	1.15	0.34	0.66	9.19	6.1
156	13.29	6.89	6.67	7.12	1.12	0.6	3.58	1.01	0.4	0.6	8.91	5.33
157	21.68	7.11	7.02	7.21	1.02	0.72	2.33	1.14	0.28	0.72	8.38	6.04
158	20.12	7.24	7.13	7.36	1.11	0.7	2.61	1.14	0.3	0.7	8.66	6.06
159	15.59	6.93	6.76	7.09	1.07	0.64	3.08	1.05	0.36	0.64	8.63	5.56
161	12.85	6.68	6.47	6.9	1.06	0.6	3.47	0.98	0.4	0.6	8.64	5.17
162	13.57	6.2	6.05	6.36	0.9	0.64	2.83	0.93	0.36	0.64	7.78	4.94
163	22.86	6.48	6.41	6.54	0.76	0.75	1.84	1.06	0.25	0.75	7.46	5.63
164	15.72	6.43	6.3	6.57	0.91	0.67	2.63	0.99	0.33	0.67	7.88	5.25
165	14.53	5.75	5.64	5.86	0.75	0.68	2.27	0.89	0.32	0.68	7	4.72

SSI: حساسیت به تنش، YR: نسبت عملکرد، TOL: شاخص تحمل، MP: میانگین عملکرد، YI: شاخص تولید پایدار، YSI: شاخص نسبت عملکرد در شرایط تنش، GMP: میانگین هندسی، HARM: شاخص میانگین هارمونیک، STI: تحمل به تنش.

SSI: Stress Sensitivity Index, YR: Yield Ratio, TOL: Tolerance Index, MP: Average Productivity Index, YI: Yield Index, YSI: Stress Yield Ratio Index, GMP: Geometric Mean Productivity, HARM: Harmonic Mean, STI: Stress Tolerance Index.