



**Figure S1.** Chlorophyll contents among different rice varieties during seedling, heading and filling stages. A, chlorophyll a; B, chlorophyll b.

**Table S1.** Difference in harvest index and ratio of grain to straw among 6 rice lines.

Lines	Harvest index	Ratio of grain
		to straw
04B	0.49360±0.007a	\
H818	0.4920±0.005a	0.9688±0.02a
Z12	0.4801±0.012a	0.9256±0.05a
LYPJ	0.4807±0.003a	0.9259±0.01a
Z18	0.4801±0.005a	0.9237±0.02a
Y12	0.4803±0.008a	0.9252±0.03a

**Table S2.** Correlation between grain yield per plant and other yield composition factors

Lines	Effective panicles number	Total grains per panicle	Total filled grains per panicle	Seed setting	1000- grain rate	Straw yield per plant	Biologica l yield per plant	Harvest index	Grain straw ratio
Zhehui 818	0.92**	-0.91**	-0.92**	0.89**	0.92**	-0.99**	-0.85**	1.00**	1.00**
Zheyou 18	-0.78**	-0.70*	0.70*	0.71*	0.70*	0.61*	0.82**	-0.06	-0.07
Yongyou 12	-0.64	0.76**	0.77**	-0.70*	0.77**	0.34	0.55*	-0.03	-0.05
Zheyou 12	0.98**	0.98**	0.98 **	-0.99**	0.98**	0.97**	0.99**	-0.90**	-0.90**
LYPJ	0.06	-1.00**	-1.00**	0.99**	-1.00**	1.00**	1.00**	-0.99**	-0.99**
Integrated	-0.15	0.61*	0.65*	0.24	-0.17	0.91**	0.97**	-0.31	-0.32

\* and \*\* refers to significance at 0.05 and 0.01 level, respectively.

**Table S3. Thirty-five rice materials used to identify *indica* or *japonica* by InDel markers and their results.**

No.	Materials	Type	Frequency of <i>Indica</i>	Frequency of <i>Japonica</i>
1	Nipponbare	Japonica	0.000	1.000
2	9311	Indica	1.000	0.000
3	IR36	Indica	0.842	0.158
4	Nanjing 11	Indica	1.000	0.000
5	YMZJ	Japonica	0.079	0.921
6	Balilla	Japonica	0.000	1.000
7	Zhe04A	Sterile line of Zheyou series	0.026	0.974
8	Zheyou12	Hybrid line	0.211	0.789
9	H414	Restorer line of Z12	0.342	0.658
10	Zheyou712	Hybrid line	0.211	0.789
11	H712	Restorer line of Z712	0.368	0.632
12	Zheyou812	Hybrid line	0.132	0.868
13	H812	Restorer line of Z812	0.263	0.737
14	Zheyou814	Hybrid line	0.474	0.526
15	H814	Restorer line of Z814	0.895	0.105
16	Zheyou818	Hybrid line	0.395	0.605
17	H818	Restorer line of Z818	0.789	0.211
18	Zheyou910	Hybrid line	0.368	0.632
19	F910	Restorer line of Z910	0.763	0.237
20	Zheyou911	Hybrid line	0.184	0.816
21	F911	Restorer line of Z911	0.342	0.658
22	Zheyou924	Hybrid line	0.316	0.684
23	F924	Restorer line of Z924	0.632	0.368
24	Zheyou925	Hybrid line	0.474	0.526
25	F925	Restorer line of Z925	0.947	0.053
26	Zheyou929	Hybrid line	0.395	0.605
27	F929	Restorer line of Z929	0.868	0.132
28	Zheyou935	Hybrid line	0.526	0.474
29	F935	Restorer line of Z935	1.000	0.000
30	Zheyou1017	Hybrid line	0.395	0.605
31	F1017	Restorer line of Z1017	0.789	0.211
32	Xiushui09	Hybrid	0.053	0.947
33	Zhenshan97A	Sterile line of Shanyou63	0.947	0.053
35	MingH63	Restorer line of Shanyou61	0.895	0.105
34	Shanyou63	Hybrid	0.947	0.053