

**Selective sweep with significant positive selection serves as the driving force for the differentiation of *japonica* and *indica* rice cultivars**

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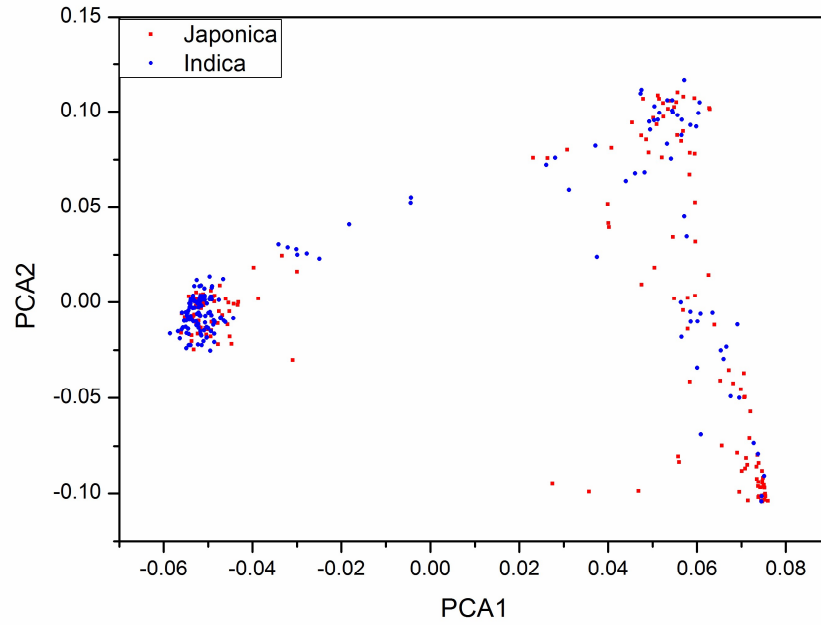
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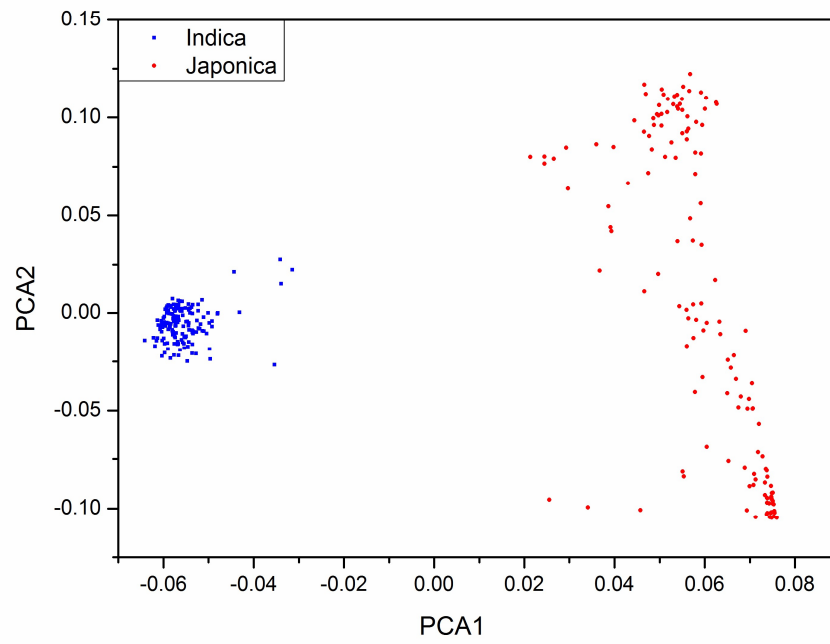
**Figure S1** PCA plots of the first two components before (a) and after

(b) sample selection.

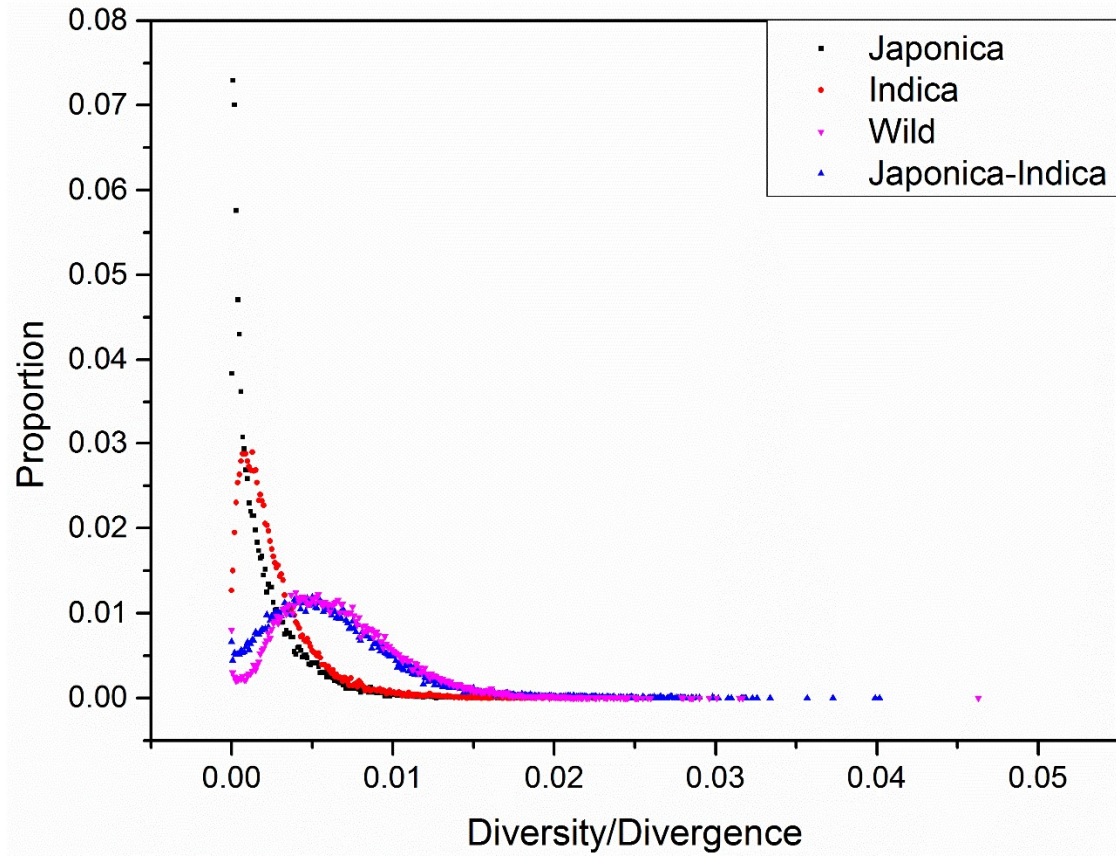
(a)



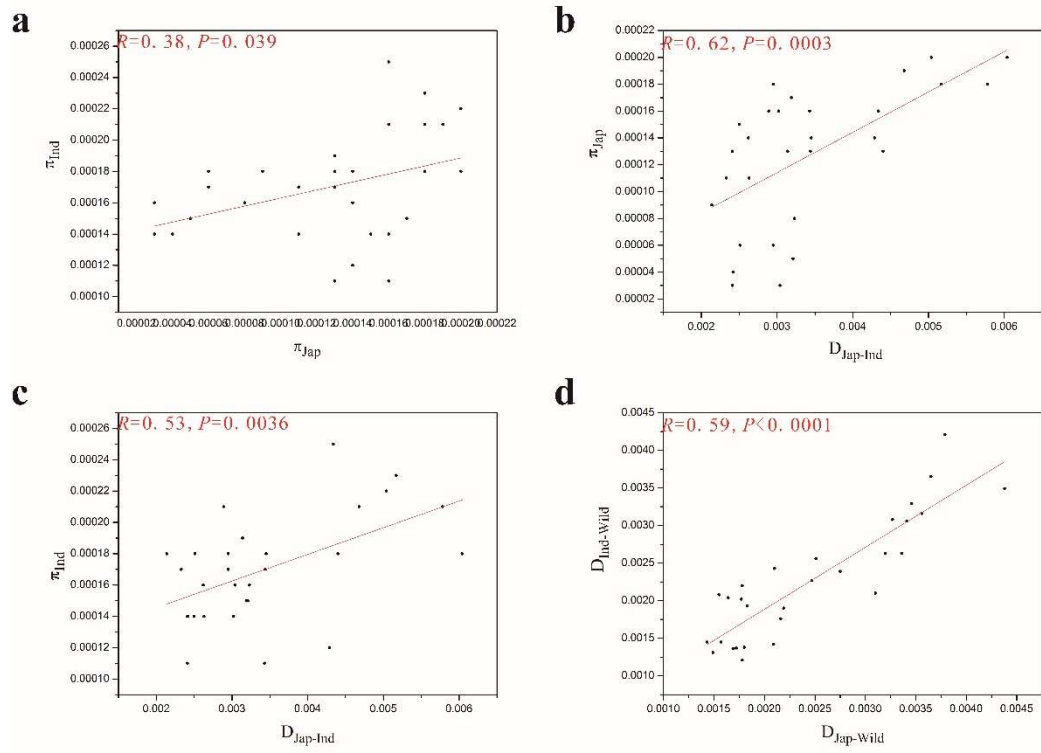
(b)



**Figure S2** The proportions of the genome-wide diversity within the groups of *japonica*, *indica* and wild rice and divergence between *japonica* and *indica* group.

