

Supplementary Information

Genome-wide patterns of genetic variation among elite maize inbreds

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SUPPLEMENTARY FIGURES

Figure S1. Pattern of genome-wide SNP distribution. SNP rates were counted in each 1Mb window across the genome. Regions having the same SNP rates were counted and plotted in the picture. Regions with rates lower than 0.0025 are more than expected in the normal distribution.

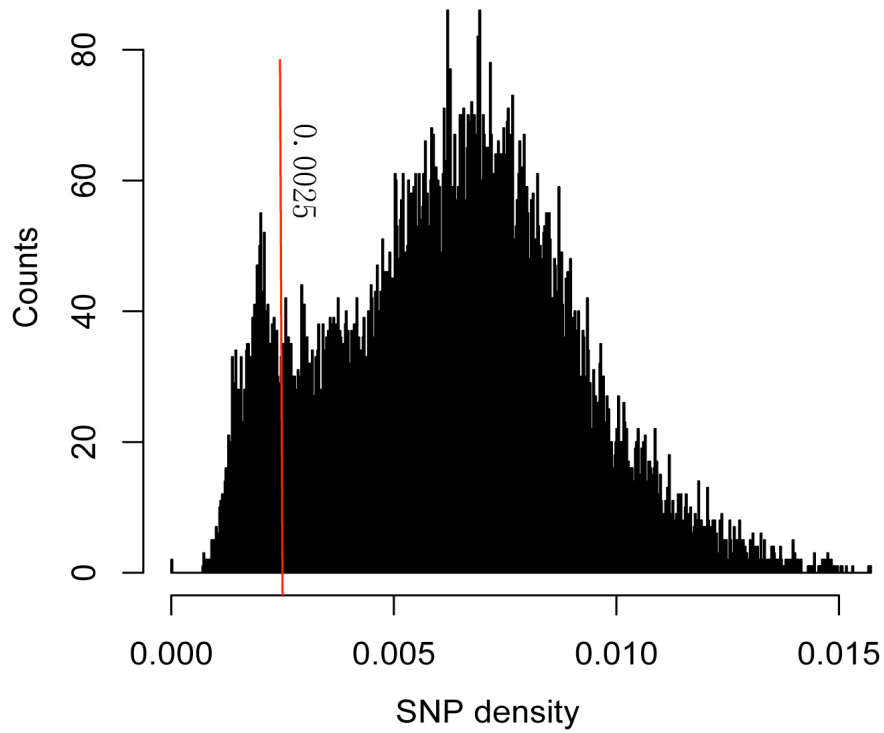


Figure S2. Genome-wide distribution of divergence rate, gene density, zero diversity genes and selected genes on each chromosome. SNP density (black line), π (orange line) and gene density (grey polygon) are plotted using 1-Mb sliding windows. Zero diversity genes are shown by vertical blue bars at the bottom of the plot. Red asterisks mark the position of known selection genes.

