

SUPPLEMENTARY DATA

TABLE S1. Grain protein (GPC, %) and mineral nutrient concentrations (mg kg⁻¹) of wild emmer wheat accessions and domesticated wheat cultivars. Values are means of five or six replicas, for 2007 and 2008 experiments, respectively.

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
Wild emmer wheat accessions																					
Jordan																					
dico 142	Amman	20.5	22.0	55.1	45.5	18.2	38.8	5.8	3.7	23.1	30.7	411	396	1782	1649	5070	4807	5517	5653	2169	2158
dico 137	Balqa	20.0	24.2	61.8	38.3	22.3	46.8	7.2	3.8	34.7	32.2	364	348	1841	1775	5713	5230	5694	5763	2109	2236
dico 141	Balqa	21.0	23.2	61.1	38.5	21.1	46.3	7.7	4.2	27.1	29.5	402	421	1794	1804	5891	5400	5371	6089	2285	2582
dico 133	Irbid	20.9		77.7		23.7				11.6				377		1994		5250		5896	2280
dico 140	Irbid	21.5		83.3		28.7				12.6				461		1897		5252		5879	2306
J 10	Sakhra	20.8		84.5		23.2				10.7				432		1978		5604		6065	2276
J 21	Sakhra	23.6	24.4	82.2	53.3	30.9	53.8	9.5	5.2	36.0	40.0	400	405	2202	1998	5883	5467	6693	6332	2603	2325
J 29	Sakhra	22.3		87.9		22.5				9.5				374		2127		5787		6232	2459
J 28	Sakhra	22.3	23.5	90.1	66.8	23.7	53.0	10.1	5.6	41.6	47.8	450	421	2113	2117	5932	5414	6236	6634	2608	2766
J 30	Sakhra	22.4		89.5		24.3				9.5				377		2086		5618		6271	2544
dico 139	Um el Amad	24.1		82.9		23.6				9.4				487		1916		5546		5936	2788
Israel																					
31-1	Kabara, Mt. Carmel	22.9		75.3		30.2				7.9				389		1830		5077		5169	2178
dico 64	Afula-Tiberias road	20.8	23.6	92.6	63.8	26.6	51.4	6.6	3.8	52.0	46.8	592	452	2020	1829	5744	5393	6145	6211	2395	2431
dico 46	Almagor	21.4		89.7		29.5				11.4				418		1801		5320		5531	2148
dico 65	Almagor	20.4		85.0		29.0				10.1				417		1793		5000		5069	2103
24-39	Amirim	21.7	29.3	94.0	60.0	37.5	55.6	9.6	4.0	43.9	38.6	485	416	2071	2034	5622	5265	5811	6209	2353	2585
dico 79	Bet Meir	20.2		77.1		22.7				7.8				458		1854		5461		5469	2296
dico 47	Bet Qeset	22.4	24.2	94.0	66.0	27.9	36.5	8.8	4.6	45.2	41.5	462	415	1872	1833	5455	5572	5891	6152	2421	2317
Bem 1/1	Burj el Maliech	21.0		74.0		26.3				9.1				377		1776		5218		5650	2411
Bem 1/3	Burj el Maliech	22.2		76.4		27.9				10.0				518		1920		5592		5922	2690
BR 1/1	Camp Brosh	22.3		74.5		30.1				9.6				374		1907		5091		5782	2341

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
BR 1/2	Camp Brosh	22.2		76.3		28.2		9.9		40.7		356		1927		5476		5807		2321	
dico 116	En Hashofet-Daliya road	21.2		78.6		28.0		8.6		47.2		444		1889		5247		5710		2184	
