

Table S1 Detection of EPSPS by real-time quantitative PCR and EPSPS test strip

Material	Ct values of EPSPS gene	Ct values of lectin	Δ ct	Detection results	EPSPS test strip
F ₂ -1	20.27	20.81	0.54	P	P
F ₂ -2	26.85	25.64	1.21	P	P
F ₂ -3	25.97	25.13	0.84	P	P
F ₂ -4	Undetermined	25.43		N	N
F ₂ -5	27.25	27.91	0.66	P	P
F ₂ -6	25.75	27.38	1.63	P	P
F ₂ -7	Undetermined	24.19		N	N
F ₂ -8	26	25.08	0.92	P	P
F ₂ -9	25.72	25.82	-0.1	P	P
F ₂ -10	24.45	25.73	1.28	P	P
F ₂ -11	Undetermined	25.51		N	N
F ₂ -12	24.31	23.54	0.77	P	P
F ₂ -13	25.09	26.64	1.55	P	P
F ₂ -14	25.66	24.87	0.79	P	P
F ₂ -15	Undetermined	24.89		N	N
F ₂ -16	20.86	21.89	1.03	P	P
F ₂ -17	25.35	26.13	0.78	P	P
F ₂ -18	26.44	26.12	0.32	P	P
F ₂ -19	25.25	23.68	1.57	P	P
F ₂ -20	Undetermined	23.98		N	N
F ₂ -21	26.94	26.44	0.5	P	P
F ₂ -22	25.34	26.66	1.32	P	P
F ₂ -23	24.09	25.91	1.82	P	P
F ₂ -24	Undetermined	24.98		N	N
F ₂ -25	26.59	25.73	0.86	P	P
F ₂ -26	24.97	24.94	0.03	P	P
F ₂ -27	21.02	22.5	1.48	P	P
F ₂ -28	Undetermined	25.67		N	N
F ₂ -29	26.76	26.91	0.15	P	P
F ₂ -30	23.91	26.08	2.17	P	P
F ₂ -31	24.05	25.46	1.41	P	P
F ₂ -32	Undetermined	25.32		N	N
F ₂ -33	26.65	25.14	1.51	P	P
F ₂ -34	27.77	26.19	1.58	P	P
F ₂ -35	25.15	24.91	0.24	P	P
F ₂ -36	25.97	26.84	0.87	P	P
F ₂ -37	Undetermined	25.18		N	N
F ₂ -38	23.25	24.79	1.54	P	P
F ₂ -39	24.88	23.63	1.25	P	P
F ₂ -40	24.32	25.39	1.07	P	P

F ₂ -41	24.78	23.26	1.52	P	P
F ₂ -42	Undetermined	25.17		N	N
F ₂ -43	22.68	24.52	1.84	P	P
F ₂ -44	22.29	22.85	0.56	P	P
F ₂ -45	26.56	25.48	1.08	P	P
F ₂ -46	26.18	25.01	1.17	P	P
F ₂ -47	25.21	23.8	1.41	P	P
F ₂ -48	25.99	26.11	0.12	P	P
F ₂ -49	Undetermined	24.98		N	N
F ₂ -50	Undetermined	25.01		N	N
F ₂ -51	28.92	26.93	1.99	P	P
F ₂ -52	25.16	27.04	1.88	P	P
F ₂ -53	28.89	29.86	0.97	P	P
F ₂ -54	Undetermined	23.93		N	N
F ₂ -55	27.21	26.65	0.56	P	P
F ₂ -56	26.72	25.47	1.25	P	P
F ₂ -57	26.39	25.24	1.15	P	P
F ₂ -58	Undetermined	24.97		N	N
F ₂ -59	26.66	26.88	0.22	P	P
F ₂ -60	26.74	26.69	0.05	P	P
F ₂ -61	27.2	26.92	0.28	P	P
F ₂ -62	26.3	26.73	0.43	P	P
F ₂ -63	Undetermined	25.81		N	N
F ₂ -64	25.09	25.95	0.86	P	P
F ₂ -65	25.92	26.05	0.13	P	P
F ₂ -66	Undetermined	25.31		N	N
F ₂ -67	25.6	25.74	0.14	P	P
F ₂ -68	Undetermined	26.01		N	N
F ₂ -69	26.92	26.13	0.79	P	P
F ₂ -70	24.63	26.29	1.66	P	P
F ₂ -71	Undetermined	25.52		N	N
F ₂ -72	25.36	25.26	0.1	P	P
F ₂ -73	26.97	26.41	0.56	P	P
F ₂ -74	25.89	25.81	0.08	P	P
F ₂ -75	23.97	24.66	0.69	P	P
F ₂ -76	Undetermined	25.71		N	N
F ₂ -77	27.62	27.7	0.08	P	P
F ₂ -78	Undetermined	25.94		N	N
F ₂ -79	28.07	28.85	0.78	P	P
F ₂ -80	25.03	27.05	2.02	P	P
F ₂ -81	22.14	22.38	0.24	P	P
F ₂ -82	25.52	25.68	0.16	P	P
F ₂ -83	20.57	20.53	0.04	P	P
F ₂ -84	25.3	25.61	0.31	P	P