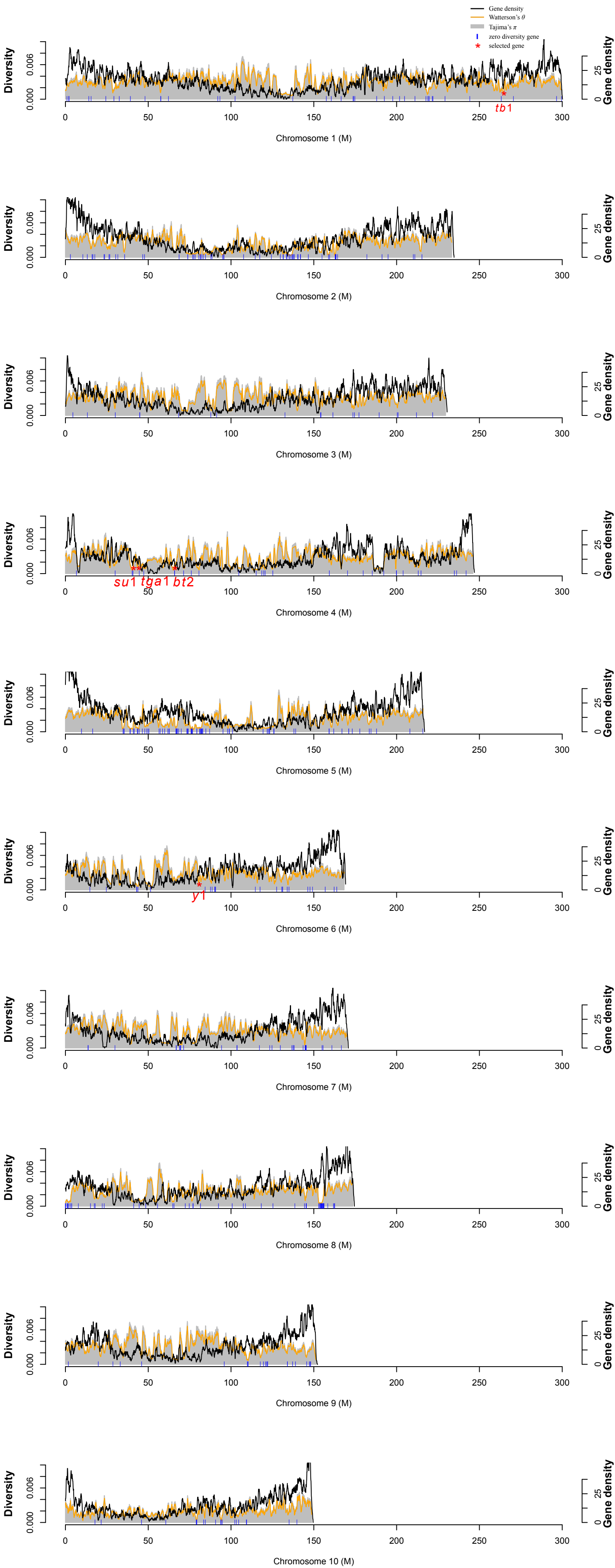
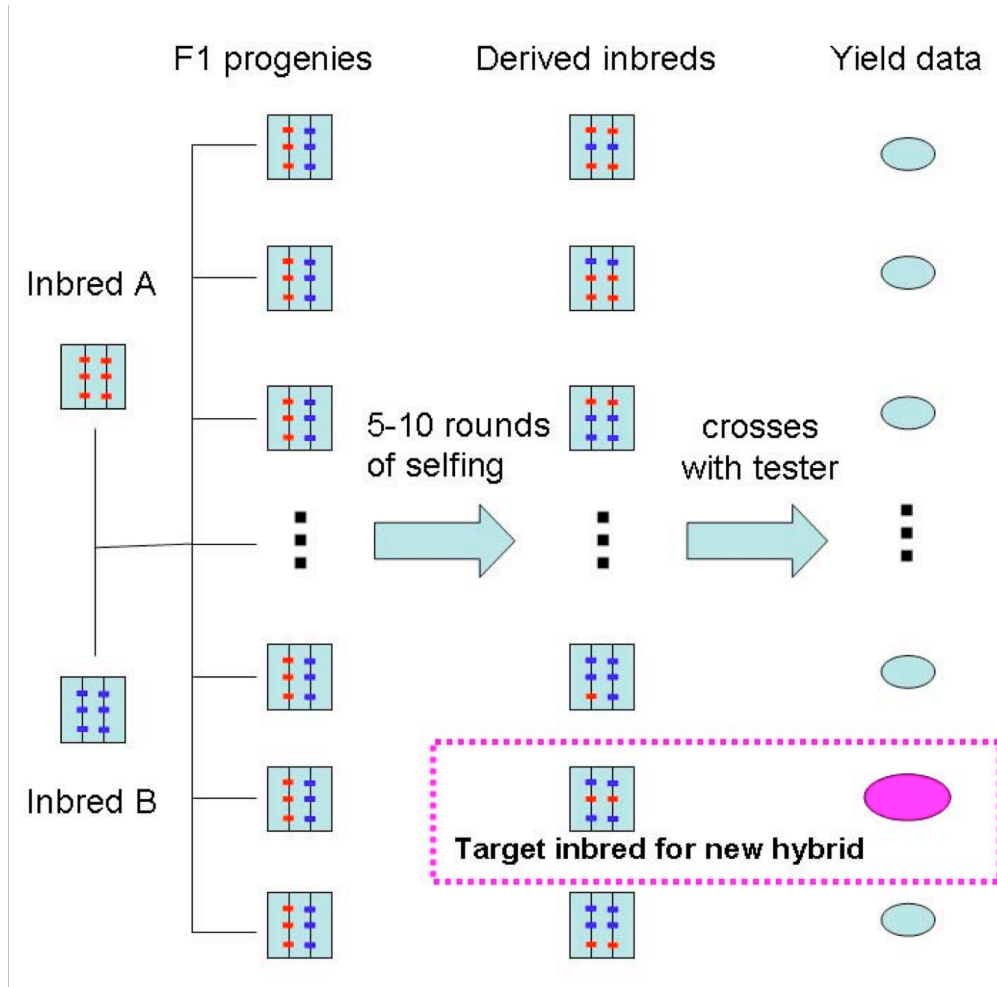


Figure S3. Pedigree Breeding. Inbred A and B from same heterotic group are crossed to produce F1 progenies, which are then selfed for 5 to 10 generations. The derived inbreds are then crossed with tester from another heterotic group. New inbred lines are selected based on the yield performance of the hybrids resulting from these test crosses.