8-28	Gamla	20.5		68.1		21.8		7.4		43.9		408		1738		4797		4934		2045	
G18-16	Gitit		19.8		39.8		42.4		4.6		27.4		419		1668		4647		5222		1992
18-27	Gitit	20.2	24.2	77.8	47.0	32.2	54.2	7.1	3.9	43.1	38.8	560	458	1812	1858	5333	4650	5644	6025	2317	2530
18-39	Gitit	22.4	23.4	90.7	49.6	29.6	44.4	11.4	5.6	47.2	37.8	546	462	1964	1897	5701	4976	6227	6110	2401	2300
19-1	Kokhav Hashahar	21.4		71.9		28.6		9.6		49.5		393		1816		5689		5944		2273	
19-36	Kokhav Hashahar	22.6		79.5		28.6		9.6		38.1		451		1920		5266		5920		2353	
KH 1/3	Kokhav Hayarden	23.6		78.8		30.2		6.0		34.4		445		1990		5691		6043		2271	
KH 2/3	Kokhav Hayarden	18.9	22.8	71.8	49.3	23.9	39.3	5.6	2.8	33.6	27.7	303	315	1828	1776	5712	5437	5551	5675	2004	2175
ME 2/1	Ma'ale Efraim	21.4		74.6		22.2		9.9		37.7		459		1974		5773		5738		2399	
ME 2/2	Ma'ale Efraim	20.6		74.6		26.5		8.5		39.5		439		1871		5900		5693		2325	
MM 4/3	Ma'ale Merav	21.4		87.8		31.7		9.8		37.5		459		1906		5442		6062		2269	
dico 80	Mt. Dov	23.9		84.2		21.9		8.6		34.2		350		2171		5232		6283		2389	
dico 100	Ramla junction	21.2		70.2		21.0		9.1		36.8		446		1874		6441		6128		2095	
dico 53	Safad road	21.3		82.6		26.4		8.7		35.6		389		1875		5185		5730		2147	
dico 84	Sanhedriya	21.0		77.9		19.1		8.2		30.7		481		1939		5887		5568		2301	
dico 114	Rosh Pinna	22.0		79.9		18.2		9.8		50.2		564		1944		5135		5730		2375	
dico 52	West Jerusalem	18.1	19.8	60.7	37.0	19.5	43.4	6.2	3.9	21.0	22.4	446	463	1870	1828	4683	4822	5450	5749	2024	2109
Lebanon																					
dico 71	Aiha-Kfarkouk road	21.1	23.1	88.9	56.8	26.8	45.8	9.8	4.7	38.1	31.0	424	395	2068	1836	5471	5520	6209	6245	2378	2245
dico 70	Rashaya	20.4		77.1		18.1		10.5		27.7		405		1883		5995		5762		2136	
dico 101	Rashaya	19.2		75.0		19.7		8.9		27.2		424		1852		5938		5769		2158	
dico 117	Rashaya	19.9		74.0		20.7		9.9		26.3		379		1847		5573		5817		2108	
dico 74	Rashaya-Aiha road	19.1		75.8		24.7		10.6		30.7		326		1818		5097		5631		2107	
Syria																					
dico 134	Idlib	18.6		61.6		24.0		8.3		35.1		386		1770		5183		5266		2055	
dico 131	Zabadani	23.6	23.7	88.9	66.3	29.9	44.3	8.4	4.9	49.7	40.0	460	426	1923	1802	5195	5349	6466	6309	2908	2861
dico 145	Birein	19.4		70.7		21.1		11.9		33.0		460		1833		5431		6027		2099	
dico 88	Dera province	18.1	19.2	80.3	62.0	21.8	46.3	9.9	5.1	40.5	36.7	591	566	1824	1801	5153	4838	5437	5792	2027	2144
dico 127	Dar'a Nawa	20.2		79.1		30.2		10.1		42.8		405		1779		5047		5393		2024	

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
dico 125	Rawda	20.6		66.4		21.2		9.3		30.9		419		1866		5413		5973		2426	