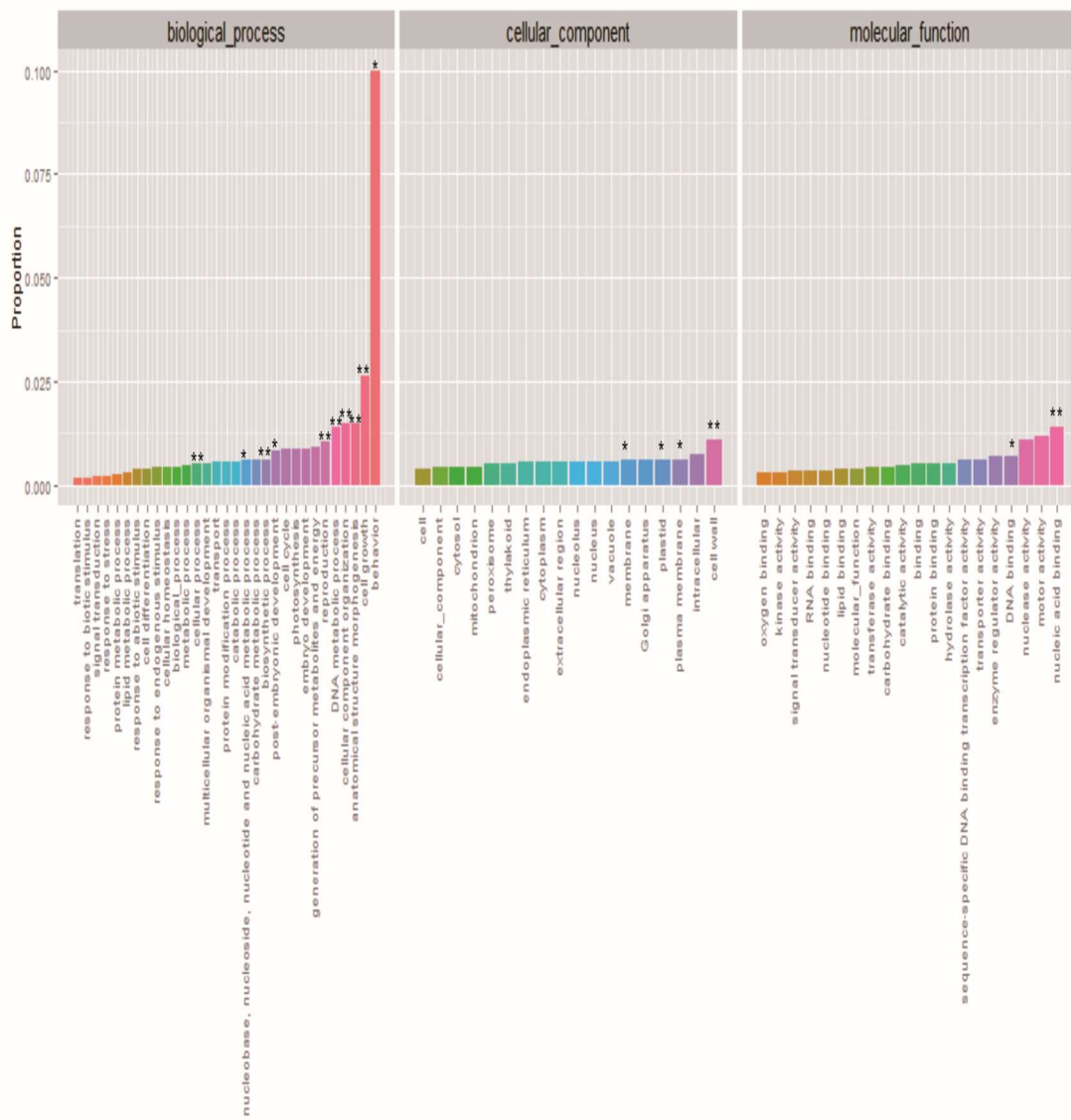


**Figure S3** Diversity/divergence relationship between rice groups. (a) Relationship of the diversity within *indica* vs. *japonica*; (b) Relationship of diversity within *japonica* vs. divergence between *indica* and *japonica*; (c) Relationship of diversity within *indica* vs. divergence between *indica* and *japonica*; (d) Relationship of divergence between  $D_{jap-wild}$  and  $D_{ind-wild}$ .



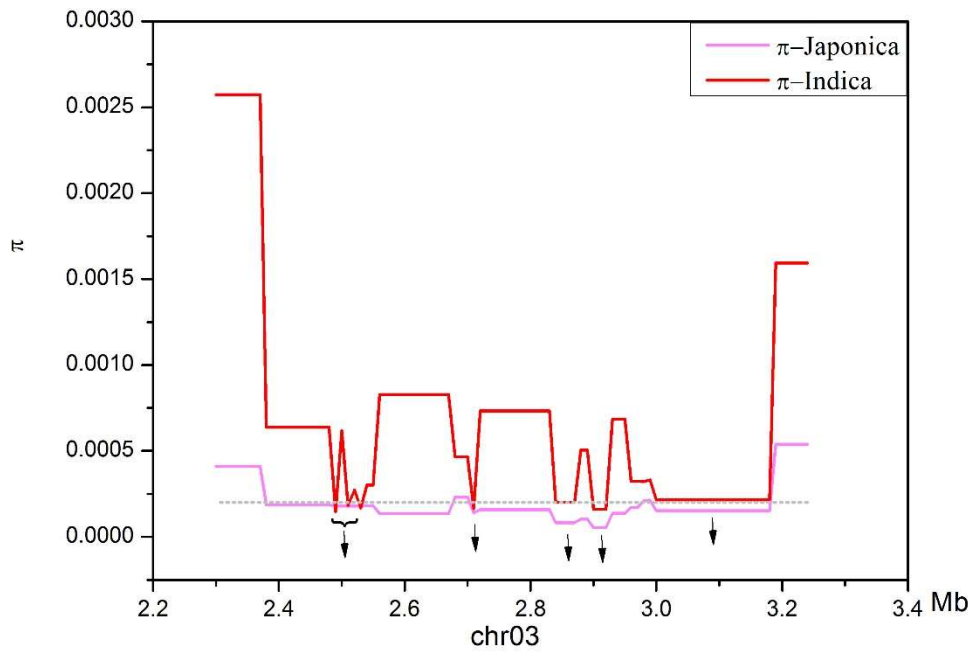
**Figure S4** GO statistic of the DR-I regions. The X-axis showed different GO functions and the Y-axis represents the proportion of the regional counts of selected GO function to the whole genome counts. Chi-square test was applied and \* stands for FDR<0.05 and \*\* stands for FDR<0.01.

The words in x-axis were short description of GO numbers. For instance, “Behavior” is the short description of GO:0007610, which means behavioral response to stimulus or behavior, behavioral response to stimulus. The same to **Supplementary Figure S5**.



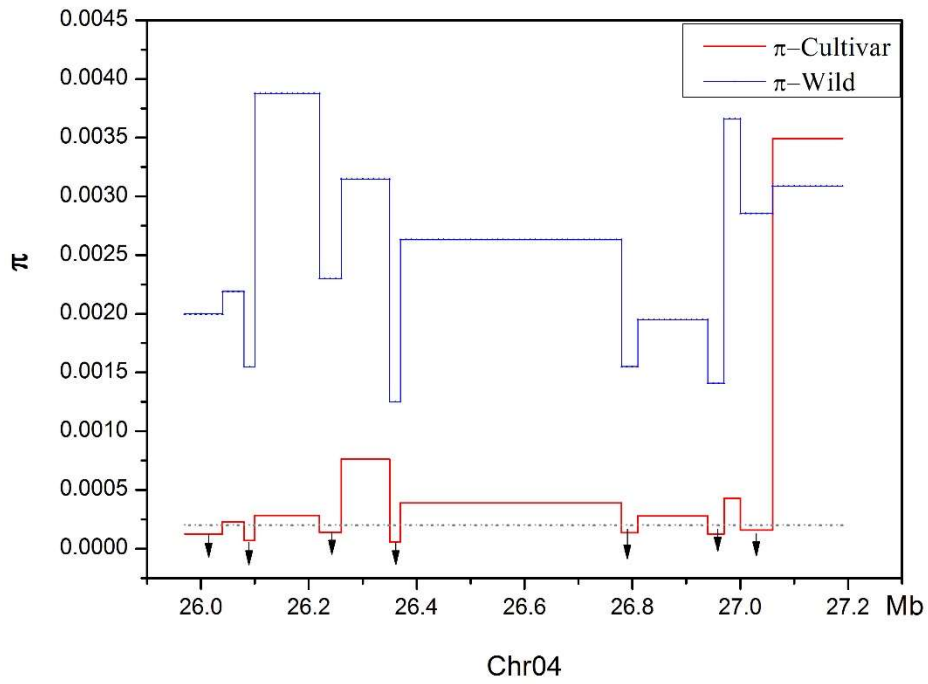


**Figure S6** Clustered DR-I regions in chr03. The arrows showed the selected DR-I regions in this research. The dotted line showed the value of  $\pi = 0.0002$ .



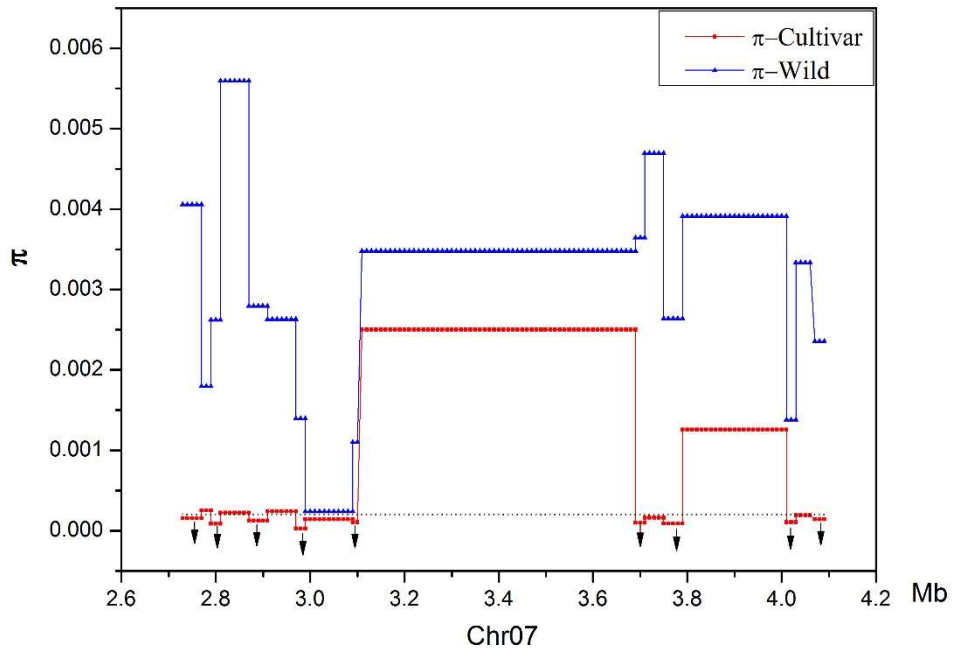
**Figure S7** Clustered regions of DR-II. Grey line represents the  $\pi$  value equals 0.0002. The arrows showed the selected regions. The dotted line showed the value of  $\pi= 0.0002$  (a) 7 regions clustered in chr04:26.0-27.1Mb. (b) Nine regions clustered in chr07:2.7-4.1Mb

(a)





(b)



**Table S1** List of 330 rice cultivars downloaded from the 3K-rice project. In this list, only 296 cultivars were used in this project and 34 cultivars were removed after diversity and PCA analysis.