SUPPLEMENTARY TABLES

Table S1. Summary of re-sequencing coverage.

Inbred Names	Yield (Giga base)	% Bases mapped	%Genome coverage	% Gene region coverage	Effective Depth (X)
Zheng 58	12,463,247,122	81.85	85.90	88.96	4.98
Chang7-2	13,463,549,694	75.88	82.99	84.72	4.99
178	13,514,836,532	77.05	83.93	86.06	5.08
5003	13,422,191,476	78.82	86.67	89.13	5.17
478	13,744,504,166	78.73	84.35	85.92	5.28
MO17	17,078,047,650	82.75	86.91	88.82	6.90

Table S2. Summary of indels in genic region.

	total	6bp	5bp	4bp	3bp	2bp	1bp
CDS	663	88	13	19	253	45	245
intron	10436	270	333	649	1029	1888	6267
Promoter	16546	525	579	1056	1887	2965	9534
UTR	2533	86	120	193	321	502	1311

Table S3. Low SNP diversity chromosomal blocks.

chromosomes	start(Mb)	end(Mb)	Length of block(Mb)	average SNP density
chr0	0.3	1.7	1.4	0.00183
chr0	2.1	3.2	1.1	0.00207
chr0	11	15	4	0.00197
chr1	123.8	125.5	1.7	0.00194
chr1	128.1	138.9	10.8	0.00192
chr1	142.3	143.6	1.3	0.00217
chr1	152.2	153.5	1.3	0.00208
chr1	218.5	219.8	1.3	0.00208
chr1	299.6	300.9	1.3	0.00201
chr2	35.4	36.6	1.2	0.00207
chr2	65.4	67.7	2.3	0.00199
chr2	72.7	82.6	9.9	0.00146
chr2	83.2	89.7	6.5	0.00153
chr2	94	98.3	4.3	0.00144
chr2	99.2	101.9	2.7	0.00181
chr2	105.3	106.5	1.2	0.00191
chr2	108.6	109.6	1	0.00214
chr2	121.2	122.9	1.7	0.00222
chr2	124	126	2	0.00193
chr2	128.5	130.3	1.8	0.00191
chr2	131	138.1	7.1	0.00137
chr2	153.4	155.6	2.2	0.00205
chr2	158.2	160.6	2.4	0.00135
chr2	160.8	162	1.2	0.00202
chr2	162.4	164.2	1.8	0.00126
chr3	25.9	27.2	1.3	0.00161
chr3	51.5	52.8	1.3	0.00211
chr3	60.9	63.1	2.2	0.00194
chr3	70.3	74.8	4.5	0.00193
chr3	87.9	89.3	1.4	0.00197
chr3	98.1	101.6	3.5	0.00188
chr3	139.8	141.3	1.5	0.00211
chr4	39.7	41.7	2	0.00168
chr4	45.5	46.8	1.3	0.002
chr4	47.3	49.5	2.2	0.00211
chr4	64.8	66.5	1.7	0.00162
chr4	71.4	73	1.6	0.00216
chr4	79.7	81.8	2.1	0.00185
chr4	95.1	97.4	2.3	0.00185
chr4	99.7	102.1	2.4	0.00181

chr4	104.3	107.7	3.4	0.0021
chr4	112.8	117.2	4.4	0.00161
chr4	118.3	119.4	1.1	0.00193
chr4	119.8	121.7	1.9	0.00204
chr4	124.6	126.2	1.6	0.00194
chr4	166.5	167.6	1.1	0.00187
chr4	186.3	193.1	6.8	0.00198
chr4	199.5	200.5	1	0.00188
chr5	34.3	36.3	2	0.00148
chr5	37.8	41.8	4	0.0014
chr5	42.3	45.4	3.1	0.00156
chr5	47.8	50.7	2.9	0.00205
chr5	56.1	57.3	1.2	0.00197
chr5	58.8	61.1	2.3	0.00204
chr5	62.3	63.6	1.3	0.00176
chr5	66.2	68.4	2.2	0.00188
chr5	72.4	73.4	1	0.00225
chr5	75.3	83.3	8	0.00149
chr5	86.8	88.7	1.9	0.00178
chr5	94.3	96.2	1.9	0.00159
chr5	97.9	99.6	1.7	0.00163
chr5	99.7	103	3.3	0.00199
chr5	104.6	106.1	1.5	0.00217
chr5	113.2	126.6	13.4	0.00153
chr5	127.1	128.6	1.5	0.00197
chr5	131.8	134.8	3	0.00173
chr5	148.1	149.5	1.4	0.00212
chr5	151.8	154.3	2.5	0.00193
chr5	160.3	161.9	1.6	0.00193
chr6	27.4	28.7	1.3	0.00215
chr6	32.5	34	1.5	0.00194
chr6	39.4	45.2	5.8	0.00174
chr6	49.5	53.5	4	0.00163
chr6	134.3	135.5	1.2	0.00204
chr7	38.9	40.9	2	0.00176
chr7	50.3	52.1	1.8	0.00212
chr7	57.9	63.9	6	0.00202
chr7	68.2	71.4	3.2	0.00142
chr7	75.8	79.9	4.1	0.00201
chr7	144.4	145.8	1.4	0.00162
chr7	170.4	171.6	1.2	0.00222
chr8	0	4.1	4.1	0.00178
chr8	40	44.3	4.3	0.00193
chr8	45	47.3	2.3	0.00205