1082	Sweida	20.4	20.6	87.1	50.2	28.9	52.2	9.3	5.6	34.7	38.0	382	334	1675	1597	5503	5125	5554	5699	2073	2044
dico 126	Sweida		19.9		44.6		42.0		4.8		26.2		370		1651		4780		5585		2033
dico 129	Sweida	23.6		73.3		18.6		8.7		30.4		393		2069		5065		6142		2479	
Turkey																					
35-8	East Siverek	21.7		72.8		26.6		10.0		36.1		349		1802		5302		5893		2359	
dico 118	Gaziantep	23.7		75.9		23.8		10.4		40.1		464		2108		5501		6363		2271	
dico 119	Gaziantep	19.4		73.4		21.7		8.6		32.9		562		1938		5842		5835		2318	
dico 107	Mt.Karakadag	23.0		80.4		20.9		10.4		41.9		449		1981		5211		6004		2414	
dico 109	Mt.Karakadag	22.2		78.4		21.7		9.6		42.4		469		1945		5432		6050		2405	
dico 110	Mt.Karakadag	21.6	20.4	67.9	59.0	18.1	46.0	10.0	5.7	16.5	23.3	404	384	1800	1746	5333	5117	5569	5711	2177	2297
dico 113	West of Diyarbakir	25.9	25.6	88.8	66.3	36.2	50.3	10.3	6.1	45.2	35.3	481	431	2131	1972	5445	5481	6526	6404	2846	2749
dico 55	West of Diyarbakir	25.6	26.4	83.7	62.7	30.6	53.3	9.7	6.0	43.1	39.5	480	462	2086	1899	5647	5328	6349	6303	2775	2710
dico 56	West of Diyarbakir	20.4		69.1		18.3		9.2		32.5		435		1804		5405		5666		2400	
dico 57	West of Diyarbakir	21.8		72.6		24.8		9.6		40.8		358		1858		5222		5816		2244	
dico 59	West of Diyarbakir	24.9	23.9	70.4	50.0	23.2	44.5	9.9	4.0	37.7	33.5	376	306	2075	1751	5597	5247	6299	5660	2521	2281
dico 60	West of Diyarbakir	23.0		85.2		25.3		11.3		42.1		358		2147		5180		6448		2498	
dico 61	West of Diyarbakir	21.8		72.4		21.9		10.8		46.3		416		1964		5125		5755		2374	
dico 63	West of Diyarbakir	21.7		70.9		28.8		9.0		34.6		397		1899		5162		6232		2426	
dico 89	West of Diyarbakir	27.0	25.7	85.5	68.3	34.4	50.2	10.2	5.8	44.5	32.3	479	462	2101	1909	5581	5605	6489	6312	2828	2720
dico 90	West of Diyarbakir	22.7	23.2	90.3	54.5	29.5	47.2	10.8	5.0	54.2	40.2	513	398	2050	1867	5544	5160	6237	6113	2487	2377
dico 91	West of Diyarbakir	23.8		81.4		22.5		11.3		36.6		377		2063		5490		6475		2506	
dico 92	West of Diyarbakir	23.3		83.8		29.7		9.8		46.0		408		1961		5157		6077		2358	
dico 93	West of Diyarbakir	21.5		76.3		21.7		11.1		30.8		350		1973		5690		6256		2316	
dico 94	West of Diyarbakir	25.3	25.1	78.7	53.7	22.2	47.0	10.2	5.9	38.9	34.0	370	342	2107	1878	5597	5071	6255	5943	2636	2449
N 33	West of Diyarbakir	23.3	23.5	86.7	57.0	26.8	44.8	10.1	5.2	50.3	37.8	425	380	1993	1808	5819	5144	6081	5864	2473	2281
Iran																					
dico 196	Bakhtaran	21.3	21.2	53.2	42.0	20.4	42.2	7.6	4.3	30.3	28.6	405	344	1687	1584	5520	5198	5441	5727	2216	2248
