Dry matter partitioning and K distribution of vegetable soybean genotypes with higher potassium efficiency - Supplement

Table S1. Some basic data of forty vegetable soybean genotypes.

| Number | Name | Seedcoat color | Seed size | Flower color | Leaf shape |
|--------|---------|----------------|------------|--------------|------------|
| 1 | H44 | Yellow | Medium | White | Round |
| 2 | Z-13-6 | Green | Large | White | Round |
| 3 | LC3 | Green | Medium | White | Round |
| 4 | D4-11 | Yellow | Large | Purple | Ellipse |
| 5 | ВЈҮ | Black | Medium | White | Ellipse |
| 6 | ZHY | Black | Medium | Purple | Ellipse |
| 7 | DZ1 | Yellow | Large | Purple | Round |
| 8 | ZKMD2 | Brown | Large | White | Round |
| 9 | BA123 | Yellow | Medium | Purple | Round |
| 10 | MD1-70 | Green | Large | White | Round |
| 11 | ZKMD1 | Yellow | Very large | White | Round |
| 12 | DS9 | Yellow | Medium | White | Ovoid |
| 13 | FS4 | Brown | Large | White | Round |
| 14 | N95 | Brown | Medium | Purple | Round |
| 15 | L27 | Green | Medium | White | Round |
| 16 | M6Z | Yellow | Medium | Purple | Round |
| 17 | FS9CK | Black | Medium | Purple | Round |
| 18 | H56 | Yellow | Large | White | Round |
| 19 | T117 | Yellow | Large | White | Round |
| 20 | L113 | Yellow | Large | White | Round |
| 21 | DZ107 | Green | Large | Purple | Round |
| 22 | ZKMD1-1 | Green | Large | White | Round |
| 23 | 51-54 | Yellow | Large | White | Round |
| 24 | RBQ | Green | Very large | White | Round |
| 25 | FS5 | Yellow | Very large | White | Round |
| 26 | 263-266 | Yellow | Medium | White | Round |
| 27 | DS28 | Yellow | Medium | White | Ovoid |
| 28 | Q36 | Green | Very large | White | Round |
| 29 | FS1 | Green | Medium | Purple | Ovoid |
| 30 | SN26 | Yellow | Medium | Purple | Ovoid |
| 31 | DS1 | Yellow | Medium | Purple | Ovoid |
| 32 | DS7 | Yellow | Medium | Purple | Ovoid |
| 33 | FS3CK | Green | Very large | Purple | Round |
| 34 | 87-1 | Yellow | Medium | White | Round |
| 35 | 9701-2 | Green | Large | Purple | Round |
| 36 | ZX8 | Green | Very large | White | Round |
| 37 | 104 | Green | Medium | Purple | Ellipse |
| 38 | VS10 | Green | Large | Purple | Round |
| 39 | T75-1 | Green | Large | White | Round |
| 40 | Z10 | Green | Large | White | Ellipse |

Table S2. Correlation analysis between KIUE and some parameters

| Variables – | 2016 field experiment | | 2017 pot experiment | |
|------------------|-----------------------|---------------------|---------------------|---------------------|
| variables – | KIUE-Y | KIUE-B | KIUE-Y | KIUE-B |
| Shoot DW | 0.144 | -0.564 | -0.794 [*] | 0.811* |
| Grain yield | 0.532 | -0.491 | -0.514 | 0.190 |
| K conc. of shoot | -0.43 | -0.975** | 0.382 | -0.998** |
| K conc. of seed | 0.068 | 0.426 | -0.579 | -0.313 |
| K acc. of shoot | -0.154 | -0.832 [*] | -0.882** | 0.372 |
| K acc. of seed | 0.609 | -0.438 | -0.845** | 0.055 |
| НІ | 0.738* | -0.36 | 0.731* | -0.908** |
| КНІ | 0.839** | 0.546 | 0.763* | -0.750 [*] |

^{*,} significant at *P*=0.05; **, significant at *P*=0.01.

Abbreviation: KIUE-Y, K internal use efficiency in yield; KIUE-B, K internal use efficiency in biomass; DW, dry matter weight; conc., concentration; acc., accumulation; HI, harvest index; KHI, potassium harvest index.

Table S3. Harvest index and K harvest index of various K efficiency genotypes under two K levels

| | | Harvest index (%) | | K harvest index (%) | |
|-----|------|-------------------|-------|---------------------|--------|
| | | КО | K120 | КО | K120 |
| KHE | T117 | 44.0a | 43.7a | 81.1a | 74.8a |
| | L113 | 37.8b | 35.5b | 79.6a | 71.6a |
| KLE | DZ1 | 29.3c | 29.8c | 64.8c | 62.5b |
| | ZX8 | 31.4c | 29.6c | 72.2b | 68.7ab |

Genotypes with different letters are significantly different (ANOVA, $P \le 0.05$).

Abbreviation: KHE, K high efficiency; KLE, K low efficiency; K0, 0kg ha^{-1} K_2SO_4 treatment; K120, 120kg ha^{-1} K_2SO_4 treatment.