chr8	53.4	55.9	2.5	0.00189
chr8	59.8	61.7	1.9	0.00198
chr8	64.4	66.5	2.1	0.00184
chr8	76.3	77.5	1.2	0.00203
chr8	81.4	82.5	1.1	0.00216
chr8	144.8	145.8	1	0.00216
chr8	152.8	156.3	3.5	0.00134
chr9	51.5	53.3	1.8	0.00215
chr9	64.8	69.2	4.4	0.00199
chr9	109.5	111.6	2.1	0.00177
chr9	151.2	152.9	1.7	0.00186
chr10	31.9	33.3	1.4	0.00205
chr10	42.7	43.7	1	0.00225
chr10	93.6	95.5	1.9	0.00167
chr10	99.7	102.7	3	0.00154
chr10	103.4	105.7	2.3	0.00173
chr10	134.6	135.6	1	0.00214

Table S4. PAV genes list and their pattern of deletion in six inbred lines.

gene ID	chromosome	Zheng58	Chang7-2	178	5003	478	Mo17
GRMZM2G703469	1	-	-	+	+	+	-
GRMZM2G465680	1	+	+	-	+	+	+
GRMZM2G703478	1	+	+	+	+	+	-
GRMZM2G343767	1	-	+	+	+	+	+
GRMZM2G378130	1	+	+	-	+	+	+
GRMZM2G445630	1	+	+	+	+	+	-
GRMZM2G109586	1	+	+	+	+	+	-
GRMZM2G031560	1	+	+	+	+	+	-
GRMZM2G305267	1	-	+	+	+	-	+
GRMZM2G335358	1	-	+	-	+	+	+
GRMZM2G064597	1	-	+	-	+	+	+
GRMZM2G417867	1	+	+	-	+	+	+
GRMZM2G021433	1	-	+	+	+	-	+
GRMZM2G703646	1	+	+	-	+	+	+
GRMZM2G004041	1	+	-	+	+	+	+
GRMZM2G067370	1	+	-	+	+	+	+
GRMZM2G125052	1	+	+	+	+	+	-
GRMZM2G166234	1	+	+	-	+	+	+
GRMZM2G428599	1	-	+	+	+	+	+
GRMZM2G399325	1	-	+	+	+	+	+
GRMZM2G104494	1	+	-	+	+	+	+
GRMZM2G350793	1	+	-	+	-	+	+
GRMZM2G115952	1	+	-	+	+	+	+
GRMZM2G126574	1	+	+	+	-	+	-
GRMZM2G013842	1	+	-	+	+	+	+
GRMZM2G136277	1	+	+	-	+	+	+
GRMZM2G129597	1	+	-	-	+	+	-
GRMZM2G153404	1	+	+	+	+	-	+
GRMZM2G116254	1	+	+	+	+	-	+
GRMZM2G386460	1	+	+	+	+	-	+
GRMZM2G703888	1	+	+	+	+	-	+
GRMZM2G115961	1	+	-	+	-	-	+
GRMZM2G704039	1	+	+	+	-	-	+
GRMZM2G100726	1	-	+	-	-	-	+
GRMZM2G155738	1	-	+	+	+	+	+
GRMZM2G155760	1	+	-	+	+	-	+
AC200627.3_FG005	1	+	-	+	+	+	+
GRMZM2G108828	1	-	+	-	-	+	-
GRMZM2G143317	1	-	-	-	+	+	+
GRMZM2G392563	1	+	-	-	+	+	+
GRMZM2G159353	1	-	+	+	-	-	+