8941	North to Kermanshah	20.3	20.5	84.6	68.6	30.1	53.6	8.2	4.8	31.3	26.8	391	335	1627	1580	5197	4777	5269	5416	1920	2164
8943	North to Kermanshah	22.6		72.8		24.5		8.7		41.0		419		1944		5433		5645		2346	
Iraq																					

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
8808	North slope Jabal Sinjar	21.8		68.5		24.8		7.3		27.5		374		1699		5309		5425		2347	
8736	South west of Rowanduz	20.3	20.4	70.2	56.3	18.5	39.0	9.2	5.5	32.8	30.7	358	359	1847	1732	5917	5401	6122	6267	2044	2138
8357	Sulaymaniyah	20.6		79.2		23.5		11.5		33.8		387		1712		5031		5497		2173	
Israeli wild emmer wheat populations																					
10-8	Ammiad	21.1	23.0	78.7	67.7	22.0	55.3	10.0	5.3	28.0	32.0	391	371	1729	1714	4987	4503	5101	5485	2339	2552
10-9		22.8	25.9	84.7	61.6	21.7	63.0	8.6	4.8	32.6	49.4	564	563	1923	1902	5297	5053	5864	6415	2593	2877
10-22		23.7	25.4	89.8	69.2	24.2	50.5	8.4	4.8	34.0	39.0	411	400	1964	1974	5454	5113	5972	6298	2466	2604
10-24		22.0	25.4	81.5	57.8	22.3	66.6	10.6	6.1	34.2	41.4	413	464	2000	1917	5561	5121	5790	6138	2354	2664
10-209		21.5	22.7	90.1	58.2	26.6	55.5	8.4	5.0	35.4	33.5	488	491	1991	2004	6245	5527	6170	6466	2497	2641
28-6	Beit Oren	23.1	23.5	73.6	53.0	18.3	52.7	10.9	4.0	42.0	39.0	307	363	2012	1825	5307	4889	5948	5851	2218	2373
28-15		22.7	23.5	69.4	58.0	19.5	58.7	8.7	4.5	42.8	44.3	400	361	1853	1880	5217	4956	5384	6104	2060	2351
28-33		22.2	23.4	68.4	56.7	19.8	50.7	9.9	4.1	45.2	44.3	358	319	1958	1864	5407	4851	5918	6095	2140	2358
28-49		23.1	23.1	75.7	62.3	19.0	39.5	10.4	4.3	42.2	37.3	359	332	1893	1836	5140	4594	5806	6016	2095	2257
28-53		23.7	24.0	71.9	60.0	18.0	40.0	9.3	4.2	48.3	37.5	363	322	2003	1814	5299	4787	5956	6020	2182	2249
33-2	Givat Koach		23.7		79.8		60.8		6.5		39.3		314		1786		4324		5779		2530
33-8		25.5	26.9	77.9	64.5	31.0	53.0	9.8	5.3	47.6	37.0	629	409	2214	2199	5961	5100	6505	6722	2785	2791
33-39		25.7	26.9	94.7	65.0	32.1	55.0	10.8	5.2	48.1	42.3	482	422	2171	2134	5392	5049	6313	6515	2743	2720
33-48		24.2	26.2	90.7	56.0	35.4	52.7	9.5	4.6	47.1	40.8	452	418	2107	2131	5434	4982	6171	6546	2657	2744
33-58		23.1	22.9	78.8	59.7	18.3	45.3	11.2	4.2	46.2	40.3	351	351	2000	1758	5364	4766	5990	5952	2386	2277
KH 4/1	Kokhav Hayarden	25.4	25.8	112.6	62.5	39.2	69.8	10.5	5.9	38.5	33.2	326	316	2045	1953	5459	5168	6214	6194	2701	2564
KH 4/2		24.4	26.2	94.4	61.0	34.0	63.3	9.1	5.4	33.2	34.0	358	336	2032	2004	5546	5140	6068	6410	2648	2705
KH 5/1		23.9	25.8	72.7	59.3	25.3	58.0	9.7	5.4	38.6	57.2	300	272	1926	1779	5433	4794	5690	5863	2353	2450
