

Table 1s. Characteristic, origin and pedigree and days-to-maturity of different soybean genotypes selected for the investigation.

Genotype	Characteristic	Origin	Pedigree	Days-to-maturity (days)	Soybean oil body Codes
Jidou 12	High protein	Hebei, China	You 83-14 × Jida 7826	95	HP1
Zhonghuang 13	High protein	Hunan, China	Jidou 8 × Zhong 90052-76	130	HP2
Hedou 33	High protein	Shandong, China	Hedou 20 × F6 (Zhongzuo 975 × Xu 8906)	102	HP3
Zhonghuang 39	High oil	Hebei, China	Zhongpin 661 × Zhonghuang 14	103	HO1
Zhonghuang 57	High oil	Hunan, China	Hartwig × Ji 1265	106	HO2
Dongnong 68	High oil	Heilongjiang, China	Hefeng 50 × Jiusan 03-42	120	HO3

Table 2s. Proximate composition (g/100 g) of different soybean seeds and the soybean oil bodies isolated from the different soybeans and yield of soybean oil bodies isolated from the different soybeans

Sample	Soybean		soybean oil bodies			Yield of soybean oil bodies (dry basis)
	Protein	Crude lipid	Moisture	Protein (dry basis)	Crude lipid (dry basis)	
HP1	42.95±0.24 ^c	19.26±0.06 ^c	55.43±0.30 ^{ab}	21.52±0.61 ^a	76.46±0.58 ^b	14.08±0.71 ^b
HP2	46.32±0.66 ^a	13.43±0.31 ^e	56.11±0.65 ^a	20.18±1.14 ^{ab}	77.87±1.12 ^{ab}	9.60±0.47 ^d
HP3	44.08±0.26 ^b	17.35±0.01 ^d	55.08±0.06 ^b	21.34±0.45 ^a	76.76±0.32 ^b	12.49±0.11 ^c
HO1	40.22±0.14 ^d	20.82±0.13 ^b	52.65±0.27 ^d	20.66±0.95 ^{ab}	77.55±0.73 ^{ab}	15.18±0.21 ^a
HO2	38.60±0.50 ^e	21.02±0.04 ^b	53.58±0.43 ^c	19.45±0.66 ^b	78.70±0.56 ^a	14.78±0.94 ^{ab}
HO3	37.91±0.40 ^e	22.17±0.30 ^a	53.73±0.26 ^c	20.69±1.16 ^{ab}	77.53±0.95 ^{ab}	15.02±0.43 ^{ab}

Different letters within column (a-e) represent the statistically significant differences ($p < 0.05$) between the mean values.

Table 3s. Fatty acid composition of the soybean oil bodies isolated from the different soybeans (%)

	C16:0	C18:0	C18:1	C18:2	C18:3	PUFA	UFA
HP1	12.05±0.05 ^a	3.73±0.01 ^d	18.59±0.06 ^e	53.72±0.04 ^a	8.83±0.03 ^b	62.56±0.01 ^a	81.53±0.03 ^d
HP2	10.84±0.01 ^e	3.01±0.00 ^f	23.28±0.05 ^c	50.45±0.05 ^c	9.11±0.02 ^a	59.56±0.07 ^c	83.42±0.00 ^a
HP3	11.00±0.01 ^d	3.29±0.00 ^e	22.17±0.02 ^d	52.76±0.08 ^b	7.41±0.01 ^c	60.17±0.08 ^b	80.79±0.01 ^e
HO1	11.97±0.02 ^b	4.44±0.02 ^b	24.57±0.05 ^b	49.68±0.01 ^d	5.98±0.02 ^e	55.66±0.02 ^d	80.66±0.01 ^f
HO2	11.75±0.02 ^c	4.47±0.01 ^a	24.60±0.07 ^b	49.47±0.00 ^e	6.16±0.03 ^f	55.63±0.03 ^d	82.85±0.06 ^b
HO3	11.70±0.03 ^c	3.87±0.00 ^c	26.24±0.04 ^a	48.59±0.02 ^f	6.76±0.02 ^d	55.35±0.00 ^e	81.89±0.06 ^c

Different letters within column (a-e) represent the statistically significant differences ($p < 0.05$) between the mean values.

Table 4s. Pearson correlation coefficients of the minor components and physicochemical properties of the soybean oil bodies isolated from the different soybeans

	DPPH _{MeOH}	DPPH _{Hexane}	ABTS _{MeOH}	ABTS _{Hexane}	d 4.3-SDS reaction rate	d 4.3-water reaction rate	LPO reaction rate	TBARS reaction rate
TPC	-0.18	-0.30	0.47*	-0.33	0.59*	0.32	0.16	0.54*
α-tocopherol	-0.08	0.36	-0.14	0.51*	-0.59**	0.03	-0.60**	-0.53*
γ-tocopherol	-0.46*	0.83**	-0.32	0.89**	-0.59**	-0.37	-0.74**	-0.77**
δ-tocopherol	-0.33	0.81**	-0.43*	0.85**	-0.67**	-0.50*	-0.7**	-0.78**
Total- tocopherols	-0.43*	0.82**	-0.33	0.90**	-0.65**	-0.35	-0.78**	-0.80**
LPO reaction rate	0.10*	-0.76**	0.40*	-0.70**	0.69**	0.55*	1.00	0.75**
TBARS reaction rate	0.06	-0.62**	0.45*	-0.77**	0.65**	0.36	0.75**	1.00

** $p < 0.01$, * $p < 0.05$.