AC203966.5_FG002	1	+	+	+	+	-	+
GRMZM2G463280	2	+	+	+	-	+	-
GRMZM2G039961	2	+	+	-	+	+	+
AC217283.2_FG004	2	+	-	+	+	+	+
GRMZM2G108698	2	+	+	-	+	-	-
GRMZM2G159896	2	+	+	+	+	+	-
GRMZM2G116701	2	-	+	-	+	+	-
GRMZM2G115630	2	+	-	+	+	+	+
GRMZM2G007256	2	-	+	+	+	+	+
GRMZM2G463267	2	+	+	+	-	+	-
GRMZM2G162266	2	+	+	+	-	+	-
GRMZM2G162230	2	+	+	+	-	+	-
GRMZM2G702948	2	+	+	+	+	+	-
GRMZM2G148147	2	+	+	-	+	+	+
GRMZM2G309188	2	+	+	+	+	+	-
GRMZM2G450496	2	+	+	+	-	-	-
GRMZM2G020183	2	+	-	+	+	+	+
GRMZM2G703190	2	+	-	+	+	+	+
GRMZM2G164704	2	+	-	+	+	+	+
GRMZM2G346757	2	+	+	-	+	+	+
AC195825.3_FG001	2	-	+	-	+	-	+
GRMZM2G036547	2	+	-	+	+	+	+
GRMZM2G115388	2	+	-	+	+	+	+
GRMZM2G025971	2	+	+	-	+	+	+
GRMZM2G587376	2	+	+	+	+	-	-
GRMZM2G351827	2	-	+	+	+	+	+
GRMZM2G119241	2	+	+	+	+	+	-
GRMZM2G449669	2	-	-	-	-	-	-
GRMZM2G044438	2	-	+	+	+	+	+
GRMZM2G358619	2	+	+	+	+	-	-
GRMZM2G038024	2	+	+	+	+	-	+
GRMZM2G372058	2	+	-	+	+	+	+
GRMZM2G428659	2	+	+	+	+	+	-
GRMZM2G513206	2	+	+	+	+	-	-
GRMZM2G140665	2	+	-	+	+	+	+
AC217293.3_FG007	2	+	-	+	+	+	+
GRMZM2G007860	2	-	-	-	+	-	-
GRMZM2G309503	2	-	-	-	+	-	-
GRMZM2G094662	2	-	-	-	+	-	-
GRMZM2G396357	2	+	-	-	+	-	+
GRMZM2G106493	3	+	+	+	-	-	+
AC209243.2_FG002	3	+	+	-	+	-	-
GRMZM2G102770	3	+	+	+	+	+	-
GRMZM2G338721	3	+	-	+	+	+	+

GRMZM2G429964	3	+	+	+	+	-	+
AC229993.1_FG009	3	-	-	+	+	-	+
GRMZM2G019965	3	+	+	+	+	-	+
GRMZM2G146708	3	-	+	+	+	+	+
GRMZM2G364410	3	+	-	+	+	-	-
GRMZM2G016351	3	+	+	-	+	+	+
GRMZM2G144189	3	+	-	+	+	+	+
GRMZM2G360579	3	+	+	-	-	-	+
GRMZM2G044503	3	+	+	-	+	+	+
GRMZM2G042855	3	-	+	-	+	+	+
GRMZM2G129403	3	-	-	-	-	-	-
GRMZM2G701738	3	+	+	+	+	+	-
GRMZM2G016598	3	+	-	+	+	+	+
GRMZM2G701746	3	-	+	+	+	+	+
GRMZM2G104523	3	+	-	+	+	+	+
GRMZM2G041544	3	-	+	+	+	+	+
GRMZM2G470731	3	+	+	+	+	+	-
GRMZM2G396418	3	-	-	+	-	-	+
GRMZM2G180509	3	+	-	+	+	+	+
GRMZM2G162274	3	+	-	+	+	+	+
GRMZM2G077375	3	-	+	-	+	-	-
GRMZM2G348434	3	-	+	-	+	+	+
GRMZM2G007666	4	+	-	+	+	+	+
GRMZM2G007583	4	+	-	+	+	+	+
GRMZM2G702403	4	-	-	-	+	+	-
GRMZM2G054415	4	-	+	-	+	+	+
AC196974.3_FG008	4	+	-	+	+	+	+
GRMZM2G316553	4	+	-	+	+	+	+
GRMZM2G358153	4	-	+	+	+	+	+
GRMZM2G469499	4	+	-	+	+	+	+
GRMZM2G702379	4	-	+	-	+	+	-
GRMZM2G324671	4	+	+	+	-	+	+
GRMZM2G123257	4	+	+	+	+	-	+
GRMZM2G043162	4	-	-	+	+	+	+
GRMZM2G326560	4	+	-	+	+	+	+
AC191692.3_FG001	4	-	-	-	+	+	+
AC208920.3_FG001	4	+	+	+	+	-	+
GRMZM2G498141	4	-	+	+	+	+	+
GRMZM2G127690	4	-	+	+	+	+	-
GRMZM2G313854	4	-	+	+	+	+	+
GRMZM2G542205	4	+	+	+	+	+	-
GRMZM2G071396	4	-	-	+	+	-	-
GRMZM2G109830	4	+	+	+	+	-	+
GRMZM2G042181	4	+	-	-	-	-	+