<b>Sample ID</b>	<b>Variety Group</b>	<b>Area of origin</b>	<b>Depth</b>	<b>Coverage<sup>1</sup></b>
List of the 296 rice cultivars used in this project				
B001	Temperate_Japonica	China	27.59	0.94
B003	Temperate_Japonica	China	16.66	0.86
B005	Temperate_Japonica	Japan	17.06	0.91
B008	Temperate_Japonica	Vietnam	15.32	0.9
B012	Indica	India	24.14	0.86
B015	Indica	Romania	22.71	0.85
B016	Temperate_Japonica	Hungary	19.47	0.9
B017	Temperate_Japonica	Bulgaria	18.28	0.9
B018	Tropical_Japonica	United States	22.34	0.9
B023	Temperate_Japonica	North Korea	15.96	0.89
B026	Indica	Indonesia	22.79	0.85
B034	Temperate_Japonica	Albania	17.21	0.91
B036	Temperate_Japonica	Brazil	17.55	0.88
B043	Tropical_Japonica	Australia	15.23	0.87
B045	Temperate_Japonica	Japan	20.11	0.92
B046	Temperate_Japonica	Japan	19.53	0.92
B066	Temperate_Japonica	China	18.96	0.89
B070	Temperate_Japonica	China	20.76	0.89
B097	Indica	China	24.8	0.86
B100	Temperate_Japonica	China	17.35	0.89
B111	Temperate_Japonica	China	15.99	0.87
B143	Japonica	China	15.5	0.87
B160	Temperate_Japonica	China	22.43	0.9
B162	Temperate_Japonica	China	22.69	0.89
B167	Temperate_Japonica	North Korea	19.33	0.89
B182	Temperate_Japonica	Japan	24.85	0.9
B183	Temperate_Japonica	Japan	19.81	0.92
B190	Tropical_Japonica	Nigeria	21.76	0.88
B191	Tropical_Japonica	Australia	20.04	0.88
B196	Japonica	China	15.64	0.84
B204	Temperate_Japonica	China	27.22	0.91
B210	Indica	China	25.54	0.84
B212	Temperate_Japonica	China	23.95	0.89
B214	Indica	China	27.48	0.85
B218	Temperate_Japonica	China	16.62	0.89
B225	Temperate_Japonica	China	17.81	0.89

B226	Temperate_Japonica	China	19.01	0.89
B230	Temperate_Japonica	China	16.3	0.87
B241	Tropical_Japonica	China	16.54	0.87
B250	Temperate_Japonica	China	21.76	0.92
B258	Temperate_Japonica	China	16.52	0.88
B261	Indica	China	22.86	0.85
B264	Indica	China	28.91	0.86
B265	Indica	China	32.13	0.87
B266	Tropical_Japonica	China	15.28	0.86
B269	Temperate_Japonica	China	29.58	0.94
CX101	Indica	Taiwan	23.07	0.85
CX102	Indica	Taiwan	22.29	0.85
CX106	Tropical_Japonica	Vietnam	21.69	0.91
CX109	Japonica	Philippines	26.55	0.91
CX111	Tropical_Japonica	Egypt	20.8	0.9
CX138	Japonica	China	19.12	0.9
CX139	Japonica	Portugal	15.11	0.83
CX142	Temperate_Japonica	China	20.64	0.9
CX147	Indica	-	22.8	0.85
CX150	Indica	Philippines	21.94	0.84
CX152	Indica	-	23.49	0.85
CX154	Indica	Thailand	22.85	0.85
CX155	Indica	India	23.24	0.85
CX16	Temperate_Japonica	China	15.22	0.83
CX205	Japonica	Philippines	16.5	0.85
CX220	Tropical_Japonica	Brazil	22.5	0.9
CX225	Indica	Philippines	23.94	0.87
CX241	Japonica	Philippines	15.31	0.82
CX243	Japonica	Philippines	17.81	0.86
CX262	Japonica	China	19.83	0.88
CX269	Tropical_Japonica	Brazil	20.89	0.89
CX285	Japonica	China	18.86	0.89
CX3	Indica	Bangladesh	22.06	0.85
CX306	Temperate_Japonica	China	17.42	0.89
CX315	Temperate_Japonica	North Korea	16.94	0.88
CX329	Temperate_Japonica	China	15.02	0.88
CX353	Japonica	China	21.56	0.88
CX354	Temperate_Japonica	China	16.48	0.85
CX355	Japonica	China	20.03	0.86
CX383	Temperate_Japonica	China	19.57	0.91
CX389	Japonica	China	24.74	0.91
CX391	Temperate_Japonica	China	15.62	0.87
CX98	Indica	India	24.71	0.86

CX99	Indica	India	24.78	0.86
IRIS_313-10010	Indica	Fiji	23.45	0.86
IRIS_313-10097	Temperate_Japonica	South Korea	23.44	0.94
IRIS_313-10171	Indica	China	25.92	0.87
IRIS_313-10177	Indica	China	33.67	0.88
IRIS_313-10235	Indica	Philippines	23.59	0.87
IRIS_313-10440	Temperate_Japonica	Philippines	16.21	0.89
IRIS_313-10511	Indica	Philippines	22.7	0.86
IRIS_313-10541	Tropical_Japonica	Guinea-Bissau	17.03	0.89
IRIS_313-10563	Temperate_Japonica	-	17.68	0.9
IRIS_313-10564	Temperate_Japonica	Japan	16.71	0.93
IRIS_313-10570	Temperate_Japonica	Japan	15.37	0.91
IRIS_313-10577	Tropical_Japonica	Philippines	23.08	0.91
IRIS_313-10578	Tropical_Japonica	Philippines	17.57	0.88
IRIS_313-10582	Tropical_Japonica	Philippines	25.49	0.91
IRIS_313-10609	Indica	Sri Lanka	26.23	0.87
IRIS_313-10617	Temperate_Japonica	-	15.53	0.89
IRIS_313-10642	Temperate_Japonica	Japan	20.68	0.89
IRIS_313-10657	Tropical_Japonica	Laos	18.22	0.9
IRIS_313-10677	Temperate_Japonica	Japan	15.08	0.93
IRIS_313-10725	Indica	Senegal	21.03	0.86
IRIS_313-10744	Japonica	Indonesia	15.34	0.88
IRIS_313-10793	Tropical_Japonica	Indonesia	19.4	0.9
IRIS_313-10798	Tropical_Japonica	Indonesia	17.36	0.9
IRIS_313-10834	Tropical_Japonica	India	15.48	0.89
IRIS_313-10840	Temperate_Japonica	South Korea	16.47	0.92
IRIS_313-10857	Indica	India	26.16	0.87
IRIS_313-10858	Indica	India	33.15	0.89
IRIS_313-10863	Indica	India	26.42	0.87
IRIS_313-10870	Tropical_Japonica	India	22.13	0.91
IRIS_313-10872	Japonica	India	24.86	0.93
IRIS_313-10916	Temperate_Japonica	Cambodia	15.67	0.9
IRIS_313-10918	Japonica	Philippines	26.15	0.92
IRIS_313-10923	Tropical_Japonica	Thailand	16.02	0.88
IRIS_313-10960	Tropical_Japonica	Indonesia	15.86	0.87
IRIS_313-10975	Indica	Bangladesh	25.31	0.87
IRIS_313-10986	Indica	Bangladesh	25.61	0.87
IRIS_313-10994	Japonica	Philippines	16.33	0.87
IRIS_313-10999	Tropical_Japonica	Indonesia	16.05	0.87
IRIS_313-11044	Japonica	Malaysia	21.67	0.91
IRIS_313-11046	Japonica	Malaysia	25.16	0.91
IRIS_313-11083	Indica	Laos	27.82	0.87
IRIS_313-11085	Indica	Laos	24.58	0.87

IRIS_313-11089	Indica	Cambodia	27.17	0.87
IRIS_313-11094	Tropical_Japonica	Laos	22.27	0.91
IRIS_313-11097	Indica	Philippines	27.54	0.88
IRIS_313-11102	Tropical_Japonica	Liberia	29.31	0.92
IRIS_313-11103	Tropical_Japonica	Liberia	24.61	0.92
IRIS_313-11104	Tropical_Japonica	Liberia	20.66	0.91
IRIS_313-11113	Indica	Bangladesh	24.21	0.87
IRIS_313-11118	Indica	Vietnam	25.09	0.87
IRIS_313-11151	Indica	Myanmar	24.4	0.86
IRIS_313-11202	Temperate_Japonica	China	22.88	0.93
IRIS_313-11205	Indica	Bangladesh	23.75	0.85
IRIS_313-11229	Indica	Bangladesh	22.28	0.86
IRIS_313-11234	Indica	Philippines	27.39	0.87
IRIS_313-11238	Tropical_Japonica	Brazil	20.1	0.9
IRIS_313-11239	Indica	Indonesia	28.31	0.88
IRIS_313-11241	Indica	Bangladesh	27.5	0.87
IRIS_313-11242	Indica	India	29.14	0.89
IRIS_313-11244	Indica	India	25.16	0.87
IRIS_313-11245	Indica	India	24.95	0.87
IRIS_313-11247	Indica	India	24.76	0.86
IRIS_313-11251	Indica	Philippines	24.18	0.86
IRIS_313-11253	Indica	Suriname	22.74	0.87
IRIS_313-11256	Indica	India	22.4	0.86
IRIS_313-11260	Indica	India	27.75	0.89
IRIS_313-11263	Indica	India	25.87	0.87
IRIS_313-11266	Indica	India	25.19	0.87
IRIS_313-11267	Indica	India	26.14	0.87
IRIS_313-11273	Indica	India	30.95	0.87
IRIS_313-11279	Indica	India	29.31	0.89
IRIS_313-11395	Indica	Indonesia	22.28	0.86
IRIS_313-11642	Indica	India	24.3	0.87
IRIS_313-11643	Indica	India	34.37	0.88
IRIS_313-11644	Indica	India	28.87	0.88
IRIS_313-11645	Indica	India	34.39	0.88
IRIS_313-11646	Indica	India	35.29	0.88
IRIS_313-11648	Indica	India	26.98	0.87
IRIS_313-11651	Temperate_Japonica	China	33.15	0.96
IRIS_313-11652	Temperate_Japonica	China	26.9	0.93
IRIS_313-11656	Indica	Indonesia	34.74	0.88
IRIS_313-11659	Tropical_Japonica	Sierra Leone	25.83	0.92
IRIS_313-11663	Indica	Zimbabwe	30.14	0.88
IRIS_313-11664	Indica	China	38.39	0.89
IRIS_313-11665	Indica	China	36.32	0.89

IRIS_313-11667	Indica	China	23.62	0.87
IRIS_313-11668	Indica	China	36.08	0.89
IRIS_313-11669	Indica	China	51.09	0.91
IRIS_313-11677	Indica	Thailand	25.01	0.87
IRIS_313-11681	Indica	Thailand	34.8	0.88
IRIS_313-11683	Indica	Thailand	33.38	0.88
IRIS_313-11684	Indica	Thailand	27.42	0.87
IRIS_313-11685	Indica	Thailand	30.53	0.88
IRIS_313-11686	Indica	Thailand	34.35	0.89
IRIS_313-11687	Indica	Thailand	31.7	0.88
IRIS_313-11692	Indica	Taiwan	28.46	0.88
IRIS_313-11700	Indica	Thailand	30.55	0.88
IRIS_313-11704	Indica	Thailand	26.91	0.87
IRIS_313-11705	Indica	Thailand	29.11	0.88
IRIS_313-11707	Indica	Thailand	26.99	0.88
IRIS_313-11708	Indica	Thailand	26.81	0.88
IRIS_313-11709	Indica	Thailand	28.74	0.88
IRIS_313-11710	Indica	Thailand	34.09	0.89
IRIS_313-11716	Indica	Guinea	25.47	0.87
IRIS_313-11717	Indica	Indonesia	34.52	0.88
IRIS_313-11719	Indica	Thailand	28.36	0.88
IRIS_313-11720	Indica	Thailand	25.39	0.87
IRIS_313-11721	Indica	Thailand	27.9	0.88
IRIS_313-11722	Indica	Bangladesh	36.38	0.89
IRIS_313-11723	Indica	Guinea	40.18	0.89
IRIS_313-11727	Indica	China	31.55	0.89
IRIS_313-11728	Indica	China	30.78	0.88
IRIS_313-11730	Indica	China	32.66	0.89
IRIS_313-11731	Indica	China	33.69	0.89
IRIS_313-11732	Indica	China	24.46	0.88
IRIS_313-11733	Indica	China	21.76	0.87
IRIS_313-11734	Indica	China	24.18	0.87
IRIS_313-11740	Indica	Ghana	32.57	0.89
IRIS_313-11744	Indica	China	31	0.89
IRIS_313-11745	Indica	China	31.86	0.89
IRIS_313-11746	Indica	China	28.84	0.88
IRIS_313-11748	Indica	China	27.86	0.88
IRIS_313-11750	Indica	China	26.81	0.88
IRIS_313-11751	Indica	China	23.45	0.87
IRIS_313-11752	Indica	China	31.61	0.88
IRIS_313-11755	Tropical Japonica	Liberia	32.33	0.93
IRIS_313-11757	Indica	Madagascar	23.71	0.87
IRIS_313-11760	Indica	Madagascar	26.04	0.88