KH 5/3		20.8	25.2	80.3	64.3	39.2	65.0	9.1	5.6	54.8	50.3	410	384	1752	1808	5066	4891	5742	6130	1987	2395
P 2/3		21.8	24.3	62.0	43.6	21.4	59.0	9.3	5.0	36.2	42.4	295	315	1888	1962	5518	5476	5609	6271	2215	2533
16-28	Mt. Gilbboa	22.0		76.8		33.8		11.9		30.2		458		1918		5805		6168		2340	
16-34		23.8	26.4	78.5	50.0	33.4	57.5	9.7	5.4	39.7	27.5	426	449	1944	2012	6110	5389	5923	6382	2201	2387
16-40		23.5	26.0	81.0	47.0	29.4	51.5	11.6	5.5	39.1	28.5	396	424	2001	1977	5539	4915	6094	6382	2309	2420
16-51		23.2	24.0	82.9	48.6	29.2	51.8	9.9	4.7	43.8	36.0	400	369	1936	1923	5638	5297	5728	6072	2276	2293
1-22	Mt. Hermon	22.7	22.0	83.8	49.5	25.3	48.0	7.2	4.1	37.9	43.8	338	365	1806	1739	5560	5508	6086	6378	2285	2365
1-24		22.1		86.0		27.6		7.3		43.1		406		1885		5495		6362		2526	

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
1-42		23.6	22.0	79.4	56.6	24.1	43.6	7.8	4.3	36.4	40.2	362	372	1912	1738	5521	5457	6418	6453	2520	2451
1-59		21.0	19.4	61.9	47.6	16.4	37.0	8.9	4.2	25.2	24.0	502	486	2007	1700	5109	4576	5822	5386	2601	2261
1-64			27.5		59.7		67.0		4.8			48.2		346		1807		4730		6062	2580
1-67			23.7		50.0		46.3		4.3			40.7		385		1788		5399		6545	2416
MM 5/2	Lower Ma'ale Merav	23.8	26.6	86.9	51.8	37.6	61.8	9.2	3.8	41.7	40.0	395	434	2079	2037	5410	4903	5871	6248	2364	2536
MM 5/3			20.8		48.0		54.25		4.1			43.8		393		1704		4467		5693	2080
MM 5/4		24.2	27.2	93.9	59.8	39.7	56.8	10.4	3.9	48.4	36.4	434	411	2048	2003	5925	4854	5828	6135	2376	2393
MM 1/1	Upper Ma'ale Merav	24.8	26.5	101.6	68.5	38.3	59.5	9.4	4.9	51.8	47.0	494	521	2065	2065	5929	5873	6541	6492	2647	2670
MM 1/2			27.3		65.4		62.2		5.0			45.0		477		2107		5253		6681	2553
MM 1/3		22.7	23.4	75.3	57.0	23.0	43.0	8.3	4.1	31.6	29.7	395	385	1849	1808	5124	4851	5568	5881	2260	2425
MM 2/1			23.6		62.8		59.8		5.1			42.8		436		1958		5051		6377	2447
MM 2/2			24.9		67.0		54.5		4.4			44.5		3845		1986		5090		6377	2505
9-29	Rosh Pinna	21.8	21.7	69.6	45.6	26.9	42.8	7.3	3.7	48.6	34.6	353	360	1932	1784	5352	4905	5470	5557	2165	2125
9-33		21.9	21.8	75.2	48.3	24.0	45.0	8.3	4.0	38.9	39.3	372	356	1948	1848	5242	5080	5569	5736	2246	2247
9-45		21.1	22.6	78.9	51.5	27.6	48.3	8.5	4.3	45.6	40.0	401	394	1875	1812	5332	4994	5578	5626	2231	2224
9-58		23.8	27.1	102.1	90.6	26.4	64.4	11.3	7.4	49.5	60.6	556	475	2020	2028	5531	4756	6075	6507	2433	2845
9-72		24.3	21.6	89.3	46.8	29.7	46.0	11.1	5.2	45.2	37.5	478	369	1979	1708	5548	5140	6117	5851	2537	2442