GRMZM2G332697	4	+	+	+	+	-	+
GRMZM2G454184	4	+	+	+	-	-	+
GRMZM2G316555	4	+	+	+	+	-	-
GRMZM2G702761	4	+	+	+	+	-	+
GRMZM2G702783	4	-	+	-	+	-	+
AC209971.4_FG003	4	+	-	+	+	+	+
GRMZM2G130256	4	+	-	+	+	+	-
GRMZM2G025931	4	-	-	-	-	-	-
GRMZM2G470863	4	+	+	+	+	-	+
GRMZM2G054422	5	+	-	+	+	+	+
AC190834.3_FG005	5	-	+	+	+	-	+
GRMZM2G309624	5	-	+	+	+	-	-
GRMZM2G030821	5	-	+	+	-	-	-
GRMZM2G144024	5	+	+	-	+	+	+
GRMZM2G012865	5	-	+	+	-	-	+
GRMZM2G350471	5	+	-	+	+	+	+
AC190526.3_FG004	5	+	+	+	+	+	-
GRMZM2G351716	5	+	+	+	+	+	-
GRMZM2G317610	5	+	+	+	+	+	-
GRMZM2G051673	5	+	+	-	+	+	+
GRMZM2G362609	5	+	+	+	+	+	-
GRMZM2G701395	5	+	-	+	+	+	+
GRMZM2G701452	5	-	-	-	-	-	+
GRMZM2G054805	5	-	+	-	+	+	-
AC196025.3_FG009	5	+	+	+	+	-	+
GRMZM2G432266	5	+	+	-	+	+	+
GRMZM2G702064	5	+	+	+	+	+	-
GRMZM2G456268	5	-	-	+	-	-	+
GRMZM2G465957	5	+	+	+	+	+	-
AC212667.3_FG005	5	+	-	+	+	+	+
GRMZM2G037595	5	-	+	+	+	+	+
GRMZM2G175875	5	+	+	-	+	+	+
AC195458.3_FG001	5	-	+	+	-	-	+
GRMZM2G481049	5	+	+	-	+	+	+
GRMZM2G325623	6	+	-	+	+	+	+
GRMZM2G161761	6	+	+	+	+	+	-
GRMZM2G378167	6	+	+	+	-	+	+
GRMZM2G160853	6	-	+	-	+	+	+
GRMZM2G098226	6	+	+	-	+	+	+
GRMZM2G047382	6	+	+	-	+	+	+
GRMZM2G356378	6	+	+	+	+	+	-
GRMZM2G003461	6	+	+	+	+	+	-
GRMZM2G134020	6	+	+	+	+	+	-
GRMZM2G403828	6	+	+	+	+	+	-

GRMZM2G403813	6	+	+	+	+	+	-
GRMZM2G451679	6	+	+	+	+	+	-
GRMZM2G150524	6	+	+	+	+	+	-
GRMZM2G050768	6	+	+	+	+	+	-
GRMZM2G390512	6	+	+	+	+	+	-
GRMZM2G066978	6	+	+	+	+	+	-
GRMZM2G066932	6	+	+	+	+	+	-
GRMZM2G048791	6	+	+	+	+	+	-
GRMZM2G122520	6	+	+	+	+	+	-
GRMZM2G076943	6	+	+	+	+	+	-
GRMZM2G051686	6	+	+	+	+	+	-
GRMZM2G156578	6	+	+	+	+	+	-
GRMZM2G009792	6	+	+	+	+	+	-
GRMZM2G082560	6	+	+	+	+	+	-
GRMZM2G320152	6	+	+	+	+	+	-
GRMZM2G134749	6	+	-	+	+	+	+
GRMZM2G471970	6	+	+	+	+	+	-
GRMZM2G428420	6	+	-	+	+	+	+
GRMZM2G412577	6	+	-	+	+	+	+
GRMZM2G700957	6	+	+	-	+	+	+
GRMZM2G434561	6	+	-	+	+	+	+
GRMZM2G700968	6	+	-	+	-	+	-
AC200287.4_FG006	6	+	-	+	+	+	+
GRMZM2G034469	6	+	-	+	+	+	+
GRMZM2G169376	6	+	-	+	+	+	+
GRMZM2G300080	6	+	-	+	+	+	+
GRMZM2G300077	6	+	-	+	+	+	+
GRMZM2G303865	6	+	-	+	+	+	+
GRMZM2G016727	6	+	+	+	+	-	+
GRMZM2G331316	6	-	+	-	+	-	-
GRMZM2G476323	6	+	+	-	+	+	+
AC194824.2_FG003	6	+	+	-	+	+	+
GRMZM2G445881	6	+	+	-	+	+	+
GRMZM2G129166	6	+	-	+	+	+	+
GRMZM2G041694	6	+	-	-	-	+	+
AC205122.4_FG006	7	+	+	+	-	+	+
GRMZM2G096868	7	+	-	+	+	+	+
GRMZM2G030189	7	+	-	+	+	+	+
GRMZM2G117281	7	+	+	+	-	+	+
GRMZM2G700149	7	-	-	+	+	-	-
GRMZM2G129092	7	+	-	-	+	+	-
GRMZM2G083285	7	+	+	+	-	-	-
GRMZM2G382273	7	+	+	+	-	-	-
GRMZM2G055009	7	-	-	+	-	-	-

