

GEM Germplasm Releases and Key Traits																					
No	Pedigree	Code	Race	Country	Site Released	Year Released	Prot	AA	Oil	Starch Prop.	Silage	GLS	NLB	SLB	Drought	Fumon.	Fuser	Aflatox	ASR	Diplodia	YM
1	GEMS-001(P1503806xB94//B94)	GEMS-0001	Alazan	Peru	Ames	2001															
2	GEMS-002 (FS8A(S):S09-43-2)	GEMS-0002	Mixed	USA	Ohio St.	2003								✓		✓					
3	BR52051(SE32):S17-B-023-001-B-B	GEMS-0003	Dente Amarelo	Brazil	NC	2003	✓		✓			✓	✓	✓		✓	✓			✓	
4	DK212T:S11-B-013-002-B-B	GEMS-0004	Hybrid-tropical	Thailand	NC	2003							✓	✓			✓				
5	DK212T:S11-B-015-001-B-B	GEMS-0005	Hybrid-tropical	Thailand	NC	2003							✓								
6	DK212T:S11-B-017-001-B-B	GEMS-0006	Hybrid-tropical	Thailand	NC	2003							✓				✓				
7	DK212T:S11-B-018-001-B-B	GEMS-0007	Hybrid-tropical	Thailand	NC	2003	✓							✓							
8	DK212T:S11-B-038-001-B-B	GEMS-0008	Hybrid-tropical	Thailand	NC	2003															
9	DK212T:S11-B-040-001-B-B	GEMS-0009	Hybrid-tropical	Thailand	NC	2003											✓				
10	DK212T:S11-B-041-002-B-B	GEMS-0010	Hybrid-tropical	Thailand	NC	2003															
11	DK212T:S11-B-045-002-B-B	GEMS-0011	Hybrid-tropical	Thailand	NC	2003															
12	DK888:S11-B-003-001-B-B	GEMS-0012	Hybrid-tropical	Thailand	NC	2003															
13	DK888:S11-B-004-004-B-B	GEMS-0013	Hybrid-tropical	Thailand	NC	2003								✓							
14	DK888:S11-B-010-001-B-B	GEMS-0014	Hybrid-tropical	Thailand	NC	2003															
15	DK888:S11-B-014-001-B-B	GEMS-0015	Hybrid-tropical	Thailand	NC	2003								✓							
16	DK888:S11-B-015-003-B-B	GEMS-0016	Hybrid-tropical	Thailand	NC	2003						✓	✓				✓				
17	DK888:S11-B-025-001-B-B	GEMS-0017	Hybrid-tropical	Thailand	NC	2003															
18	DK888:S11-B-026-002-B-B	GEMS-0018	Hybrid-tropical	Thailand	NC	2003															
19	DK888:S11-B-029-001-B-B	GEMS-0019	Hybrid-tropical	Thailand	NC	2003						✓									
20	DK888:S11-B-033-001-B-B	GEMS-0020	Hybrid-tropical	Thailand	NC	2003															
21	DK888:S11-B-035-002-B-B	GEMS-0021	Hybrid-tropical	Thailand	NC	2003										✓	✓				
22	DK888:S11-B-035-003-B-B	GEMS-0022	Hybrid-tropical	Thailand	NC	2003															
23	DK888:S11-B-039-002-B-B	GEMS-0023	Hybrid-tropical	Thailand	NC	2003															
24	DKB830:S11-B-045-001-B-B	GEMS-0024	Hybrid-tropical	Mexico	NC	2003						✓									
25	DKXL370:S11-B-001-002-B-B	GEMS-0025	Hybrid-tropical	Brazil	NC	2003															
26	DKXL370:S11-B-025-001-B-B	GEMS-0027	Hybrid-tropical	Brazil	NC	2003								✓						✓	
27	DKXL370:S11-B-025-002-B-B	GEMS-0028	Hybrid-tropical	Brazil	NC	2003						✓								✓	
28	DKXL370:S11-B-028-001-B-B	GEMS-0029	Hybrid-tropical	Brazil	NC	2003								✓			✓				
29	DKXL380:S11-B-004-003-B-B	GEMS-0030	Hybrid-tropical	Brazil	NC	2003						✓	✓	✓			✓	✓			
30	DKXL380:S11-B-028-001-B-B	GEMS-0031	Hybrid-tropical	Brazil	NC	2003	✓	✓					✓								
31	DKXL380:S11-B-029-001-B-B	GEMS-0032	Hybrid-tropical	Brazil	NC	2003							✓							✓	
32	BR51403(PE001):N16-B-044-B	GEMN-0033	Cateto	Brazil	NC	2003							✓								