IRIS_313-11761	Indica	Ivory Coast	30.32	0.88
IRIS_313-11762	Indica	Madagascar	27.46	0.88
IRIS_313-11786	Indica	Gambia	31.14	0.87
IRIS_313-11787	Indica	Gambia	21.9	0.85
IRIS_313-11791	Indica	Madagascar	32.25	0.89
IRIS_313-11795	Indica	China	28.3	0.87
IRIS_313-11797	Indica	China	31.86	0.88
IRIS_313-11798	Indica	China	26.52	0.87
IRIS_313-11799	Indica	China	23.45	0.87
IRIS_313-11800	Temperate_Japonica	China	38.45	0.96
IRIS_313-11801	Indica	China	43.1	0.89
IRIS_313-11804	Indica	China	33.06	0.88
IRIS_313-11805	Indica	China	36.96	0.89
IRIS_313-11806	Indica	China	22.04	0.86
IRIS_313-11811	Indica	Kenya	28.06	0.87
IRIS_313-11812	Indica	Kenya	41.86	0.89
IRIS_313-11813	Indica	Kenya	26.96	0.87
IRIS_313-11814	Indica	Kenya	28.41	0.87
IRIS_313-11815	Indica	Kenya	29.2	0.88
IRIS_313-11816	Indica	Myanmar	21.53	0.86
IRIS_313-11817	Indica	Myanmar	29.24	0.89
IRIS_313-11819	Indica	Myanmar	33.9	0.88
IRIS_313-11820	Indica	Myanmar	26.41	0.87
IRIS_313-11821	Indica	India	35.56	0.88
IRIS_313-11822	Indica	India	25.35	0.87
IRIS_313-11823	Indica	India	29.28	0.88
IRIS_313-11900	Tropical_Japonica	Thailand	23.63	0.92
IRIS_313-11924	Tropical_Japonica	Thailand	16.18	0.9
IRIS_313-11929	Tropical_Japonica	Philippines	20.51	0.92
IRIS_313-11994	Tropical_Japonica	Philippines	18.14	0.9
IRIS_313-12045	Tropical_Japonica	Indonesia	15.33	0.88
IRIS_313-12058	Indica	Cambodia	26.57	0.88
IRIS_313-12060	Temperate_Japonica	China	19.58	0.92
IRIS_313-12061	Temperate_Japonica	China	17.51	0.92
IRIS_313-12108	Tropical_Japonica	Malaysia	15.59	0.89
IRIS_313-12129	Tropical_Japonica	Laos	16.04	0.9
IRIS_313-12164	Tropical_Japonica	Cambodia	17.4	0.9
IRIS_313-12228	Tropical_Japonica	Laos	19.23	0.91
IRIS_313-12281	Tropical_Japonica	Madagascar	15.6	0.89
IRIS_313-12321	Tropical_Japonica	Laos	15.06	0.87
IRIS_313-12323	Tropical_Japonica	Laos	15.94	0.89
IRIS_313-12349	Tropical_Japonica	Laos	19.97	0.91
IRIS_313-12351	Tropical_Japonica	Laos	15.49	0.88

IRIS_313-7876	Tropical_Japonica	Philippines	16.11	0.9
IRIS_313-7883	Tropical_Japonica	Indonesia	20.09	0.91
IRIS_313-7902	Tropical_Japonica	Philippines	21.4	0.91
IRIS_313-7909	Tropical_Japonica	Philippines	17.99	0.9
IRIS_313-7914	Japonica	Ivory Coast	23.98	0.91
IRIS_313-7924	Japonica	Bolivia	15.94	0.88
IRIS_313-7933	Tropical_Japonica	Nepal	16.95	0.88
IRIS_313-7994	Japonica	Madagascar	16.68	0.9
IRIS_313-8010	Tropical_Japonica	Philippines	18.43	0.9
IRIS_313-8074	Temperate_Japonica	Australia	15.15	0.89
IRIS_313-8085	Temperate_Japonica	Spain	15.19	0.91
IRIS_313-8118	Temperate_Japonica	Portugal	15.42	0.91
IRIS_313-8119	Temperate_Japonica	Bulgaria	16.99	0.93
IRIS_313-8123	Temperate_Japonica	Portugal	15.35	0.9
IRIS_313-8127	Temperate_Japonica	Bulgaria	16.01	0.92
IRIS_313-8151	Temperate_Japonica	Portugal	19.45	0.93
IRIS_313-8173	Temperate_Japonica	United States	20.32	0.9
IRIS_313-8177	Temperate_Japonica	Italy	15.13	0.91
IRIS_313-8305	Indica	India	25.68	0.87
IRIS_313-8312	Indica	Malaysia	25.78	0.87
IRIS_313-8323	Japonica	United States	17.12	0.91
IRIS_313-8356	Temperate_Japonica	Philippines	17.14	0.89
IRIS_313-8381	Tropical_Japonica	Malaysia	15.17	0.9
IRIS_313-8391	Indica	Burkina Fasso	32.53	0.88
IRIS_313-8407	Indica	Malaysia	22.61	0.86
IRIS_313-8436	Tropical_Japonica	Indonesia	17.43	0.9
IRIS_313-8493	Indica	Indonesia	33.37	0.88
IRIS_313-8606	Indica	-	21.2	0.86
IRIS_313-8627	Temperate_Japonica	United States	15.08	0.9
IRIS_313-8703	Indica	Bangladesh	27.53	0.87
IRIS_313-8768	Tropical_Japonica	Ivory Coast	17.27	0.9
IRIS_313-8925	Indica	Sri Lanka	25.15	0.87
IRIS_313-8930	Indica	Bangladesh	22.89	0.86
IRIS_313-8948	Indica	Philippines	28.36	0.88
IRIS_313-9020	Indica	Thailand	27.96	0.87
IRIS_313-9023	Indica	India	25.66	0.87
IRIS_313-9066	Indica	Bangladesh	33.64	0.9
IRIS_313-9148	Indica	Bangladesh	26.98	0.87
IRIS_313-9262	Indica	Bangladesh	24.49	0.86
IRIS_313-9294	Indica	Gambia	29.43	0.88
IRIS_313-9379	Temperate_Japonica	South Korea	18.33	0.93
IRIS_313-9409	Indica	Malaysia	22.38	0.87
IRIS_313-9470	Tropical_Japonica	Indonesia	18.78	0.91



IRIS_313-9590	Indica	Indonesia	22.1	0.87
IRIS_313-9790	Temperate_Japonica	Uruguay	15.96	0.92
List of the 34 removed cultivars after PCA analysis				
IRIS_313-10114	Indica	Burundi	27.45	0.88
IRIS_313-11467	Temperate_Japonica	Philippines	16.62	0.84
IRIS_313-11493	Tropical_Japonica	India	23.23	0.86
IRIS_313-11622	Tropical_Japonica	China	15.71	0.84
IRIS_313-11657	Tropical_Japonica	Nigeria	33.93	0.88
IRIS_313-11671	Temperate_Japonica	Nepal	42.84	0.89
IRIS_313-11673	Indica	Philippines	33.32	0.93
IRIS_313-11674	Tropical_Japonica	Thailand	27.67	0.88
IRIS_313-11691	Indica	Bhutan	31.45	0.93
IRIS_313-11706	Temperate_Japonica	Thailand	17.16	0.85
IRIS_313-11724	Temperate_Japonica	Guinea	24.29	0.87
IRIS_313-11725	Indica	Japan	32.64	0.97
IRIS_313-11737	Indica	India	30.84	0.89
IRIS_313-11738	Tropical_Japonica	India	28.5	0.88
IRIS_313-11739	Indica	Ghana	22.37	0.92
IRIS_313-11747	Temperate_Japonica	China	26.56	0.88
IRIS_313-11754	Tropical_Japonica	Madagascar	32.66	0.91
IRIS_313-11758	Tropical_Japonica	Ivory Coast	26.23	0.88
IRIS_313-11759	Indica	Ivory Coast	32.78	0.93
IRIS_313-11789	Japonica	Madagascar	31.67	0.88
IRIS_313-11790	Indica	Madagascar	30.49	0.91
IRIS_313-11794	Tropical_Japonica	Madagascar	35.43	0.88
IRIS_313-11796	Tropical_Japonica	China	40.97	0.89
IRIS_313-11802	Temperate_Japonica	China	47.52	0.9
IRIS_313-11809	Indica	Kenya	28.36	0.88
IRIS_313-11810	Tropical_Japonica	Kenya	30.31	0.88
IRIS_313-11833	Tropical_Japonica	Thailand	15.74	0.83
IRIS_313-7646	Tropical_Japonica	Madagascar	18.6	0.88
IRIS_313-7719	Temperate_Japonica	Mali	16.46	0.84
IRIS_313-7725	Temperate_Japonica	Madagascar	16.94	0.85
IRIS_313-7911	Tropical_Japonica	Philippines	17.34	0.84
IRIS_313-8864	Indica	Bangladesh	23.67	0.86
IRIS_313-8911	Tropical_Japonica	Thailand	23.95	0.91
IRIS_313-9160	Temperate_Japonica	Senegal	21.46	0.86