AC202110.3_FG004	7	-	+	-	+	+	-
GRMZM2G334162	7	-	+	-	+	+	-
GRMZM2G329334	7	+	+	+	+	+	-
GRMZM2G435015	7	+	+	+	+	-	+
GRMZM2G351484	7	+	+	+	+	-	+
GRMZM2G336694	8	+	+	-	+	+	+
GRMZM2G006290	8	+	-	+	+	+	+
GRMZM2G700603	8	+	+	+	+	+	-
GRMZM2G405844	8	+	+	-	+	+	-
GRMZM2G009732	8	+	+	-	+	+	+
GRMZM2G402708	8	+	+	-	+	+	+
GRMZM2G061403	8	+	+	-	+	+	+
GRMZM2G132088	8	+	+	+	+	+	-
GRMZM2G172396	8	+	+	+	+	-	-
GRMZM2G171346	8	+	-	+	+	+	+
GRMZM2G162727	8	+	-	+	+	+	+
GRMZM2G083875	8	+	+	+	-	+	+
GRMZM2G356523	8	+	+	-	+	+	+
GRMZM2G303168	8	+	-	+	+	+	+
GRMZM2G043855	8	+	+	-	+	+	+
GRMZM2G700664	8	+	-	+	+	+	-
GRMZM2G458650	8	-	+	+	+	+	+
GRMZM2G307756	8	+	-	+	+	+	+
GRMZM2G101053	8	+	+	-	+	+	+
GRMZM2G101080	8	+	+	-	+	+	+
GRMZM2G700756	8	+	+	-	+	+	+
AC233916.1_FG002	8	+	+	-	+	+	+
GRMZM2G439238	8	+	+	+	+	+	-
GRMZM2G700765	8	-	+	+	+	+	+
GRMZM2G700803	8	-	+	+	+	+	+
GRMZM2G120951	8	+	+	+	-	+	+
AC188583.4_FG003	9	+	-	-	+	+	+
GRMZM2G703044	9	+	-	+	+	+	-
GRMZM2G703370	9	+	-	+	+	+	-
GRMZM2G096464	9	+	+	+	-	+	+
GRMZM2G703552	9	+	+	-	+	+	-
GRMZM2G015645	9	+	+	+	+	+	-
GRMZM2G109399	9	+	+	-	+	+	+
GRMZM2G704171	9	+	-	+	+	-	+
GRMZM2G134049	9	+	+	-	+	+	+
GRMZM2G416535	9	+	-	+	+	+	+
GRMZM2G148216	9	+	+	+	-	+	+
GRMZM2G078924	9	-	-	+	-	+	-
GRMZM2G457428	9	+	-	+	+	+	+

