

Supplementary Material

Traditional soybean (*Glycine max*) breeding increases seed yield but reduces yield stability under non-phosphorus supply

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Supplementary data

Table S1. The parents of the soybean cultivars used in this study.

Cultivar	Province	Breeding	Male parent	Female
Qiandou 5	Guizhou	1995	Zhechun 1	Xiangchundou 10
Qiandou 6	Guizhou	2000	86-6	90-12
Nandou 8	Sichuan	2005	Xidou 3	Ee'dou 5
Dian 86-5	Yunnan	2003	Bisong	Jinnongdahuangdou
Dian 86-4	Yunnan	2003	Bisong	Jinnongdahuangdou
Diandou4	Yunnan	2006	Dian 86-5	Williams
Diandou6	Yunnan	2008	Jinnongdahuangdou	Henong 29
Andou5	Guizhou	2009	ZYD05689	ZDD15633
Chuandou13	Sichuan	2010	Zhongdou24	87-5
Andou7	Guizhou	2011	ZYD05689	ZDD15633
Qiandou 8	Guizhou	2011	86-6	90-12
Qiandou7	Guizhou	2011	8307	88-5027-2
Chuandou16	Sichuan	2014	Zhuyaozi	Aijiaozao
Qiandou10	Guizhou	2015	97-7015	Xiangchundou13
Andou9	Guizhou	2016	ZYD05615	Qiandou6015
Qiandou11	Guizhou	2016	Qiandou08001	Maoerhui
Nanchundou31	Sichuan	2016	Aijiaozao	Chuandou 4
Andou8	Guizhou	2016	ZYD05689	ZDD15633

Supplementary Table.S2. Days from sowing to final harvest in Dafang and

Shiqian in 2017, Dafang and Puding in 2018.

Cultivar	Days from sowing to full maturity (DAS)			
	Dafang		Shiqian	Puding
	2017	2018	2017	2018
Qiandou 5	115	114	112	112
Qiandou 6	118	117	112	113
Dian 86-4	120	118	113	116
Dian 86-5	120	118	114	115
Nandou 8	118	117	114	116
Diandou 4	119	118	112	114
Diandou 6	118	119	114	116
Andou 5	119	121	115	117
Chuandou 13	121	119	115	116
Andou 7	119	120	114	116
Qiandou 7	120	119	116	116
Qiandou 8	119	120	114	116
Chuandou 16	119	119	114	115
Qiandou 10	123	121	116	118
Qiandou 11	122	124	116	118
Andou 8	123	122	116	117
Andou 9	122	121	116	117
Nanchundou 31	124	125	117	118

Fig. S1. The relationship between cultivar superiority (CSP), static stability coefficient (SSC) of the seed yield and nine seed mineral concentration and year of release of the eighteen soybean cultivars. *** $P < 0.001$.