**Supplementary Table S2** PCA value for 296 selected samples.

<b>Sub_Group</b>	<b>Sample</b>	<b>PCA1</b>	<b>PCA2</b>
Temperate_Japonica	B001	0.0553578	-0.0837806
Temperate_Japonica	B003	0.0592979	0.0350484
Temperate_Japonica	B005	0.0750891	-0.0975059
Temperate_Japonica	B008	0.0749498	-0.101776
Indica	B012	-0.0431574	0.000278129
Indica	B015	-0.0545468	-0.0173855
Temperate_Japonica	B016	0.070508	-0.0361586
Temperate_Japonica	B017	0.0699643	-0.0886601
Tropical_Japonica	B018	0.0504925	0.114348
Temperate_Japonica	B023	0.055117	-0.0812428
Indica	B026	-0.049645	-0.0238813
Temperate_Japonica	B034	0.0738901	-0.0839482
Temperate_Japonica	B036	0.0578947	0.0713944
Tropical_Japonica	B043	0.0552332	0.115686
Temperate_Japonica	B045	0.074704	-0.102007
Temperate_Japonica	B046	0.0747984	-0.0952057
Temperate_Japonica	B066	0.0708003	-0.0881505
Temperate_Japonica	B070	0.0591536	0.0562264
Indica	B097	-0.0497525	-0.0185254
Temperate_Japonica	B100	0.0709517	-0.0824973
Temperate_Japonica	B111	0.0652985	-0.0760201
Japonica	B143	0.0255563	-0.0955038
Temperate_Japonica	B160	0.0753173	-0.0978473
Temperate_Japonica	B162	0.0751332	-0.10188
Temperate_Japonica	B167	0.074432	-0.104502
Temperate_Japonica	B182	0.0748908	-0.0921166
Temperate_Japonica	B183	0.0738378	-0.094511
Tropical_Japonica	B190	0.0509228	0.111715
Tropical_Japonica	B191	0.0482655	0.083739
Japonica	B196	0.0560336	0.0887642
Temperate_Japonica	B204	0.0735831	-0.080097
Indica	B210	-0.0479426	5.96E-05
Temperate_Japonica	B212	0.0457753	-0.100692
Indica	B214	-0.0542891	-0.00868509
Temperate_Japonica	B218	0.0733802	-0.0931084
Temperate_Japonica	B225	0.0688635	-0.0794412
Temperate_Japonica	B226	0.0747116	-0.0884803
Temperate_Japonica	B230	0.0650246	-0.0412826
Tropical_Japonica	B241	0.0592478	0.0048033
Temperate_Japonica	B250	0.0742912	-0.0973654

Temperate_Japonica	B258	0.0707044	-0.0490536
Indica	B261	-0.0504085	-0.0105025
Indica	B264	-0.0527654	-0.0209963
Indica	B265	-0.053564	-0.00983598
Tropical_Japonica	B266	0.0574943	-0.0128502
Temperate_Japonica	B269	0.075096	-0.0961585
Indica	CX101	-0.052692	-0.00968679
Indica	CX102	-0.0585018	-0.00688339
Tropical_Japonica	CX106	0.0518399	0.109328
Japonica	CX109	0.039157	0.0440516
Tropical_Japonica	CX111	0.0565908	0.113508
Japonica	CX138	0.0712546	-0.0852525
Japonica	CX139	0.0393394	0.0419352
Temperate_Japonica	CX142	0.0623598	0.016713
Indica	CX147	-0.0571931	-0.0101755
Indica	CX150	-0.0615407	-0.0142942
Indica	CX152	-0.0589525	-0.0185201
Indica	CX154	-0.0549844	-0.0119224
Indica	CX155	-0.0572223	-0.00175081
Temperate_Japonica	CX16	0.0712759	-0.104451
Japonica	CX205	0.0539653	0.0368337
Tropical_Japonica	CX220	0.0592047	0.112758
Indica	CX225	-0.0544563	-0.00642995
Japonica	CX241	0.0545365	0.106818
Japonica	CX243	0.0293221	0.084679
Japonica	CX262	0.0517174	0.10262
Tropical_Japonica	CX269	0.0549607	0.109422
Japonica	CX285	0.0550781	0.091974
Indica	CX3	-0.0579651	-0.00944154
Temperate_Japonica	CX306	0.0759967	-0.1048
Temperate_Japonica	CX315	0.0737345	-0.102959
Temperate_Japonica	CX329	0.0754838	-0.102174
Japonica	CX353	0.0669716	-0.0340765
Temperate_Japonica	CX354	0.0578832	-0.0406425
Japonica	CX355	0.0213718	0.0799854
Temperate_Japonica	CX383	0.0718264	-0.0714697
Japonica	CX389_Jinyuan85	0.034133	-0.099428
Temperate_Japonica	CX391	0.0679922	-0.0430324
Indica	CX98	-0.0543558	0.00193439
Indica	CX99	-0.0523137	0.00432207
Indica	IRIS_313-10010	-0.0566857	0.00225119
Temperate_Japonica	IRIS_313-10097	0.0754002	-0.101133
Indica	IRIS_313-10171	-0.0498145	-0.00506118

Indica	IRIS_313-10177	-0.0517861	-0.00576283
Indica	IRIS_313-10235	-0.0580359	-0.00863341
Temperate_Japonica	IRIS_313-10440	0.0693499	-0.100843
Indica	IRIS_313-10511	-0.0558787	0.0021948
Tropical_Japonica	IRIS_313-10541	0.0530303	0.106566
Temperate_Japonica	IRIS_313-10563	0.0720384	-0.0568305
Temperate_Japonica	IRIS_313-10564	0.0747998	-0.104762
Temperate_Japonica	IRIS_313-10570	0.0747346	-0.0939483
Tropical_Japonica	IRIS_313-10577	0.059167	0.0817225
Tropical_Japonica	IRIS_313-10578	0.0469837	0.111994
Tropical_Japonica	IRIS_313-10582	0.0579513	0.082165
Indica	IRIS_313-10609	-0.0492196	-0.00412033
Temperate_Japonica	IRIS_313-10617	0.0733428	-0.0868989
Temperate_Japonica	IRIS_313-10642	0.0752672	-0.104135
Tropical_Japonica	IRIS_313-10657	0.0543453	0.0033344
Temperate_Japonica	IRIS_313-10677	0.0748161	-0.0949095
Indica	IRIS_313-10725	-0.0576939	0.00201877
Japonica	IRIS_313-10744	0.038653	0.0546729
Tropical_Japonica	IRIS_313-10793	0.039814	0.0850117
Tropical_Japonica	IRIS_313-10798	0.0564092	0.0943033
Tropical_Japonica	IRIS_313-10834	0.0634921	-0.0108094
Temperate_Japonica	IRIS_313-10840	0.0738903	-0.0947345
Indica	IRIS_313-10857	-0.0339276	0.0148662
Indica	IRIS_313-10858	-0.0535259	-0.000338279
Indica	IRIS_313-10863	-0.060035	-0.00666279
Tropical_Japonica	IRIS_313-10870	0.0497054	0.0197686
Japonica	IRIS_313-10872	0.0466302	0.0109735
Temperate_Japonica	IRIS_313-10916	0.0705913	-0.0491109
Japonica	IRIS_313-10918	0.0244849	0.080219
Tropical_Japonica	IRIS_313-10923	0.0563629	-0.00279744
Tropical_Japonica	IRIS_313-10960	0.0465452	0.092643
Indica	IRIS_313-10975	-0.0537634	0.00288543
Indica	IRIS_313-10986	-0.0566879	-0.00228256
Japonica	IRIS_313-10994	0.0444462	0.0984275
Tropical_Japonica	IRIS_313-10999	0.0494433	0.101523
Japonica	IRIS_313-11044	0.0512647	0.0799389
Japonica	IRIS_313-11046	0.047706	0.0905509
Indica	IRIS_313-11083	-0.0574042	0.000838275
Indica	IRIS_313-11085	-0.0525579	-0.00387102
Indica	IRIS_313-11089	-0.0583459	-0.00553949
Tropical_Japonica	IRIS_313-11094	0.0574754	0.00432671
Indica	IRIS_313-11097	-0.0443356	0.0207926
Tropical_Japonica	IRIS_313-11102	0.0532991	0.110689

Tropical_Japonica	IRIS_313-11103	0.0625508	0.107482
Tropical_Japonica	IRIS_313-11104	0.0626754	0.106698
Indica	IRIS_313-11113	-0.0558971	0.000926141
Indica	IRIS_313-11118	-0.0606789	-0.00669655
Indica	IRIS_313-11151	-0.0591317	-0.0155124
Temperate_Japonica	IRIS_313-11202	0.0738187	-0.0970006
Indica	IRIS_313-11205	-0.0578238	-0.00293588
Indica	IRIS_313-11229	-0.057753	-0.00159541
Indica	IRIS_313-11234	-0.0560742	0.000871283
Tropical_Japonica	IRIS_313-11238	0.05046	0.0958324
Indica	IRIS_313-11239	-0.0557351	-0.0107224
Indica	IRIS_313-11241	-0.0574763	-0.0118873
Indica	IRIS_313-11242	-0.0565461	-0.00366094
Indica	IRIS_313-11244	-0.0575098	-0.0104994
Indica	IRIS_313-11245	-0.0588548	-0.00520839
Indica	IRIS_313-11247	-0.0575922	-0.0157561
Indica	IRIS_313-11251	-0.0584455	-0.0233533
Indica	IRIS_313-11253	-0.0479907	-0.000537322
Indica	IRIS_313-11256	-0.057312	-0.00232463
Indica	IRIS_313-11260	-0.0568442	-0.0147387
Indica	IRIS_313-11263	-0.0353847	-0.0267939
Indica	IRIS_313-11266	-0.053478	0.00415034
Indica	IRIS_313-11267	-0.0579543	-0.000702487
Indica	IRIS_313-11273	-0.0611082	-0.00626245
Indica	IRIS_313-11279	-0.0501163	-1.04E-05
Indica	IRIS_313-11395	-0.0586061	-0.00680274
Indica	IRIS_313-11642	-0.0561615	0.00135012
Indica	IRIS_313-11643	-0.0556942	-0.0150073
Indica	IRIS_313-11644	-0.0510652	-0.00212366
Indica	IRIS_313-11645	-0.0561029	0.000853498
Indica	IRIS_313-11646	-0.0577142	0.00428712
Indica	IRIS_313-11648	-0.0593358	0.00257624
Temperate_Japonica	IRIS_313-11651	0.0698197	-0.0442622
Temperate_Japonica	IRIS_313-11652	0.0738707	-0.102249
Indica	IRIS_313-11656	-0.0597251	-0.0206218
Tropical_Japonica	IRIS_313-11659	0.0600665	0.104283
Indica	IRIS_313-11663	-0.0514349	0.00659263
Indica	IRIS_313-11664	-0.0618472	-0.0170455
Indica	IRIS_313-11665	-0.0550648	-0.0125847
Indica	IRIS_313-11667	-0.0599328	-0.0129993
Indica	IRIS_313-11668	-0.0543781	-0.014806
Indica	IRIS_313-11669	-0.0513419	-0.00908779
Indica	IRIS_313-11677	-0.0562759	-0.0190649