13-B-53	Tabigha (Basalt)	22.3	24.9	83.0	70.8	22.1	45.5	11.5	6.2	44.5	39.8	390	359	1861	1861	5603	4742	5592	6082	2168	2399
13-B-78		22.2	23.9	83.6	64.5	21.6	47.0	13.1	6.2	45.9	49.3	434	342	1886	1838	5665	4969	5748	5810	2087	2291
13-B-87		22.2	23.3	81.9	58.8	22.5	54.5	10.5	5.3	40.0	36.3	350	365	1820	1919	5314	5332	5461	6272	2187	2384
13-B-89		21.6	23.1	95.3	58.2	28.7	60.0	10.8	5.3	50.3	47.3	387	349	1776	1728	5310	4567	5513	5861	2149	2240
15-T-6	Tabigha (Terra rossa)	24.6		92.0		30.9		10.0		49.2		362		1950		5616		5960		2307	
15-T-25		23.1	25.2	110.1	75.3	37.7	61.0	9.7	4.7	40.3	42.3	538	494	1980	1951	6339	5711	6590	6820	2483	2499
15-T-28		23.5	24.1	95.6	78.0	23.5	53.6	10.9	6.6	42.9	40.2	425	398	1903	1868	5161	4941	5678	5870	2403	2568
15-T-33		23.1	26.3	90.9	58.2	25.5	56.4	11.4	5.6	40.8	40.0	418	403	1726	1731	4658	4278	5178	5465	2179	2334
15-T-36		23.4	23.3	85.3	60.8	23.9	48.5	10.5	5.6	44.7	38.0	428	373	1725	1736	4986	4399	5157	5400	2093	2261
12-2	Yehudiyya	23.8	25.6	72.5	63.5	22.0	63.3	10.2	5.5	53.9	58.5	342	307	1855	1781	5178	4682	5468	5928	2122	2363
12-3		25.3	27.0	79.1	70.2	26.7	61.7	10.5	5.6	58.4	54.2	285	317	1866	1757	5179	4690	5642	5853	2224	2353
12-4		24.6	25.5	80.4	72.6	22.6	60.0	10.4	6.1	58.0	59.2	346	302	1845	1755	5243	4539	5491	5783	2177	2416
12-73		23.6	24.0	86.0	64.6	20.9	55.4	12.4	5.7	53.1	40.0	476	372	1919	1732	5520	4494	5606	5633	2691	2453

Genotype and collection site		GPC		Zn		Fe		Cu		Mn		Ca		Mg		K		P		S	
		2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
Domesticated wheat																					
Durum wheat																					
580D	Israel	13.5		50.8		14.5		7.5		22.0		274		1418		4797		4285		1396	
Inbar	Israel	11.6	11.6	47.1	32.7	15.5	25.2	8.1	4.1	27.9	20.5	273	333	1329	1241	5060	5104	4098	4499	1260	1275
Svevo	Italy	12.7	13.2	44.9	30.7	14.1	27.3	6.2	3.2	25.1	22.7	327	415	1367	1207	4828	4602	4109	4111	1316	1363
Kizilitan	Turkey	12.2	12.0	55.6	33.7	14.1	30.3	6.9	3.8	24.4	21.2	357	384	1365	1139	5123	4612	4238	4028	1377	1306
Sarica k 98	Turkey	11.5	12.3	46.5	31.7	17.9	26.8	7.0	3.6	31.1	19.5	326	403	1277	1198	4763	4731	3975	4421	1178	1336
Kofa	USA	12.0		47.1		15.3		7.0		25.8		332		1319		5449		4061		1295	
Langdon	USA	13.8	13.0	54.1	45.3	17.0	30.0	7.4	5.0	32.2	24.7	364	417	1434	1343	4237	4045	4324	4383	1512	1452
Bread wheat																					
Beit Lechem	Israel	12.1		45.9		19.7		7.3		27.4		462		1403		4802		4216		1351	
Galil	Israel	11.9		49.3		17.2		5.6		26.2		334		1330		4007		3594		1220	
Gedera	Israel	12.0	13.2	48.2	30.2	19.8	27.5	6.3	3.4	26.5	21.3	376	357	1452	1316	4612	4511	3870	3873	1318	1388