33	BR51403(PE001):N16-B-172-B	GEMN-0035	Cateto	Brazil	NC	2003							✓	✓							
34	BR51403(PE001):N16-B-176-B	GEMN-0036	Cateto	Brazil	NC	2003							✓								
35	BR51403(PE001):N16-B-181-B	GEMN-0037	Cateto	Brazil	NC	2003							✓								
36	BR51403(PE001):N16-B-239-B	GEMN-0039	Cateto	Brazil	NC	2003	✓						✓								
37	BR51403(PE001):N16-B-431-B	GEMN-0040	Cateto	Brazil	NC	2003							✓								
38	BR51403(PE001):N16-B-521-B	GEMN-0041	Cateto	Brazil	NC	2003							✓								
39	BR51403(PE001):N16-B-705-B	GEMN-0042	Cateto	Brazil	NC	2003							✓								
40	BR51403(PE001):N16-B-857-B	GEMN-0043	Cateto	Brazil	NC	2003							✓								
41	CH05015:N12-20-1-B-B	GEMN-0044	Camelia	Chile	Ames	2003															
42	CH05015:N12-140-1-B-B	GEMN-0045	Camelia	Chile	Ames	2003	✓														
43	CH05015:N15-8-1-B-B	GEMN-0046	Camelia	Chile	Ames	2003							✓								
44	UR13085:N0215-014-001	GEMN-0047	Cateto Sulino	Uruguay	Ames	2003															
45	DKXL370:N11a20-31-1-B-B	GEMN-0048	Hybrid-tropical	Brazil	Ames	2003	✓														
46	DKB844:S1601-512-1-B	GEMS-0049	Hybrid-tropical	Mexico	Ames	2003	✓														
47	DKB844:S1601-517-1-B	GEMS-0050	Hybrid-tropical	Mexico	Ames	2003															
48	CUBA164:S2008a-83-1-B	GEMS-0051	Mixed (Creole)	Cuba	Ames	2003															
49	CUBA164:S2008a-326-1-B	GEMS-0052	Mixed (Creole)	Cuba	Ames	2003															
50	CUBA164:S15-192-2-B	GEMS-0053	Mixed (Creole)	Cuba	Ames	2003															
51	AR16035:S02-450-1-B	GEMS-0054	Cristalino Colorado	Argentina	Ames	2003															
52	AR16035:S02-443-1-B-B	GEMS-0055	Cristalino Colorado	Argentina	Ames	2003															
53	FSSB(T):N1809-946-1-B	GEMN-0056	Mixed	USA	Ames	2003															
54	AR01150:N04-545-1-B	GEMN-0057	Dent. Blanco Rugoso	Argentina	Ames	2003															
55	AR01150:N04-696-1-B	GEMN-0058	Dent. Blanco Rugoso	Argentina	Ames	2003	✓														
56	SCRO1:N1310-398-1-B	GEMN-0059	St. Croix	St. Croix	Ames	2003				✓											
57	CHIS775:N1912-519-1-B-B	GEMN-0060	Tuxpeño	Mexico	Ames	2003															
58	AR16026:S17-10-1-B-B	GEMS-0061	Cristalino Colorado	Argentina	Ames	2003			✓							✓	✓	✓			

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59	ARI16026:S17-16-1-B-B	GEMS-0062	Cristalino Colorado	Argentina	Ames	2003															
60	CUBA164:S1511b-325-001	GEMS-0063	Mixed (Creole)	Cuba	Ames	2003	✓														
61	CUBA164:S1511b-249-1-B-B	GEMS-0064	Mixed (Creole)	Cuba	Ames	2003															
62	CUBA117:S1520-41-1-B-B	GEMS-0065	Argentino	Cuba	Ames	2003			✓												
63	CUBA117:S1520-52-1-B-B	GEMS-0066	Argentino	Cuba	Ames	2003															
64	GUAT209:S13 x (H99ae x OH43ae)-4-4-2-1	GEMS-0067	Tusón	Guatemala	Truman St	2007															
65	ARI16026:S1704-153-001	GEMS-0068	Cristalino Colorado	Argentina	Ames	2003															
66	ARI16035:S19-161-001	GEMS-0069	Cristalino Colorado	Argentina	Ames	2003															
67	CH05015:N12-183-001	GEMN-0070	Camelia	Chile	Ames	2003															✓