Indica	IRIS_313-11681	-0.0603104	-0.00479548
Indica	IRIS_313-11683	-0.0599917	-0.00256723
Indica	IRIS_313-11684	-0.0591439	0.00333599
Indica	IRIS_313-11685	-0.0606937	-0.00833032
Indica	IRIS_313-11686	-0.0598586	-0.00636648
Indica	IRIS_313-11687	-0.0595985	0.00185354
Indica	IRIS_313-11692	-0.0576158	-0.0218039
Indica	IRIS_313-11700	-0.0577359	-0.00455133
Indica	IRIS_313-11704	-0.0602728	-0.0141233
Indica	IRIS_313-11705	-0.0568432	-0.00484979
Indica	IRIS_313-11707	-0.058911	0.00400947
Indica	IRIS_313-11708	-0.0573447	0.00141552
Indica	IRIS_313-11709	-0.0598309	-0.00460157
Indica	IRIS_313-11710	-0.0583017	0.00292871
Indica	IRIS_313-11716	-0.0492343	-0.00696437
Indica	IRIS_313-11717	-0.0621507	-0.0127407
Indica	IRIS_313-11719	-0.0592369	-0.00492915
Indica	IRIS_313-11720	-0.0612913	-0.00373235
Indica	IRIS_313-11721	-0.0595883	-0.00661976
Indica	IRIS_313-11722	-0.0578107	-0.00965476
Indica	IRIS_313-11723	-0.0566344	0.0022187
Indica	IRIS_313-11727	-0.053629	-0.00875838
Indica	IRIS_313-11728	-0.061288	-0.0128793
Indica	IRIS_313-11730	-0.055398	-0.0157837
Indica	IRIS_313-11731	-0.0573609	-0.0125102
Indica	IRIS_313-11732	-0.0553522	-0.0181653
Indica	IRIS_313-11733	-0.0509978	-0.00923126
Indica	IRIS_313-11734	-0.0578781	-0.0111842
Indica	IRIS_313-11740	-0.0589021	-0.00840543
Indica	IRIS_313-11744	-0.0521967	-0.00775826
Indica	IRIS_313-11745	-0.0534124	-0.010481
Indica	IRIS_313-11746	-0.0568462	-0.0161076
Indica	IRIS_313-11748	-0.0543389	-0.00514679
Indica	IRIS_313-11750	-0.0597162	-0.0157793
Indica	IRIS_313-11751	-0.0553875	-0.012217
Indica	IRIS_313-11752	-0.0566537	-0.0219159
Tropical_Japonica	IRIS_313-11755	0.0603581	0.10997
Indica	IRIS_313-11757	-0.056698	-0.0157651
Indica	IRIS_313-11760	-0.0579491	0.00719809
Indica	IRIS_313-11761	-0.0563424	0.00601944
Indica	IRIS_313-11762	-0.0567875	-0.00205294
Indica	IRIS_313-11786	-0.0604147	-0.00403758
Indica	IRIS_313-11787	-0.052267	0.00100423

Indica	IRIS_313-11791	-0.0314547	0.0218892
Indica	IRIS_313-11795	-0.05596	-0.0137011
Indica	IRIS_313-11797	-0.0519455	-0.00799381
Indica	IRIS_313-11798	-0.0547223	-0.00437122
Indica	IRIS_313-11799	-0.053409	-0.009285
Temperate_Japonica	IRIS_313-11800	0.0746104	-0.102219
Indica	IRIS_313-11801	-0.0603157	-0.0222415
Indica	IRIS_313-11804	-0.054683	-0.0249345
Indica	IRIS_313-11805	-0.0549679	-0.0044708
Indica	IRIS_313-11806	-0.0535828	-0.0160361
Indica	IRIS_313-11811	-0.0567326	0.00628478
Indica	IRIS_313-11812	-0.0572521	0.00254312
Indica	IRIS_313-11813	-0.0558333	0.00587243
Indica	IRIS_313-11814	-0.0582361	-0.000435592
Indica	IRIS_313-11815	-0.057031	0.00411998
Indica	IRIS_313-11816	-0.0572215	-0.00643219
Indica	IRIS_313-11817	-0.0555537	-0.00678458
Indica	IRIS_313-11819	-0.0641193	-0.0140953
Indica	IRIS_313-11820	-0.058612	-0.00742026
Indica	IRIS_313-11821	-0.0566843	-0.0018108
Indica	IRIS_313-11822	-0.0556755	-0.00118854
Indica	IRIS_313-11823	-0.0589058	0.00131304
Tropical_Japonica	IRIS_313-11900	0.0595196	-0.0330738
Tropical_Japonica	IRIS_313-11924	0.0651088	-0.0241984
Tropical_Japonica	IRIS_313-11929	0.0541067	0.104344
Tropical_Japonica	IRIS_313-11994	0.04663	0.11671
Tropical_Japonica	IRIS_313-12045	0.0550256	0.103727
Indica	IRIS_313-12058	-0.0592107	-7.18E-05
Temperate_Japonica	IRIS_313-12060	0.07373	-0.0806585
Temperate_Japonica	IRIS_313-12061	0.0751204	-0.0918919
Tropical_Japonica	IRIS_313-12108	0.0504326	0.101653
Tropical_Japonica	IRIS_313-12129	0.0559572	0.00157865
Tropical_Japonica	IRIS_313-12164	0.0474951	0.0718551
Tropical_Japonica	IRIS_313-12228	0.0604452	-0.00506658
Tropical_Japonica	IRIS_313-12281	0.0561766	0.100394
Tropical_Japonica	IRIS_313-12321	0.0596933	-0.0089248
Tropical_Japonica	IRIS_313-12323	0.058124	-0.00353759
Tropical_Japonica	IRIS_313-12349	0.063295	-0.00453674
Tropical_Japonica	IRIS_313-12351	0.0560225	-0.0170174
Tropical_Japonica	IRIS_313-7876	0.0485999	0.0994248
Tropical_Japonica	IRIS_313-7883	0.0535622	0.079601
Tropical_Japonica	IRIS_313-7902	0.0360053	0.08642
Tropical_Japonica	IRIS_313-7909	0.0245093	0.0765802

Japonica	IRIS_313-7914	0.0567871	0.122256
Japonica	IRIS_313-7924	0.0265791	0.0791213
Tropical_Japonica	IRIS_313-7933	0.0367327	0.0214813
Japonica	IRIS_313-7994	0.0538843	0.105356
Tropical_Japonica	IRIS_313-8010	0.0487738	0.0960284
Temperate_Japonica	IRIS_313-8074	0.0497948	0.100865
Temperate_Japonica	IRIS_313-8085	0.0690618	-0.00920522
Temperate_Japonica	IRIS_313-8118	0.0604798	-0.0689123
Temperate_Japonica	IRIS_313-8119	0.0674865	-0.0485043
Temperate_Japonica	IRIS_313-8123	0.0658046	-0.0282324
Temperate_Japonica	IRIS_313-8127	0.0694884	-0.0491367
Temperate_Japonica	IRIS_313-8151	0.0664929	-0.0219813
Temperate_Japonica	IRIS_313-8173	0.029693	0.0637315
Temperate_Japonica	IRIS_313-8177	0.0567926	0.0484628
Indica	IRIS_313-8305	-0.0562662	0.0012962
Indica	IRIS_313-8312	-0.054437	0.00452076
Japonica	IRIS_313-8323	0.0538997	0.111495
Temperate_Japonica	IRIS_313-8356	0.0594771	0.0960561
Tropical_Japonica	IRIS_313-8381	0.0581262	0.0976409
Indica	IRIS_313-8391	-0.0543319	0.0015152
Indica	IRIS_313-8407	-0.0586781	-0.000340163
Tropical_Japonica	IRIS_313-8436	0.0429839	0.0665321
Indica	IRIS_313-8493	-0.0601908	-0.00734127
Indica	IRIS_313-8606	-0.0550944	0.00249484
Temperate_Japonica	IRIS_313-8627	0.0560226	0.0927706
Indica	IRIS_313-8703	-0.0572143	-0.00371984
Tropical_Japonica	IRIS_313-8768	0.0498886	0.106088
Indica	IRIS_313-8925	-0.0540726	-8.05E-05
Indica	IRIS_313-8930	-0.0603432	-0.0096649
Indica	IRIS_313-8948	-0.0572042	-0.00518127
Indica	IRIS_313-9020	-0.0597627	-0.0019242
Indica	IRIS_313-9023	-0.0536344	-0.020832
Indica	IRIS_313-9066	-0.0341119	0.0277044
Indica	IRIS_313-9148	-0.0573562	-0.00666078
Indica	IRIS_313-9262	-0.0585375	0.00372362
Indica	IRIS_313-9294	-0.0541136	0.00224468
Temperate_Japonica	IRIS_313-9379	0.0728289	-0.0737546
Indica	IRIS_313-9409	-0.0574398	0.00187411
Tropical_Japonica	IRIS_313-9470	0.0526664	0.0873372
Indica	IRIS_313-9590	-0.0566248	0.00422653
Temperate_Japonica	IRIS_313-9790	0.0573546	0.0372686



**Supplementary Table S3** List of African cultivated rice (*O. glaberrima*) and wild rice (*O. rufipogon* and *O. nivara*) used to generate phylogenetic tree.

Sample ID	Data Source	Species	Origin Place	Depth	Coverage <sup>1</sup>
IRGC88812	Zhang et al.,2014	<i>O. nivara</i>	Laos	68.61	0.99
MV 89-80	Xu et al.,2011	<i>O. nivara</i>	Medinipur, India	18.55	0.96
HK 47	Xu et al.,2011	<i>O. nivara</i>	Madhya Pradesh, India	15.78	0.95
042/87/34	Xu et al.,2011	<i>O. nivara</i>	Dhoni, India	19.22	0.98
CA 97-053	Xu et al.,2011	<i>O. nivara</i>	Sopoir Tep, Cambodia	16.86	0.97
L 89-12	Xu et al.,2011	<i>O. nivara</i>	Vientiane, Laos	17.41	0.96
VOC4	Xu et al.,2011	<i>O. rufipogon</i>	Nepal	18.85	0.98
Yuan 3-9	Xu et al.,2011	<i>O. rufipogon</i>	Yunnan,China	13.57	0.94
DAL DHAN	Xu et al.,2011	<i>O. rufipogon</i>	Chakaria, Bangladesh	19.21	0.98
P46	Xu et al.,2011	<i>O. rufipogon</i>	Hainan, China, China	15.32	0.97
PADI PADIAN	Xu et al.,2011	<i>O. rufipogon</i>	Kromat Watu, Indonesia	17.32	0.96
W1943	Xu et al.,2011, Ohyanagi et al.,2016 and Yang et al., 2012	<i>O. rufipogon</i>	Jiangxi, China	20.8	0.97
W3105	Huang et al.,2012	<i>O. rufipogon</i>	India	40	0.86
W1559	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.35	0.06
W3072	Huang et al.,2012	<i>O. rufipogon</i>	Hainan, China	4.73	0.16
W1087	Huang et al.,2012	<i>O. rufipogon</i>	India	6.25	0.41
W1093	Huang et al.,2012	<i>O. rufipogon</i>	India	5.09	0.14
W1096	Huang et al.,2012	<i>O. rufipogon</i>	India	4.84	0.09
W1683	Huang et al.,2012	<i>O. rufipogon</i>	India	6.75	0.5
W2022	Huang et al.,2012	<i>O. rufipogon</i>	Indonesia	4.27	0.06
W2024	Huang et al.,2012	<i>O. rufipogon</i>	Indonesia	4.38	0.09
W0171	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	6.07	0.48
W1790	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	6.72	0.5
W1849	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	9.77	0.87
W1850	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.57	0.12
W1854	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.73	0.14
W1859	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.65	0.16
W1870	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.18	0.07
W1940	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	5.04	0.29
W2282	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	4.9	0.03
W1715	Huang et al.,2012	<i>O. rufipogon</i>	China	5.04	0.22
W2198	Huang et al.,2012	<i>O. rufipogon</i>	China	4.36	0.08
W3046	Huang et al.,2012	<i>O. rufipogon</i>	Guangdong, China	5.1	0.15
W3048	Huang et al.,2012	<i>O. rufipogon</i>	Guangxi, China	4.58	0.08
W3065	Huang et al.,2012	<i>O. rufipogon</i>	Hainan, China	4.02	0.08

