

**Table S1.** Analysis of variance (ANOVA) showing the effect of accession, country of origin and maturity group (MG) on the tocopherol content of soybean accessions grown at two locations of China for two years (separate ANOVA was performed for accession, origin, and maturity group)

Variation source	Tocopherol Contents			
	$\alpha$ -Tocopherol	$\gamma$ -Tocopherol	$\delta$ -Tocopherol	Total-Tocopherol
<b>Year</b>	***	***	***	***
<b>Accession</b>	***	***	***	***
<b>Year <math>\times</math> Accession</b>	NS	NS	NS	*
<b>Year</b>	***	***	***	***
<b>Country of Origin</b>	***	***	***	***
<b>Year <math>\times</math> Country of Origin</b>	NS	NS	NS	NS
<b>Year</b>	***	***	***	***
<b>MG</b>	***	***	***	***
<b>Year <math>\times</math> MG</b>	NS	**	NS	***

Here, \*, \*\* and \*\*\* represent the significance levels at  $p < 0.05$ ,  $p < 0.01$ , and  $p < 0.001$ , respectively; NS = non-significant

**Table S2.** List of soybean accessions with highest and lowest contents of tocopherols

<b>Tocopherols</b>	<b>ID Number</b>	<b>Name</b>	<b>Mean (<math>\mu\text{g g}^{-1}</math>)</b>	<b>Origin</b>
$\alpha$ -Tocopherol	ZDD12828	SNFTJSD	3.15	China
	ZDD00041	Heihe1	33.38	China
$\gamma$ -Tocopherol	WDD02958	POLUKULTURNAYA-2	79.31	Russia
	PI592523	Glacier	220.91	USA
$\delta$ -Tocopherol	WDD02708	PSB313	21.87	Russia
	ZDD06638	Baishuidou	136.67	China
Total-Tocopherol	WDD02708	PSB313	118.92	Russia
	PI592523	Glacier	344.02	USA