

Supplementary Data

Heterosis for yield and agronomic attributes in diverse maize germplasm

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Table A. Heterosis (%) values over mid-parent (MPH) and better parent (BPH) of plant height, ear height, anthesis silking interval (ASI) and grain yield of 29 testcrosses with three testers derived from S₁ maize inbred lines.

Line × Tester		Plant height		Ear height		ASI		grain Yield	
		MPH %	BP H %	MPH %	BP H %	MPH %	BP H %	MPH %	BP H %
CMI-1	WD2×8	14.17	8.83	10.23	9.97	0.00	-25.00	36.64	36.18
	Jalal	35.99	11.15	26.39	1.56	-50.00	-75.00	61.82	45.25
	WD3×6	11.52	8.66	-10.41	-17.24	0.00	-25.00	82.16	70.46
CMI-4	WD2×8	38.28	31.54	43.81	23.99	-77.78	-85.71	47.87	44.67
	Jalal	75.09	55.47	84.23	68.98	-42.86	-71.43	72.08	51.06
	WD3×6	23.79	9.94	26.00	1.86	-11.11	-42.86	42.87	30.59
CMI-6	WD2×8	4.44	4.01	3.70	-1.87	100.00	100.00	36.78	19.74
	Jalal	50.80	27.76	72.11	44.33	-300.00	-200.0	112.00	106.76
	WD3×6	11.07	3.69	8.52	-4.51	-200.00	-200.0	42.5	33.07
CMI-18	WD2×8	21.98	11.46	21.42	1.56	-50.00	-66.67	109.38	91.59
	Jalal	53.30	41.52	43.66	36.34	-100.00	-100.0	88.84	84.27
	WD3×6	22.41	4.76	9.61	-13.79	-50.00	-66.67	59.58	56.31
CMI-48	WD2×8	25.14	22.30	21.07	9.66	-50.00	-66.67	53.01	31.70
	Jalal	70.96	48.18	86.36	62.57	33.33	-33.33	61.76	34.66
	WD3×6	20.12	9.37	-2.75	-17.77	-50.00	-66.67	32.93	14.89
CMI-71	WD2×8	4.99	0.48	0.92	-0.07	100.00	66.67	-1.86	-18.83
	Jalal	33.70	9.96	56.00	32.73	33.33	-33.33	35.41	2.69
	WD3×6	15.68	11.86	14.77	-0.53	-50.00	-33.33	-12.05	-31.13
CMI-76	WD2×8	20.70	16.96	17.40	9.81	100.00	0.00	3.34	-2.95
	Jalal	61.85	34.08	56.18	32.29	....	.....	63.25	38.25
	WD3×6	-10.04	-13.78	-20.18	-30.50	300.00	100.00	65.05	45.26
CMI-81	WD2×8	25.19	17.18	19.21	3.43	-20.00	-33.33	37.82	24.01
	Jalal	53.99	38.83	53.95	40.25	-233.33	-166.6	54.87	26.35
	WD3×6	0.65	-11.93	-11.91	-28.38	-20.00	-33.33	13.99	-3.55
CMI-82	WD2×8	9.49	-2.61	3.97	-1.90	33.33	0.00	4.18	-14.12
	Jalal	20.87	-6.59	20.89	-7.15	300.00	100.00	3.68	-21.60
	WD3×6	26.92	2.094	5.57	3.45	-233.33	-200.0	-16.61	-34.90
CMI-89	WD2×8	13.09	13.05	-2.68	-6.71	-50.00	-50.00	4.21	-6.99
	Jalal	50.63	28.10	38.24	-7.43	-300.0	-200.0	38.89	12.51
	WD3×6	11.26	3.43	-5.03	-8.43	0.00	0.00	47.67	24.01
CMI-90	WD2×8	32.28	28.24	28.44	18.07	-100.00	-100.0	42.24	16.21
	Jalal	55.16	35.44	63.44	4 0.62	700.00	300.0	19.88	-10.05
	WD3×6	21.41	9.73	12.97	-3.18	100.00	50.00	36.69	5.85
CMI-115	WD2×8	3.41	-5.09	19.75	19.57	-100.00	-100.0	9.04	1.06
	Jalal	44.43	14.03	67.05	33.85	33.33	-33.33	65.08	38.20
	WD3×6	-7.40	-9.18	-18.45	-24.40	60.00	33.33	0.97	-12.21
CMI-119	WD2×8	26.99	23.10	19.71	17.76	-66.67	-75.00	35.04	17.71
	Jalal	68.19	39.38	71.26	39.13	0.00	-50.00	66.15	31.85
	WD3×6	15.64	10.80	4.73	-4.51	-100.00	-100.0	-15.27	-30.38
CMI-129-2	WD2×8	0.42	-6.79	-17.08	-22.57	-100.00	-100.0	26.47	7.95
	Jalal	31.74	5.37	37.77	5.00	-500.00		41.94	10.61
	WD3×6	-7.16	-7.36	-25.03	-25.73	300.00	0	-12.20	-29.23
CMI-131-2	WD2×8	2.88	0.17	-4.50	-14.02	50.00	50.00	7.63	-14.59
	Jalal	56.79	36.36	47.97	29.83	100.00	0.00	23.69	-9.41
	WD3×6	7.24	-2.70	0.95	-15.12	-8.94	-28.83	1.04	-23.75
CMI-137	WD2×8	29.14	16.93	27.65	9.66	-20.00	-33.33	57.54	39.63
	Jalal	73.55	61.71	73.14	59.44	1.66	33.33	69.35	67.49