W3070	Huang et al.,2012	<i>O. rufipogon</i>	Hainan, China	4.16	0.09
W1748	Huang et al.,2012	<i>O. rufipogon</i>	India	6.41	0.5
W1777	Huang et al.,2012	<i>O. rufipogon</i>	India	4.84	0.14
W1725	Huang et al.,2012	<i>O. rufipogon</i>	Thailand	6.92	0.52
IRGC101049	Wang et al.2014	<i>O. glaberrima</i>	Senegal,Africa	116.74	0.98
IRGC103469	Wang et al.2014	<i>O. glaberrima</i>	Burkina Faso,Africa	11.85	0.87
IRGC103472	Wang et al.2014	<i>O. glaberrima</i>	Burkina Faso,Africa	11.92	0.85
IRGC103520	Wang et al.2014	<i>O. glaberrima</i>	Mali,Africa	16.04	0.88
IRGC103632	Wang et al.2014	<i>O. glaberrima</i>	Mali,Africa	11.69	0.84
IRGC103937	Wang et al.2014	<i>O. glaberrima</i>	Liberia,Africa	11.15	0.85
IRGC104206	Wang et al.2014	<i>O. glaberrima</i>	Ghana,Africa	11.37	0.84
IRGC104574	Wang et al.2014	<i>O. glaberrima</i>	Mali,Africa	8.37	0.78
IRGC104955	Wang et al.2014	<i>O. glaberrima</i>	Sierra Leone,Africa	7.01	0.75
IRGC67563	Wang et al.2014	<i>O. glaberrima</i>	Ghana,Africa	117.87	0.98
IRGC68939	Wang et al.2014	<i>O. glaberrima</i>	Madagascar,Africa	118.03	0.98
IRGC68976	Wang et al.2014	<i>O. glaberrima</i>	Guyana,Africa	113.12	0.98
IRGC75500	Wang et al.2014	<i>O. glaberrima</i>	Burkina Faso,Africa	110.92	0.98
IRGC96841	Wang et al.2014	<i>O. glaberrima</i>	Zimbabwe,Africa	120.34	0.98
TOG5457	Wang et al.2014	<i>O. glaberrima</i>	Nigeria,Africa	9.38	0.83
TOG5467	Wang et al.2014	<i>O. glaberrima</i>	Nigeria,Africa	13.86	0.89
TOG5923	Wang et al.2014	<i>O. glaberrima</i>	Liberia,Africa	5.93	0.64
TOG5949	Wang et al.2014	<i>O. glaberrima</i>	Liberia,Africa	7.58	0.77
TOG7025	Wang et al.2014	<i>O. glaberrima</i>	Sierra Leone,Africa	11.58	0.86
TOG7102	Wang et al.2014	<i>O. glaberrima</i>	Mali,Africa	6.07	0.62

1. The percentage of the genome regions that covered by over 5 reads.

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**Table S4** List of wild rice obtained from Huang et al. used in this project

Sample	Species	Clade <sup>1</sup>	Original producing area	Depth
W0610	<i>O. rufipogon</i>	Or-I	Burma	0.71
W0626	<i>O. rufipogon</i>	Or-I	Burma	2.03
W0627	<i>O. rufipogon</i>	Or-I	Burma	1.29
W0630	<i>O. rufipogon</i>	Or-I	Burma	0.81
W0631	<i>O. rufipogon</i>	Or-I	Burma	0.52
W0632	<i>O. rufipogon</i>	Or-I	Burma	1.28
W0633	<i>O. rufipogon</i>	Or-I	Burma	0.5
W0638	<i>O. rufipogon</i>	Or-I	Burma	1.25
W0639	<i>O. rufipogon</i>	Or-I	Burma	0.67
W1295	<i>O. rufipogon</i>	Or-I	Cambodia	1.07
W2263	<i>O. rufipogon</i>	Or-I	Cambodia	1.8
W2296	<i>O. rufipogon</i>	Or-I	Cambodia	1.43
W0101	<i>O. rufipogon</i>	Or-I	India	1.42
W0102	<i>O. rufipogon</i>	Or-I	India	1.4
W0103	<i>O. rufipogon</i>	Or-I	India	1.18
W0106	<i>O. rufipogon</i>	Or-I	India	1.81
W0107	<i>O. rufipogon</i>	Or-I	India	1.93
W0121	<i>O. rufipogon</i>	Or-I	India	1.11
W0123	<i>O. rufipogon</i>	Or-I	India	0.26
W0124	<i>O. rufipogon</i>	Or-I	India	1.07
W0128	<i>O. rufipogon</i>	Or-I	India	2.41
W0130	<i>O. rufipogon</i>	Or-I	India	1.07
W0147	<i>O. rufipogon</i>	Or-I	India	0.21
W0148	<i>O. rufipogon</i>	Or-I	India	1.55
W0151	<i>O. rufipogon</i>	Or-I	India	1.94
W0152	<i>O. rufipogon</i>	Or-I	India	1.73
W1080	<i>O. rufipogon</i>	Or-I	India	1.54
W1082	<i>O. rufipogon</i>	Or-I	India	1.42
W1083	<i>O. rufipogon</i>	Or-I	India	1.37
W1084	<i>O. rufipogon</i>	Or-I	India	1.6
W1086	<i>O. rufipogon</i>	Or-I	India	1.49
W1090	<i>O. rufipogon</i>	Or-I	India	0.26
W1092	<i>O. rufipogon</i>	Or-I	India	1.25
W1105	<i>O. rufipogon</i>	Or-I	India	1.5
W1107	<i>O. rufipogon</i>	Or-I	India	1.59
W1111	<i>O. rufipogon</i>	Or-I	India	1.82
W1112	<i>O. rufipogon</i>	Or-I	India	0.76
W1117	<i>O. rufipogon</i>	Or-I	India	1.58
W1121	<i>O. rufipogon</i>	Or-I	India	1.17

W1142	<i>O. rufipogon</i>	Or-I	India	1.05
W1143	<i>O. rufipogon</i>	Or-I	India	0.76
W1532	<i>O. rufipogon</i>	Or-I	India	0.92
W1533	<i>O. rufipogon</i>	Or-I	India	0.89
W1666	<i>O. rufipogon</i>	Or-I	India	0.68
W1675	<i>O. rufipogon</i>	Or-I	India	1.14
W1676	<i>O. rufipogon</i>	Or-I	India	1.12
W1677	<i>O. rufipogon</i>	Or-I	India	2.61
W1679	<i>O. rufipogon</i>	Or-I	India	1.36
W1681	<i>O. rufipogon</i>	Or-I	India	0.9
W1685	<i>O. rufipogon</i>	Or-I	India	1.51
W1731	<i>O. rufipogon</i>	Or-I	India	1.51
W1735	<i>O. rufipogon</i>	Or-I	India	1.71
W1737	<i>O. rufipogon</i>	Or-I	India	1.14
W1738	<i>O. rufipogon</i>	Or-I	India	1.91
W1740	<i>O. rufipogon</i>	Or-I	India	2.02
W1741	<i>O. rufipogon</i>	Or-I	India	1.33
W1743	<i>O. rufipogon</i>	Or-I	India	1.09
W1747	<i>O. rufipogon</i>	Or-I	India	1.34
W1749	<i>O. rufipogon</i>	Or-I	India	1.33
W1750	<i>O. rufipogon</i>	Or-I	India	1.96
W1751	<i>O. rufipogon</i>	Or-I	India	0.72
W1753	<i>O. rufipogon</i>	Or-I	India	1.46
W1754	<i>O. rufipogon</i>	Or-I	India	2.11
W1756	<i>O. rufipogon</i>	Or-I	India	1.08
W1757	<i>O. rufipogon</i>	Or-I	India	3.79
W1761	<i>O. rufipogon</i>	Or-I	India	1.22
W1762	<i>O. rufipogon</i>	Or-I	India	0.88
W1770	<i>O. rufipogon</i>	Or-I	India	1.11
W1983	<i>O. rufipogon</i>	Or-I	India	2.04
W2193	<i>O. rufipogon</i>	Or-I	India	1.54
W3105	<i>O. rufipogon</i>	Or-I	India	40
W1970	<i>O. rufipogon</i>	Or-I	Indonesia	1.53
W2265	<i>O. rufipogon</i>	Or-I	Laos	3.58
W2298	<i>O. rufipogon</i>	Or-I	Laos	0.89
W2299	<i>O. rufipogon</i>	Or-I	Laos	1.45
W2301	<i>O. rufipogon</i>	Or-I	Laos	1.96
W2302	<i>O. rufipogon</i>	Or-I	Laos	2.55
W2303	<i>O. rufipogon</i>	Or-I	Laos	1.5
W2304	<i>O. rufipogon</i>	Or-I	Laos	2.66
W2305	<i>O. rufipogon</i>	Or-I	Laos	1.64
W2306	<i>O. rufipogon</i>	Or-I	Laos	3.15
W2307	<i>O. rufipogon</i>	Or-I	Laos	2.53

