

## SUPPORTING INFORMATION

### **Development and characterization of a soybean experimental line lacking the $\alpha'$ subunit of $\beta$ -conglycinin and G1, G2, and G4 glycinin**

Bo Song<sup>1,2</sup>, Nathan W. Oehrle<sup>2</sup>, Shanshan Liu<sup>1,\*</sup>, and Hari B. Krishnan<sup>2,3,\*</sup>

<sup>1</sup>Key Laboratory of Soybean Biology at the Chinese Ministry of Education, Northeast Agricultural University, Harbin, China.

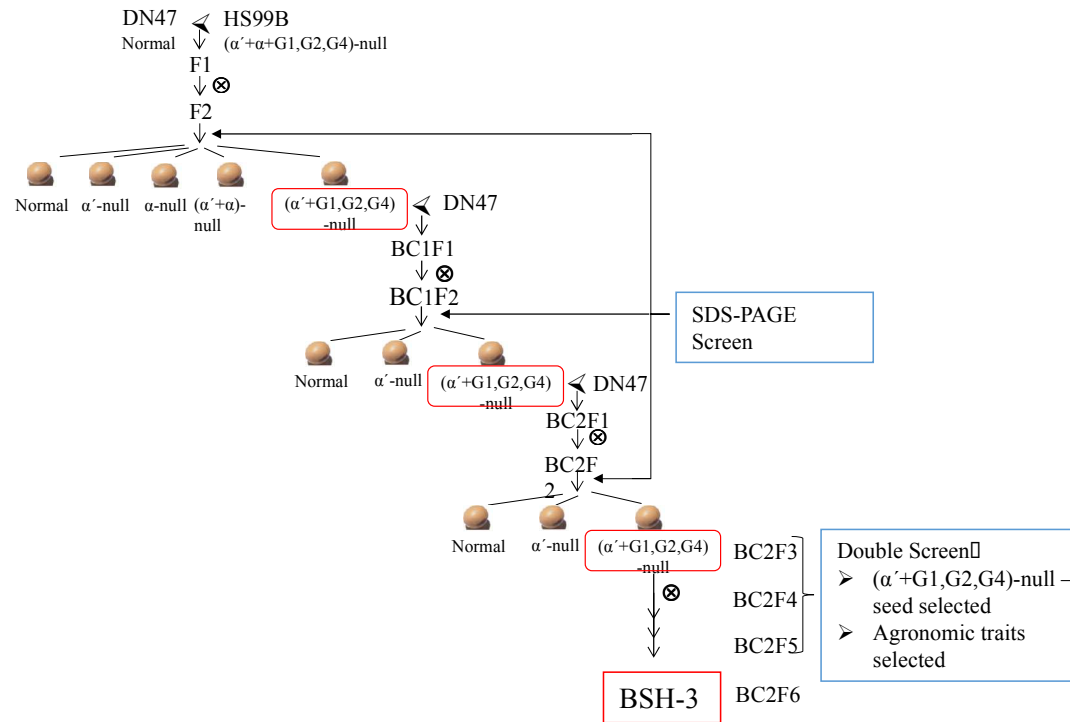
<sup>2</sup>Plant Genetics Research Unit, Agricultural Research Service, U.S. Department of Agriculture, University of Missouri, Columbia, MO, USA.

<sup>3</sup>Plant Science Division, University of Missouri, Columbia, MO, USA

\*Corresponding authors E-mail: [Hari.Krishnan@ARS.USDA.GOV](mailto:Hari.Krishnan@ARS.USDA.GOV)

[ars336699@aliyun.com](mailto:ars336699@aliyun.com)

**Figure S1.** Schematic outline of development of soybean experimental line (BSH-3) derived from DN47 x HS99B crosses.



**Table S1.** Protein, oil and fatty acid content of DN47 and BSH-3 seeds.

Seed Component	DN47	BSH-3	Significance level
Protein <sup>1</sup>	35.6 ± 0.7	38.1 ± 0.3	*
Oil <sup>1</sup>	22.4 ± 0.4	19.2 ± 0.06	*
Fatty acids <sup>1</sup> :			
Palmitic Acid (16:0)	12.8 ± 0.1	11.9 ± 0.1	*
Stearic Acid (18:0)	3.5 ± 0.1	3.4 ± 0.04	NS
Oleic Acid (18:1)	28.7 ± 0.6	23.8 ± 0.4	*
Linoleic Acid (18:2)	47.3 ± 0.6	52.4 ± 0.4	*
Linolenic Acid (18:3)	7.5 ± 0.04	8.35 ± 0.08	*

Significantly different means are indicated by \* ( $p \leq 0.05$ ) and insignificant differences are indicated by “NS”.

<sup>1</sup>expressed as percentage