	WD3x6	19.25	1.21	- 10.49	- 27.88	-60.00	-66.67	96.90	86.32
CMI-138	WD2x8	17.03	16.35	28.98	13.71	42.66	0.00	15.05	5.30
	Jalal	57.46	34.50	77.90	59.39	180.00	40.00	53.77	27.33
	WD3x6	3.65	- 4.12	- 27.65	- 40.32	-42.86	-60.00	-6.99	-20.06
CMI-141	WD2x8	15.13	14.66	5.20	4.79	300.00	200.00	34.28	27.92
	Jalal	45.48	23.26	40.48	12.36	500.00	200.00	84.24	72.51
	WD3x6	- 6.43	- 12.64	- 29.34	- 34.35	33.33	0.00	19.33	16.72
CMI-149	WD2x8	13.01	11.89	15.75	3.58	100.00	50.00	25.20	11.61
	Jalal	51.74	30.08	47.49	30.18	700.00	300.00	95.44	94.58
	WD3x6	0.19	- 7.67	35.61	13.40	-366.67	-300.0	93.44	84.21
CMI-152	WD2x8	27.71	27.34	25.70	15.42	-20.00	-33.33	51.55	47.88
	Jalal	57.50	33.58	57.19	35.38	300.00	100.00	79.38	57.11
	WD3x6	19.95	11.86	12.32	- 3.85	-60.00	-66.67	-2.28	-10.90
CMI-183	WD2x8	25.25	24.33	25.04	18.22	.....	100.00	15.69	2.72
	Jalal	48.39	25.39	52.92	28.32	-100.00	.....	47.76	19.15
	WD3x6	19.25	11.86	20.66	6.10	.....	50.00	-17.19	-30.79
CMI-185-2	WD2x8	29.16	22.54	23.54	7.63	33.33	0.00	3.96	-10.04
	Jalal	63.62	45.63	59.83	44.97	50.00	-25.00	36.11	7.34
	WD3x6	28.26	13.64	30.01	6.10	-66.67	-75.00	-12.14	-28.28
CMI-187	WD2x8	35.89	25.85	40.91	27.41	14.29	-20.00	45.38	31.60
	Jalal	64.79	50.10	72.66	50.87	20.00	-40.00	108.36	105.73
	WD3x6	13.11	- 1.99	31.03	10.61	71.43	20.00	15.24	11.56
CMI-190-2	WD2x8	22.56	19.98	6.50	- 1.71	-14.29	-40.00	45.56	34.58
	Jalal	52.91	32.35	54.24	32.23	-20.00	-60.00	211.04	200.20
	WD3x6	- 1.01	- 9.73	- 5.71	- 18.90	-14.29	-40.00	25.66	24.46
CMI-191	WD2x8	29.09	28.18	15.78	9.74	140.00	100.00	38.75	28.93
	Jalal	54.43	30.54	70.37	42.67	233.33	66.67	73.10	45.24
	WD3x6	- 17.87	- 23.12	- 34.54	- 42.31	60.00	33.33	10.01	-4.13
CMI-197	WD2x8	24.39	23.28	15.02	11.53	100.00	100.00	37.04	28.33
	Jalal	43.87	21.41	38.85	14.10	200.00	50.00	97.31	87.94
	WD3x6	10.49	3.62	- 11.72	- 20.56	200.00	200.00	15.72	15.24
CMI-200	WD2x8	35.34	35.17	20.45	16.98	100.00	100.00	54.96	49.67
	Jalal	59.26	35.26	54.48	26.78	0.00	-50.00	90.57	76.06
	WD3x6	5.59	- 1.68	- 3.41	- 12.95	50.00	50.00	37.49	32.61
CMI-SI(22)	WD2x8	8.65	5.53	- 1.58	- 7.79	300.00	233.33	46.28	44.45
	Jalal	43.18	18.83	67.97	42.07	100.00	0.00	98.99	40.72
	WD3x6	- 16.67	- 20.31	- 32.78	- 41.38	-20.00	-33.33	-22.00	-28.08
CMI-SI(34)	WD2x8	27.29	26.01	28.34	18.22	-100.00	-10.00	91.65	91.33
	Jalal	54.42	32.38	46.22	25.57	300.00	100.00	36.89	22.69
	WD3x6	- 5.50	- 12.93	- 28.33	-38.46	0.00	0.00	15.56	7.96

SI = Selected line