Nirit	Israel	13.3		53.1		18.9		6.9		35.0		336		1558		4292		4219		1401	
Rotem	Israel	10.2		40.2		19.5		5.8		26.1		312		1340		4455		3457		1180	
Zahir	Israel	10.5	12.1	37.4	28.7	18.9	29.0	5.1	3.1	26.6	27.5	321	386	1329	1265	4381	4299	3794	4051	1270	1322
Ruta	Israel	11.9		45.5		18.3		6.1		33.0		354		1405		4179		3794		1291	
Ada -99	Turkey	10.6	12.3	42.9	35.0	21.0	28.0	6.1	3.8	30.3	30.7	344	359	1268	1287	4657	4226	3610	4043	1151	1362
Gerek-79	Turkey	11.4	13.0	44.6	28.3	19.4	31.5	5.4	3.0	26.0	27.5	355	425	1467	1340	4836	4406	4108	4171	1271	1346
UC 1113	USA	12.3		45.4		13.0		5.5		19.8		267		1219		4757		4020		1212	

TABLE S2. Soil characteristics of 12 wild emmer wheat populations collection sites in Israel. Symbol of variable: Ln = longitude; Lt = latitude; NH₄ = ammonium (mg kg⁻¹); NO₃ = nitrate (mg l⁻¹), Zn = zinc (mg kg⁻¹); Fe = iron (mg kg⁻¹); Cu = copper (mg kg⁻¹); Mn = manganese (mg kg⁻¹); Ca+Mg = calcium and magnesium (meq⁻¹); K = phosphorus (mg kg⁻¹); P = potassium (mg kg⁻¹); Cl = chloride (meq⁻¹); Clay = percentage of clay (%), Silt = percentage of silt (%); Sand = percentage of sand (%); CaCO₃ = percentage of calcium carbonate (%); EC = electrical conductivity (ds m⁻¹).

Population	Ln	Lt	NH ₄	NO ₃	Zn	Fe	Cu	Mn	Ca+Mg	K	P	Cl	Clay	Silt	Sand	CaCO ₃	EC	pH
Ammiad	35°31	32°55	6.0	2.5	1.4	15.5	3.4	16.1	2.9	0.09	18.4	0.73	62.2	25.2	12.6	5.6	0.39	7.17
Beit Oren	35°00	32°43	8.6	4.2	0.6	10.8	2.7	26.2	3.2	0.06	7.6	0.70	68.0	23.4	8.6	2.7	0.37	7.07
Givat Koach	34°57	32°02	8.2	5.2	1.0	10.9	2.7	11.8	3.5	0.07	7.0	0.83	50.7	40.7	8.6	4.0	0.40	7.37
Kokhav Hayarden	35°29	32°27	14.7	6.9	0.9	9.4	4.7	7.4	3.9	0.21	8.7	0.70	59.3	23.7	16.9	7.3	0.44	7.53
Mt. Gilbboa	35°24	32°30	32.1	6.1	1.7	17.6	2.3	87.1	7.0	0.15	7.7	1.03	55.5	34.5	9.9	3.7	0.72	7.00
Mt. Hermon	35°45	33°17	10.8	10.3	1.8	19.2	1.6	47.0	4.0	0.08	25.9	0.90	64.0	30.1	5.9	5.1	0.45	6.97
Lower Ma'ale Merav	35°26	32°25	17.4	11.7	1.4	18.4	2.2	27.1	4.5	0.08	5.3	0.57	54.2	33.2	12.6	3.1	0.51	7.40
Upper Ma'ale Merav	35°26	32°26	22.5	9.5	1.1	11.5	1.4	32.5	5.6	0.13	5.6	0.67	58.2	33.2	8.6	3.7	0.57	7.33
Rosh Pinna	35°30	32°58	11.9	6.6	2.2	16.4	2.9	22.7	2.7	0.04	17.3	0.67	70.7	23.4	5.9	3.7	0.33	6.93
Tabigha (Baslet)	35°32	32°53	6.5	4.7	0.5	9.4	2.3	10.5	3.1	0.06	8.5	0.73	58.7	28.7	12.6	13.8	0.40	7.47
Tabigha (Terra rossa)	35°32	32°53	14.5	3.9	0.5	10.9	2.4	13.2	3.1	0.05	7.5	0.73	60.0	31.4	8.6	9.1	0.37	7.47
Yehudiya	35°41	32°55	17.0	2.5	1.2	30.2	3.0	103.8	5.3	0.08	12.1	0.70	56.9	37.2	5.9	4.8	0.56	6.63