68	CH05015:N15-003-001	GEMN-0071	Camelia	Chile	Ames	2003															✓
69	CHIS775:S1911b-439-001	GEMS-0072	Tuxpeño	Mexico	Ames	2003															
70	CUBA117:S15-372-001	GEMS-0073	Argentino	Cuba	Ames	2003	✓							✓		✓					
71	CUBA164:S1517-163-001	GEMS-0074	Mixed (Creole)	Cuba	Ames	2003															
72	CUBA164:S1517-241-002	GEMS-0075	Mixed (Creole)	Cuba	Ames	2003								✓							
73	DKB844:N11b-118-001	GEMN-0076	Hybrid-tropical	Mexico	Ames	2003															
74	DKXL370:N11a20-604-001	GEMN-0077	Hybrid-tropical	Brazil	Ames	2003					✓		✓								
75	FS8A(S):S09-362-001	GEMS-0078	Mixed	USA	Ames	2003								✓							
76	FS8B(S):S0316-802-001	GEMS-0079	Mixed	USA	Ames	2003								✓							
77	FS8B(S):S0316-814-001	GEMS-0080	Mixed	USA	Ames	2003								✓							
78	FS8B(T):N1802-382-001	GEMN-0081	Mixed	USA	Ames	2003								✓							
79	FS8B(T):N1802-525-001	GEMN-0082	Mixed	USA	Ames	2003						✓		✓							
80	GUAT209:N1925-081-001	GEMN-0083	Tusón	Guatemala	Ames	2003		✓				✓									
81	PASCO14:S0105-198-001	GEMS-0084	Cuban yellow	Peru	Ames	2003							✓								
82	UR01089:S0525-519-001	GEMS-0085	Cateto Sulino	Uruguay	Ames	2003								✓							
83	UR10001:S1813-257-001	GEMS-0086	Dente Branco	Uruguay	Ames	2003															
84	AR03056:N09-024-001	GEMN-0087	Dentado Blanco	Argentina	Ames	2004															
85	AR03056:N09-182-001	GEMN-0088	Dentado Blanco	Argentina	Ames	2004						✓									✓
86	AR03056:N09-191-001	GEMN-0089	Dentado Blanco	Argentina	Ames	2004															
87	AR03056:N09-250-001	GEMN-0090	Dentado Blanco	Argentina	Ames	2004															
88	CHIS740:S1411a-783-002	GEMS-0091	Tuxpeño/Olotillo	Mexico	Ames	2004	✓														
89	CUBA164:S2012-444-001	GEMS-0092	Mixed (Creole)	Cuba	Ames	2004							✓		✓		✓				
90	CUBA164:S2012-966-001	GEMS-0093	Mixed (Creole)	Cuba	Ames	2004															
91	DKXL370:N11a20-199-002	GEMN-0094	Hybrid-tropical	Brazil	Ames	2004															
92	DKXL370:N11a20-234-002	GEMN-0095	Hybrid-tropical	Brazil	Ames	2004						✓	✓								
93	DKXL370:N11a20-322-001	GEMN-0096	Hybrid-tropical	Brazil	Ames	2004					✓										✓
94	FS8B(T):N11a-087-001	GEMN-0097	Mixed	USA	Ames	2004											✓				✓
95	FS8B(T):N11a-110-001	GEMN-0098	Mixed	USA	Ames	2004															
96	FS8B(T):N11a-322-001	GEMN-0099	Mixed	USA	Ames	2004						✓									
97	UR11003:S0302-937-001	GEMS-0100	Dente Branco	Uruguay	Ames	2004											✓				✓
98	DK888:S11b-007-B-B	GEMS-0101	Hybrid-tropical	Thailand	NC	2004								✓							
99	DK888:S11b-001-B	GEMS-0102	Hybrid-tropical	Thailand	NC	2004								✓							
100	DK888:N11(95)-B-027-010-B-B	GEMN-0103	Hybrid-tropical	Thailand	NC	2004							✓	✓							
101	DK888:N11(95)-B-027-012-B-B	GEMN-0104	Hybrid-tropical	Thailand	NC	2004							✓	✓							
102	DK888:N11(95)-B-027-015-B-B	GEMN-0105	Hybrid-tropical	Thailand	NC	2004								✓							
103	DK888:N11(95)-B-022-007-B-B	GEMN-0106	Hybrid-tropical	Thailand	NC	2004															