GRMZM2G124409	9	+	-	+	+	+	+
GRMZM2G134279	9	+	+	+	-	+	+
GRMZM2G036349	9	+	-	+	+	+	+
GRMZM2G438606	9	+	+	+	+	+	-
AC234175.1_FG009	10	+	+	+	+	+	-
GRMZM2G005134	10	+	+	-	+	-	+
GRMZM2G084278	10	+	+	-	+	+	+
AC214791.2_FG002	10	+	+	+	+	+	-
GRMZM2G440965	10	+	-	+	+	+	+
GRMZM2G440972	10	+	-	+	+	+	+
GRMZM2G700927	10	+	+	+	+	+	-
GRMZM2G117319	10	-	+	-	+	+	-
GRMZM2G008977	10	-	+	-	+	+	-
GRMZM2G074309	10	-	+	-	+	+	-
AC193645.3_FG006	10	+	+	-	+	+	+
GRMZM2G451765	10	-	-	+	+	+	+
GRMZM2G098677	10	+	+	-	+	+	+
GRMZM2G098697	10	+	+	-	+	+	+
GRMZM2G397785	10	+	+	-	+	+	+
GRMZM2G157448	10	+	+	+	+	-	+
AC217051.3_FG002	10	+	+	-	+	+	+
GRMZM2G042811	10	+	-	+	+	+	+
GRMZM2G418875	10	+	-	+	+	+	+
AC219002.2_FG004	10	+	-	+	+	+	+
GRMZM2G168263	10	+	-	+	+	+	+
GRMZM2G435924	10	+	-	+	+	+	+
GRMZM2G135378	10	+	-	+	+	+	+
GRMZM2G125476	10	+	+	+	+	-	+
GRMZM2G107299	10	+	-	+	+	+	-
GRMZM2G054591	10	-	-	+	+	+	-
GRMZM2G031280	10	-	+	+	+	+	-
GRMZM2G456618	10	+	-	+	+	+	+
GRMZM2G438178	10	+	+	+	+	-	+
GRMZM2G480282	10	-	+	+	+	+	+
GRMZM2G370905	10	+	-	+	+	+	+

Note: “+” means present, and “-” means absent

BGIB73PAVG000196	546	BGIZmNSC000446	827	-	62.6	85.52	15.26	18.89	100	-
BGIB73PAVG000272	330	BGIZmNSC000425	826	98.33	54.05	-	23.27	-	-	IPR007081; RNA polymerase Rpb1, domain 5
BGIB73PAVG000180	252	BGIZmNSC000415	825	-	65.48	86.43	13.83	16.88	100	IPR013103; Reverse transcriptase, RNA-dependent DNA polymerase
BGIB73PAVG000306	609	BGIZmNSC000417	825	-	-	-	10.93	-	-	-
BGIB73PAVG000281	252	BGIZmNSC000354	821	-	62.65	87.55	24.01	41.51	100	-
BGIB73PAVG000206	378	BGIZmNSC000304	819	-	56.72	86.01	25.73	13.67	100	-
BGIB73PAVG000233	294	BGIZmNSC000278	817	-	66.67	91.76	31.71	7.21	100	-
BGIB73PAVG000198	441	BGIZmNSC000281	817	-	73.83	87.95	25.99	59.63	100	-
BGIB73PAVG000305	348	BGIZmNSC000250	816	81.67	-	-	19.49	-	-	-
BGIB73PAVG000304	315	BGIZmNSC000253	816	-	62.73	94.17	28.75	57.17	100	-
BGIB73PAVG000107	168	BGIZmNSC000255	816	-	75.61	92.73	31.58	48.25	100	IPR001394; Peptidase C19, ubiquitin carboxyl-terminal hydrolase 2
BGIB73PAVG000157	162	BGIZmNSC000220	814	-	62.26	90.43	9.05	43.24	100	-
BGIB73PAVG000303	480	BGIZmNSC000241	814	-	96.86	89.43	30.5	52.64	100	-
BGIB73PAVG000302	618	BGIZmNSC000191	812	-	51.68	-	21.43	-	-	-
BGIB73PAVG000301	396	BGIZmNSC000193	812	-	-	-	22.55	-	-	-
BGIB73PAVG000299	240	BGIZmNSC000166	811	-	-	90.52	15.71	8	100	-
BGIB73PAVG000300	282	BGIZmNSC000184	811	-	100	84.38	34.6	83.92	100	IPR005135; Endonuclease/exonuclease/phosphatase
BGIB73PAVG000298	348	BGIZmNSC000139	809	83.33	-	-	13.55	-	-	-
BGIB73PAVG000297	645	BGIZmNSC000107	807	-	-	-	14.85	-	-	-
BGIB73PAVG000296	234	BGIZmNSC000076	805	-	-	-	14.67	-	-	-
BGIB73PAVG000138	258	BGIZmNSC000057	804	-	-	88.37	11.35	33.99	100	-
BGIB73PAVG000295	384	BGIZmNSC000020	802	86.76	-	-	15.79	-	-	IPR004690; Malonate transporter MadL subunit
BGIB73PAVG000153	576	BGIZmNSC000022	802	-	77.02	-	14.24	-	-	IPR005132; Rare lipoprotein A; IPR007112; Expansin 45, endoglucanase-like; IPR007117; Pollen allergen/expansin, C-terminal
BGIB73PAVG000098	462	BGIZmNSC000001	801	-	-	88.89	23.15	16.74	100	-
BGIB73PAVG000294	432	BGIZmNSC000008	801	72.73	-	-	17.19	-	-	-