



Figure S1 The experimental design in the field. Two planting density treatments were applied as the main plots, and two plant distribution patterns were designated as sub-plots. The main plot size was 20 m × 10 m, while the sub-plot size was 10 m × 10 m. Hp, high planting density; Np, normal planting density; Nu, non-uniform plant distribution; U, uniform plant distribution. I, II, III, and IV represented four repetitions.

Table S1. Yield and yield components of soybean under different plant distributions.

Year	Planting density (10^4 p ha $^{-1}$)	Plant distribution	Harvest density (10^4 p ha $^{-1}$)	Seed No. per area (m $^{-2}$)	Hundred-seed weight (g)	Yield (kg ha $^{-1}$)
2018	Normal planting density	Non-uniform	17.2 d	2325 c	15.92 a	3632.9 c
		Uniform	17.9 c	2598 b	15.90 a	3965.1 b
	High planting density	Non-uniform	24.7 b	2688 b	15.75 a	4142.8 b
		Uniform	26.8 a	3056 a	15.53 a	4582.5 a
2019	Normal planting density	Non-uniform	17.1 d	2587 d	16.82 a	3473.7 d
		Uniform	17.9 c	2815 c	16.86 a	3780.1 c
	High planting density	Non-uniform	24.6 b	3385 b	16.06 b	4545.5 b
		Uniform	26.7 a	3701 a	16.21 b	4970.7 a

The same letters at the same column during one year are not significantly different at $P < 0.05$ as determined by the least significance difference (LSD) test.