104	DK888:N11(95)-B-022-012-B-B	GEMN-0107	Hybrid-tropical	Thailand	NC	2004															
105	DK888:N11(95)-B-027-001-B-B	GEMN-0108	Hybrid-tropical	Thailand	NC	2004															
106	DKXL380:N11-B-015-003-B-B	GEMN-0109	Hybrid-tropical	Brazil	NC	2004															
107	BARBGP2:N08a18-332-001	GEMN-0110	Tusón	Barbados	Ames	2005							✓								
108	CH05015:N1204-057-001	GEMN-0111	Camelia	Chile	Ames	2005	✓	✓	✓								✓				
109	CH05015:N1502-086-001	GEMN-0112	Camelia	Chile	Ames	2005	✓														✓
110	CHIS775:S1911b-120-001	GEMS-0113	Tuxpeño	Mexico	Ames	2005	✓			✓				✓							
111	DK212T:N11a12-191-001	GEMN-0114	Hybrid-tropical	Thailand	Ames	2005															
112	DKB844:S1601-073-001	GEMS-0115	Hybrid-tropical	Mexico	Ames	2005															
113	DKB844:S1601-003-002	GEMS-0116	Hybrid-tropical	Mexico	Ames	2005	✓						✓								
114	DREP150:N2011d-624-001	GEMN-0117	Mixed	Dom. Republic	Ames	2005	✓	✓		✓				✓							
115	UR11003:S0302-1011-001	GEMS-0118	Dente Branco	Uruguay	Ames	2005			✓												✓
116	CHS775:N19-042-001-B	GEMN-0119	Tuxpeño	Mexico	NC	2005							✓	✓							
117	CHS775:N19-042-003-B	GEMN-0120	Tuxpeño	Mexico	NC	2005							✓	✓							

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236	W606S (SCRO1:N1310)	W606S	St. Croix	St. Croix	U of Wisc.	2009					✓										
237	W607S (BR52051:N04)	W607S	Dente Amarelo	Brazil	U of Wisc.	2009					✓										
238	W608S (CH05015:N15)	W608S	Camelia	Chile	U of Wisc.	2009					✓										
239	W609S (FS8B(T):N11a)	W609S	Mixed	USA	U of Wisc.	2009					✓										
240	W610S (CUBA164:S2012)	W610S	Mixed (Creole)	Cuba	U of Wisc.	2009					✓										
241	NY212 (FS8B(T):N1802-212)	NY212	Mixed	USA	Cornell U	2009															✓
242	NY215 (FS8B(T):N1802-215)	NY215	Mixed	USA	Cornell U	2009															✓
243	NY266 (AR01150:N0406-266)	NY266	Dent. Blanco Rugoso	Argentina	Cornell U	2009															✓
244	DKXL212:N11a-139-001-001	DE EXP	Hybrid-tropical	Brazil	UDEL	2003		✓					✓								
Legend:																					
Agro traits = Yield, lodging, and moisture w/in 10% of check mean																					
Y/M = Yield moisture ratio similar to or above check mean																					
ECB = European corn borer tolerance																					
GLS = Gray leafspot resistance																					
MDR = Mal de Rio Cuarto virus tolerance																					
NLB = Northern leaf blight resistance																					
SLB = Southern leaf blight resistance																					
Fuser = Fusarium ear rot resistance																					
Fumonisin = Low level of fumonisin (Fusarium mycotoxin)																					
Aflatoxin = Low level of aflatoxin (Aspergillus mycotoxin)																					
ASR=Anthracnose stalk rot resistance																					
AAI = Amino acid index of lysine, methionine, and tryptophan																					
Oil = Oil content > 4.5%, Protein = Protein content > 13%, and Starch = Starch thermal property																					
Bolded codes are Crop Science Registered																					