F ₂ -85	26.03	24.63	1.4	P	P
F ₂ -86	Undetermined	23.98		N	N
F ₂ -87	25.59	26.37	0.78	P	P
F ₂ -88	25.55	23.98	1.57	P	P
F ₂ -89	23.64	22.79	0.85	P	P
F ₂ -90	26.09	26.54	0.45	P	P
F ₂ -91	24.54	24	0.54	P	P
F ₂ -92	24.8	24.65	0.15	P	P
F ₂ -93	Undetermined	25.21		N	N
F ₂ -94	25.59	26.35	0.76	P	P
F ₂ -95	26.34	26.07	0.27	P	P
F ₂ -96	27.74	27.4	0.34	P	P
F ₂ -97	26.43	26.6	0.17	P	P
F ₂ -98	Undetermined	25.61		N	N
F ₂ -99	28.12	25.66	2.46	P	P
F ₂ -100	24.56	26.55	1.99	P	P
F ₂ -101	Undetermined	25.39		N	N
F ₂ -102	25.63	25.72	0.09	P	P
F ₂ -103	24.57	24.91	0.34	P	P
F ₂ -104	23.36	24.02	0.66	P	P
F ₂ -105	Undetermined	24.95		N	N
F ₂ -106	24.85	24.18	0.67	P	P
F ₂ -107	25.05	25.6	0.55	P	P
F ₂ -108	24.53	25.17	0.64	P	P
F ₂ -109	25.75	26.92	1.17	P	P
F ₂ -110	25.68	25.12	0.56	P	P
F ₂ -111	26.92	25.79	1.13	P	P
F ₂ -112	Undetermined	25.76		N	N
F ₂ -113	26.53	26.74	0.21	P	P
F ₂ -114	26.33	26.68	0.35	P	P
F ₂ -115	23.67	24.54	0.87	P	P
F ₂ -116	Undetermined	24.83		N	N
F ₂ -117	23.83	24.82	0.99	P	P
F ₂ -118	23.27	22.67	0.6	P	P
F ₂ -119	21.81	22.17	0.36	P	P
F ₂ -120	23.72	24.61	0.89	P	P
F ₂ -121	22.82	22.39	0.43	P	P
F ₂ -122	25.86	25.55	0.31	P	P
F ₂ -123	Undetermined	24.45		N	N
F ₂ -124	24.79	23.87	0.92	P	P
F ₂ -125	25.15	26.23	1.08	P	P
F ₂ -126	26.45	26.88	0.43	P	P
F ₂ -127	26.58	25.77	0.81	P	P
F ₂ -128	28.67	27.03	1.64	P	P

F ₂ -129	26.96	27.43	0.47	P	P
F ₂ -130	24.05	26.01	1.96	P	P
F ₂ -131	24.91	24.64	0.27	P	P
F ₂ -132	25.82	25.76	0.06	P	P
F ₂ -133	25.7	25.94	0.24	P	P
F ₂ -134	Undetermined	24.59		N	N
F ₂ -135	26.6	25.19	1.41	P	P
F ₂ -136	26.01	25.85	0.16	P	P
F ₂ -137	28.25	28.3	0.05	P	P
F ₂ -138	29.11	28.72	0.39	P	P
F ₂ -139	23.94	25.27	1.33	P	P
F ₂ -140	23.97	23.35	0.62	P	P
F ₂ -141	Undetermined	25.19		N	N
F ₂ -142	25.73	24.83	0.9	P	P
F ₂ -143	24.67	24.85	0.18	P	P
F ₂ -144	28.22	28.14	0.08	P	P
F ₂ -145	26.63	25.13	1.5	P	P
F ₂ -146	26.4	27.79	1.39	P	P
F ₂ -147	25.25	25.43	0.18	P	P
F ₂ -148	25.7	24.43	1.27	P	P
F ₂ -149	Undetermined	24.94		N	N
F ₂ -150	25.67	27.17	-1.5	P	P
F ₂ -151	26.82	25.72	1.1	P	P
F ₂ -152	Undetermined	23.98		N	N
F ₂ -153	25.86	25.81	0.05	P	P
F ₂ -154	24.76	24.86	-0.1	P	P
F ₂ -155	24.49	26.73	2.24	P	P
F ₂ -156	24.33	24.75	0.42	P	P
F ₂ -157	Undetermined	26.74		N	N
F ₂ -158	24.71	25.14	0.43	P	P
F ₂ -159	Undetermined	25.97		N	N
F ₂ -160	25.59	26.03	0.44	P	P
F ₂ -161	26.25	26.62	0.37	P	P
F ₂ -162	23.88	24.82	0.94	P	P
F ₂ -163	25.34	26.75	1.41	P	P
F ₂ -164	Undetermined	25.13		N	N
F ₂ -165	23.84	24.88	1.04	P	P
F ₂ -166	Undetermined	23.42		N	N
F ₂ -167	24.33	25.19	0.86	P	P
F ₂ -168	Undetermined	25.18		N	N
F ₃ -1	20.57	20.7	-0.13	P	P
F ₃ -2	Undetermined	25.71		N	N
F ₃ -3	Undetermined	26.43		N	N
F ₃ -4	26.65	25.33	1.32	P	P

