

Table S6. Information on candidate genes related to linoleic and linolenic acid content in soybean.

Trait	Gene ID	Chr	Start	End	Allel	SNP position	Pvalue	Function annotation
linoleic	<i>Glyma.13G035600</i>	Gm13	10063434	10067331	C/A	10009679	7.02E-04	Biological Process: gibberellin biosynthetic process (GO:0009686);; Biological Process: unidimensional cell growth (GO:0009826);; Biological Process: flower development (GO:0009908);; Molecular Function: gibberellin 20-oxidase activity (GO:0045544)
linolenic acid	<i>Glyma.19G147400</i>	Gm19	41268263	41270535	T/C	41366844	6.81E-04	Biological Process: lipid metabolic process (GO:0006629);; Molecular Function: oxidoreductase activity, acting on paired donors, with oxidation of a pair of donors resulting in the reduction of molecular oxygen to two molecules of water (GO:0016717)

Note: p-value measures the degree of association between a SNP and a trait