

Transcriptome and genome sequencing elucidates the molecular basis for the high yield and good quality of the hybrid rice variety Chuanyou6203

Juansheng Ren*¹, Fan Zhang*², Fangyuan Gao¹, Lihua Zeng³, Xianjun Lu¹, Xiuqin Zhao², Jianqun Lv¹, Xiangwen Su¹, Liping Liu¹, Mingli Dai¹, Jianlong Xu², Guangjun Ren^{1**}

¹Crop Research Institute, Sichuan Academy of Agricultural Sciences, Chengdu, 610066, P.R. China

²Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, Beijing, 100081, P.R. China

³Sichuan Normal University, Chengdu, 610066, P.R. China

*These authors contributed equally to the work

**Corresponding author email: guangjun61@sina.com.

Table 3 Summary of RNA-seq data and mapping statistics on the reference genome

Sample	HQ Clean Data (bp)	HQ Clean Reads	Q30 %	GC %	Reads Num. after filtered rRNA	Mapping Ratio %	Known Gene Num.
W6203-1	11300506106	76169578	94.24	54.61	72665108	84.18	25242
W6203-2	8148068869	55160382	89.49	54.22	53297408	78.40	24332
W6203-3	8696052450	59056872	88.80	54.23	56556802	77.95	24381
W3203-1	10053674119	67735144	94.02	55.13	66424844	85.62	24914
W3203-2	12056776812	81251036	93.79	55.37	77712124	85.50	24998
W3203-3	10802879693	72757552	94.13	55.34	69307686	86.56	24860
W106B-1	8981285607	60551516	93.42	54.86	58516764	85.80	24432
W106B-2	9178862093	61853502	93.56	54.30	59283840	85.60	24998
W106B-3	10191169486	68587864	94.28	55.28	66087670	86.30	24856
Y6203-1	11823055437	79781008	93.63	54.08	58017758	83.11	24306
Y6203-2	7671360039	51701644	93.44	54.50	49284946	84.42	25367
Y6203-3	10012576488	67501494	93.68	54.64	63490854	84.69	26083
Y3203-1	12092508354	81491078	93.97	55.91	75947322	85.77	24714
Y3203-2	8408234170	56695606	93.76	55.75	53715170	86.32	24632
Y3203-3	12809600876	86341206	93.75	55.52	82817144	86.61	25311

Y106B-1	11842407174	79770932	93.91	54.85	72457558	85.93	25471
Y106B-2	11178089278	75285346	94.13	54.54	72157014	86.16	25152
Y106B-3	9239609465	62259138	93.91	55.32	59810178	85.70	25016
S6203-1	10730388792	72360936	94.01	55.04	70317550	86.46	29388
S6203-2	9854289411	66464632	93.33	54.62	64489684	85.79	28987
S6203-3	11157621901	75302106	93.28	54.50	73003714	85.92	29462
S3203-1	8972285496	60796168	91.28	54.12	58865464	82.89	28069
S3203-2	8262342135	56020796	90.58	54.71	54750640	81.95	28069
S3203-3	9285781818	63078348	90.14	54.09	61742454	81.16	28145
S106B-1	8869336543	60144702	90.73	54.48	58922058	81.73	28940
S106B-2	10886785432	73975418	90.12	55.22	71669314	80.26	28429
S106B-3	9447720271	63963906	91.14	54.93	61909592	82.37	28588
H6203-1	8029426229	54619306	89.72	54.60	51226864	78.17	25300
H6203-2	7569385291	51355174	90.09	54.34	49506816	79.12	24753
H6203-3	13645344281	92035562	93.84	54.59	87451782	84.14	26178
H3203-1	6505425062	43888162	91.83	56.65	42102810	84.02	23611
H3203-2	8895684668	60425686	89.88	54.94	58176950	79.98	24391
H3203-3	9518667597	64537372	90.45	54.77	62472786	80.86	24647
H106B-1	9811338647	66372186	89.97	54.83	64280094	80.75	25072
H106B-2	8279694311	56215400	90.13	54.51	53725478	79.14	24764
H106B-3	9576682256	64979914	90.18	54.66	61375856	79.19	25265
E6203-1	8683332115	58887944	90.56	54.10	56921326	79.35	27976
E6203-2	8642034305	58747182	88.25	52.68	56772730	77.59	27843
E6203-3	9093034449	61516102	91.25	54.41	59206698	81.40	28003
E3203-1	9426382278	63953574	90.43	54.59	62360898	80.43	28036
E3203-2	10154707165	68779518	91.08	55.23	66544724	81.54	27933
E3203-3	14817194758	101156682	89.88	55.28	97558562	79.23	28608
E106B-1	11487055944	78309042	89.66	54.22	75690020	78.39	28569
E106B-2	12661640296	85381398	94.03	54.72	82166340	84.79	28797
E106B-3	11395592924	76849592	93.88	55.51	74749264	84.79	28622
Mean	10003242019.8	67645949.02	91.99	54.77	64566903.51	82.80	26344.67
	0						
Max	14817194758	101156682	94.28	56.65	97558562.00	86.61	29462.00
Min	6505425062.0	43888162.0	88.25	52.68	42102810.00	77.59	23611.00