F ₃ -5	25.98	24.67	1.31	P	P
F ₃ -6	Undetermined			N	N
F ₃ -7	25.59	25.69	-0.1	P	P
F ₃ -8	25.55	24.23	1.32	P	P
F ₃ -9	24	23.76	0.24	P	P
F ₃ -10	Undetermined	24.57		N	N
F ₃ -11	25.29	23.85	1.44	P	P
F ₃ -12	24.86	24.78	0.08	P	P
F ₃ -13	21.2	21.62	-0.42	P	P
F ₃ -14	25.72	26.36	-0.64	P	P
F ₃ -15	26.33	26.13	0.2	P	P
F ₃ -16	25.26	24.06	1.2	P	P
F ₃ -17	25.45	23.95	1.5	P	P
F ₃ -18	Undetermined	26.39		N	N
F ₃ -19	24.6	26.97	-2.37	P	P
F ₃ -20	24.96	26.38	-1.42	P	P
F ₃ -21	Undetermined	25.46		N	N
F ₃ -22	29.08	28.46	0.62	P	P
F ₃ -23	24.66	24.16	0.5	P	P
F ₃ -24	24.82	24.64	0.18	P	P
F ₃ -25	Undetermined	26.19		N	N
F ₃ -26	25	26.06	-1.06	P	P
F ₃ -27	25.01	26.77	-1.76	P	P
F ₃ -28	24.67	25.51	-0.84	P	P
F ₃ -29	25.84	26.69	-0.85	P	P
F ₃ -30	25.84	24.54	1.3	P	P
F ₃ -31	26.92	26.2	0.72	P	P
F ₃ -32	25.09	24.19	0.9	P	P
F ₃ -33	27.04	26.69	0.35	P	P
F ₃ -34	26.55	27.37	-0.82	P	P
F ₃ -35	24.08	25.43	-1.35	P	P
F ₃ -36	Undetermined	24.93		N	N
F ₃ -37	24.64	24.47	0.17	P	P
F ₃ -38	24.05	23.65	0.4	P	P
F ₃ -39	21.88	23.56	-1.68	P	P
F ₃ -40	23.61	24.04	-0.43	P	P
F ₃ -41	22.64	23.58	-0.94	P	P
F ₃ -42	Undetermined	23.44		N	N
F ₃ -43	25.68	24.03	1.65	P	P
F ₃ -44	24.61	22.98	1.63	P	P
F ₃ -45	24.96	26.66	-1.7	P	P
F ₃ -46	26.2	26.83	-0.63	P	P
F ₃ -47	Undetermined	25.76		N	N
F ₃ -48	27.95	27.43	0.52	P	P

F ₃ -49	25.88	26.66	-0.78	P	P
F ₃ -50	29.37	29.57	-0.2	P	P
F ₃ -51	Undetermined	26.79		N	N
F ₃ -52	29.28	29.76	-0.48	P	P
F ₃ -53	28.79	29.57	-0.78	P	P
F ₃ -54	27.34	29.08	-1.74	P	P
F ₃ -55	27.22	27.41	-0.19	P	P
F ₃ -56	26.92	26.1	0.82	P	P
F ₃ -57	26.77	26.14	0.63	P	P
F ₃ -58	Undetermined	25.57		N	N
F ₃ -59	26.59	26.39	0.2	P	P
F ₃ -60	25.98	24.8	1.18	P	P
F ₃ -61	25.59	24.51	1.08	P	P
F ₃ -62	25.99	25.54	0.45	P	P
F ₃ -63	26.73	27.05	-0.32	P	P
F ₃ -64	24.88	23.75	1.13	P	P
F ₃ -65	26.16	26.57	-0.41	P	P
F ₃ -66	27.07	27.09	-0.02	P	P
F ₃ -67	Undetermined	24.64		N	N
F ₃ -68	25.8	25.83	-0.03	P	P
F ₃ -69	25.41	25.82	-0.41	P	P
F ₃ -70	26.75	27.11	-0.36	P	P
F ₃ -71	Undetermined	26.12		N	N
F ₃ -72	23.53	24.25	-0.72	P	P
F ₃ -73	25.81	24.65	1.16	P	P
F ₃ -74	27.58	26.7	0.88	P	P
F ₃ -75	27.26	26.98	0.28	P	P
F ₃ -76	27.87	28.77	-0.9	P	P
F ₃ -77	25.85	26.19	-0.34	P	P
F ₃ -78	22.12	22.27	-0.15	P	P
F ₃ -79	25.45	25.6	-0.15	P	P
F ₃ -80	20.57	21.03	-0.46	P	P
F ₃ -81	26.48	25.6	0.88	P	P
F ₃ -82	Undetermined	24.22		N	N
F ₃ -83	25.47	25.63	-0.16	P	P
F ₃ -84	25.66	26.74	-1.08	P	P
F ₃ -85	25.33	25.46	-0.13	P	P
F ₃ -86	Undetermined	25.18		N	N
F ₃ -87	26.9	25.61	1.29	P	P
F ₃ -88	25.31	24.86	0.45	P	P
F ₃ -89	25.81	24.51	1.3	P	P
F ₃ -90	20.2	21.83	-1.63	P	P
F ₃ -91	26.36	24.81	1.55	P	P
F ₃ -92	25.79	26.16	-0.37	P	P

F ₃ -93	27.29	26.59	0.7	P	P
F ₃ -94	25.03	26.09	-1.06	P	P
F ₃ -95	26.22	26.44	-0.22	P	P
F ₃ -96	Undetermined	26.21		N	N
F ₃ -97	Undetermined	26.54		N	N
F ₃ -98	23.87	24.51	-0.64	P	P
F ₃ -98	26.07	26.28	-0.21	P	P
F ₃ -100	24.45	24.72	-0.27	P	P
F ₃ -101	24.77	25.12	-0.35	P	P
F ₃ -102	26.98	25.59	1.39	P	P
F ₃ -103	25.68	25.31	0.37	P	P
F ₃ -104	Undetermined	23.46		N	N
F ₃ -105	Undetermined	25.97		N	N
F ₃ -106	25.37	25.95	-0.58	P	P
F ₃ -107	24.82	27.39	-2.57	P	P
F ₃ -108	26.73	26.86	-0.13	P	P
F ₃ -109	26.04	24.58	1.46	P	P
F ₃ -110	27.9	28.63	-0.73	P	P
F ₃ -111	24.34	24.31	0.03	P	P
F ₃ -112	Undetermined	25.77		N	N
F ₃ -113	28.21	28.07	0.14	P	P
F ₃ -114	26.34	26.29	0.05	P	P
F ₃ -115	27.35	27.14	0.21	P	P
F ₃ -116	25.46	26.2	-0.74	P	P
F ₃ -117	25.86	25.81	0.05	P	P
F ₃ -118	25.54	24.76	0.78	P	P
F ₃ -119	24.01	24.51	-0.5	P	P
F ₃ -120	27.11	26.3	0.81	P	P
F ₃ -121	Undetermined	23.37		N	N
F ₃ -122	25.13	24.96	0.17	P	P
F ₃ -123	26.07	24.6	1.47	P	P
GM-1	24.29	23.92	0.37	P	P
GM-2	23.83	25.17	-1.34	P	P
GM-3	20.96	23.34	-2.38	P	P
GM-4	24.29	24.19	0.1	P	P
GM-5	25.77	25.19	0.58	P	P
Wild-1	Undetermined	24.9		N	N
Wild-2	Undetermined	26.93		N	N
Wild-3	Undetermined	27.23		N	N
Wild-4	Undetermined	25.32		N	N
Wild-5	Undetermined	25.25		N	N

Note: Delta Ct was calculated as follows: delta Ct=Ct (target gene)– Ct (*lectin*). *P* positive, *N* negative,

GM genetically modified, *Wild* wild soybean