W0574	<i>O. rufipogon</i>	Or-I	Malaya	2.38
W0589	<i>O. rufipogon</i>	Or-I	Malaya	1.21
W0590	<i>O. rufipogon</i>	Or-I	Malaya	1.94
W0605	<i>O. rufipogon</i>	Or-I	Malaya	0.9
W0168	<i>O. rufipogon</i>	Or-I	Thailand	1.57
W0170	<i>O. rufipogon</i>	Or-I	Thailand	1.84
W0173	<i>O. rufipogon</i>	Or-I	Thailand	1.92
W0176	<i>O. rufipogon</i>	Or-I	Thailand	1.39
W0178	<i>O. rufipogon</i>	Or-I	Thailand	1.06
W0179	<i>O. rufipogon</i>	Or-I	Thailand	1.08
W1546	<i>O. rufipogon</i>	Or-I	Thailand	1.09
W1547	<i>O. rufipogon</i>	Or-I	Thailand	1.67
W1551	<i>O. rufipogon</i>	Or-I	Thailand	1.53
W1559	<i>O. rufipogon</i>	Or-I	Thailand	4.35
W1619	<i>O. rufipogon</i>	Or-I	Thailand	0.99
W1690	<i>O. rufipogon</i>	Or-I	Thailand	1.42
W1695	<i>O. rufipogon</i>	Or-I	Thailand	1.16
W1696	<i>O. rufipogon</i>	Or-I	Thailand	0.67
W1698	<i>O. rufipogon</i>	Or-I	Thailand	1.63
W1700	<i>O. rufipogon</i>	Or-I	Thailand	1.08
W1726	<i>O. rufipogon</i>	Or-I	Thailand	1.31
W1727	<i>O. rufipogon</i>	Or-I	Thailand	1.44
W1787	<i>O. rufipogon</i>	Or-I	Thailand	1.76
W1788	<i>O. rufipogon</i>	Or-I	Thailand	2.95
W1792	<i>O. rufipogon</i>	Or-I	Thailand	2.71
W1794	<i>O. rufipogon</i>	Or-I	Thailand	1.89
W1795	<i>O. rufipogon</i>	Or-I	Thailand	2.07
W1832	<i>O. rufipogon</i>	Or-I	Thailand	1.56
W1852	<i>O. rufipogon</i>	Or-I	Thailand	1.57
W1853	<i>O. rufipogon</i>	Or-I	Thailand	1.38
W1865	<i>O. rufipogon</i>	Or-I	Thailand	1.32
W1866	<i>O. rufipogon</i>	Or-I	Thailand	1.62
W1879	<i>O. rufipogon</i>	Or-I	Thailand	1.4
W1881	<i>O. rufipogon</i>	Or-I	Thailand	1.35
W1893	<i>O. rufipogon</i>	Or-I	Thailand	1.59
W1912	<i>O. rufipogon</i>	Or-I	Thailand	1.75
W1914	<i>O. rufipogon</i>	Or-I	Thailand	3.12
W1921	<i>O. rufipogon</i>	Or-I	Thailand	1.25
W1925	<i>O. rufipogon</i>	Or-I	Thailand	1.23
W1928	<i>O. rufipogon</i>	Or-I	Thailand	1.29
W1935	<i>O. rufipogon</i>	Or-I	Thailand	0.97
W2268	<i>O. rufipogon</i>	Or-I	Thailand	1.71
W2269	<i>O. rufipogon</i>	Or-I	Thailand	1.18

W2271	<i>O. rufipogon</i>	Or-I	Thailand	1.61
W2275	<i>O. rufipogon</i>	Or-I	Thailand	0.93
W2277	<i>O. rufipogon</i>	Or-I	Thailand	1.28
W2278	<i>O. rufipogon</i>	Or-I	Thailand	2.73
W0624	<i>O. rufipogon</i>	Or-II	Burma	0.77
W0628	<i>O. rufipogon</i>	Or-II	Burma	2.31
W0634	<i>O. rufipogon</i>	Or-II	Burma	1.13
W0635	<i>O. rufipogon</i>	Or-II	Burma	0.52
W2288	<i>O. rufipogon</i>	Or-II	Cambodia	2.8
W3003	<i>O. rufipogon</i>	Or-II	Guangdong, China	0.39
W3067	<i>O. rufipogon</i>	Or-II	Hainan, China	3.7
W3068	<i>O. rufipogon</i>	Or-II	Hainan, China	1.75
W3072	<i>O. rufipogon</i>	Or-II	Hainan, China	4.73
W0108	<i>O. rufipogon</i>	Or-II	India	1.79
W0120	<i>O. rufipogon</i>	Or-II	India	0.97
W0132	<i>O. rufipogon</i>	Or-II	India	1.4
W0157	<i>O. rufipogon</i>	Or-II	India	1.2
W1087	<i>O. rufipogon</i>	Or-II	India	6.25
W1093	<i>O. rufipogon</i>	Or-II	India	5.09
W1096	<i>O. rufipogon</i>	Or-II	India	4.84
W1122	<i>O. rufipogon</i>	Or-II	India	3.48
W1124	<i>O. rufipogon</i>	Or-II	India	3.1
W1126	<i>O. rufipogon</i>	Or-II	India	2.85
W1683	<i>O. rufipogon</i>	Or-II	India	6.75
W1687	<i>O. rufipogon</i>	Or-II	India	2.31
W1736	<i>O. rufipogon</i>	Or-II	India	1.63
W1742	<i>O. rufipogon</i>	Or-II	India	1.61
W1780	<i>O. rufipogon</i>	Or-II	India	2.32
W1292	<i>O. rufipogon</i>	Or-II	Indonesia	0.98
W1971	<i>O. rufipogon</i>	Or-II	Indonesia	1.88
W1972	<i>O. rufipogon</i>	Or-II	Indonesia	2.71
W1974	<i>O. rufipogon</i>	Or-II	Indonesia	2.16
W1975	<i>O. rufipogon</i>	Or-II	Indonesia	2.74
W1976	<i>O. rufipogon</i>	Or-II	Indonesia	1.83
W1977	<i>O. rufipogon</i>	Or-II	Indonesia	3.98
W1978	<i>O. rufipogon</i>	Or-II	Indonesia	1.99
W1979	<i>O. rufipogon</i>	Or-II	Indonesia	2.27
W1981	<i>O. rufipogon</i>	Or-II	Indonesia	1.36
W2017	<i>O. rufipogon</i>	Or-II	Indonesia	2.62
W2021	<i>O. rufipogon</i>	Or-II	Indonesia	2.64
W2022	<i>O. rufipogon</i>	Or-II	Indonesia	4.27
W2024	<i>O. rufipogon</i>	Or-II	Indonesia	4.38
W2025	<i>O. rufipogon</i>	Or-II	Indonesia	1.21

W2030	<i>O. rufipogon</i>	Or-II	Indonesia	2.47
W2197	<i>O. rufipogon</i>	Or-II	Indonesia	3.63
W2266	<i>O. rufipogon</i>	Or-II	Laos	1.47
W2308	<i>O. rufipogon</i>	Or-II	Laos	2.47
W2310	<i>O. rufipogon</i>	Or-II	Laos	2.28
W2311	<i>O. rufipogon</i>	Or-II	Laos	2.35
W0576	<i>O. rufipogon</i>	Or-II	Malaya	3.69
W0587	<i>O. rufipogon</i>	Or-II	Malaya	1.37
W0594	<i>O. rufipogon</i>	Or-II	Malaya	1.37
W0596	<i>O. rufipogon</i>	Or-II	Malaya	1.06
W0600	<i>O. rufipogon</i>	Or-II	Malaya	0.97
W0606	<i>O. rufipogon</i>	Or-II	Malaya	1.18
W0145	<i>O. rufipogon</i>	Or-II	Thailand	0.31
W0163	<i>O. rufipogon</i>	Or-II	Thailand	3.38
W0164	<i>O. rufipogon</i>	Or-II	Thailand	1.58
W0165	<i>O. rufipogon</i>	Or-II	Thailand	1.09
W0166	<i>O. rufipogon</i>	Or-II	Thailand	0.76
W0169	<i>O. rufipogon</i>	Or-II	Thailand	1.12
W0171	<i>O. rufipogon</i>	Or-II	Thailand	6.07
W0174	<i>O. rufipogon</i>	Or-II	Thailand	3.07
W0175	<i>O. rufipogon</i>	Or-II	Thailand	3.68
W0180	<i>O. rufipogon</i>	Or-II	Thailand	3.32
W0234	<i>O. rufipogon</i>	Or-II	Thailand	2.05
W1550	<i>O. rufipogon</i>	Or-II	Thailand	3.92
W1552	<i>O. rufipogon</i>	Or-II	Thailand	1.51
W1553	<i>O. rufipogon</i>	Or-II	Thailand	1.09
W1554	<i>O. rufipogon</i>	Or-II	Thailand	3.1
W1555	<i>O. rufipogon</i>	Or-II	Thailand	0.92
W1556	<i>O. rufipogon</i>	Or-II	Thailand	1.12
W1557	<i>O. rufipogon</i>	Or-II	Thailand	0.7
W1558	<i>O. rufipogon</i>	Or-II	Thailand	2.73
W1790	<i>O. rufipogon</i>	Or-II	Thailand	6.72
W1798	<i>O. rufipogon</i>	Or-II	Thailand	3.28
W1849	<i>O. rufipogon</i>	Or-II	Thailand	9.77
W1850	<i>O. rufipogon</i>	Or-II	Thailand	4.57
W1854	<i>O. rufipogon</i>	Or-II	Thailand	4.73
W1857	<i>O. rufipogon</i>	Or-II	Thailand	3.99
W1858	<i>O. rufipogon</i>	Or-II	Thailand	1.31
W1859	<i>O. rufipogon</i>	Or-II	Thailand	4.65
W1862	<i>O. rufipogon</i>	Or-II	Thailand	2.43
W1870	<i>O. rufipogon</i>	Or-II	Thailand	4.18
W1873	<i>O. rufipogon</i>	Or-II	Thailand	0.78
W1880	<i>O. rufipogon</i>	Or-II	Thailand	2.9

W1882	<i>O. rufipogon</i>	Or-II	Thailand	2.12
W1884	<i>O. rufipogon</i>	Or-II	Thailand	2.3
W1890	<i>O. rufipogon</i>	Or-II	Thailand	3.36
W1891	<i>O. rufipogon</i>	Or-II	Thailand	1.71
W1895	<i>O. rufipogon</i>	Or-II	Thailand	1.95
W1896	<i>O. rufipogon</i>	Or-II	Thailand	2.95
W1916	<i>O. rufipogon</i>	Or-II	Thailand	3.61
W1919	<i>O. rufipogon</i>	Or-II	Thailand	1.72
W1927	<i>O. rufipogon</i>	Or-II	Thailand	1.33
W1939	<i>O. rufipogon</i>	Or-II	Thailand	1.61
W1940	<i>O. rufipogon</i>	Or-II	Thailand	5.04
W2272	<i>O. rufipogon</i>	Or-II	Thailand	1.78
W2276	<i>O. rufipogon</i>	Or-II	Thailand	1.35
W2282	<i>O. rufipogon</i>	Or-II	Thailand	4.9
W2283	<i>O. rufipogon</i>	Or-II	Thailand	2.17
W2284	<i>O. rufipogon</i>	Or-II	Thailand	1.12
W3091	<i>O. rufipogon</i>	Or-II	Yangzi, China	1.81
W3097	<i>O. rufipogon</i>	Or-II	Yangzi, China	1.92
W3098	<i>O. rufipogon</i>	Or-II	Yangzi, China	1.79
W1715	<i>O. rufipogon</i>	Or-II	China	5.04
W0621	<i>O. rufipogon</i>	Or-III	Burma	1.39
W0623	<i>O. rufipogon</i>	Or-III	Burma	0.5
W0625	<i>O. rufipogon</i>	Or-III	Burma	0.5
W0629	<i>O. rufipogon</i>	Or-III	Burma	0.36
W0637	<i>O. rufipogon</i>	Or-III	Burma	0.95
W2036	<i>O. rufipogon</i>	Or-III	Burma	1.38
W2198	<i>O. rufipogon</i>	Or-III	China	4.36
W3000	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.97
W3001	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.69
W3002	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.95
W3004	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.11
W3005	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.19
W3006	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.61
W3007	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.62
W3008	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.68
W3009	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.99
W3010	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.67
W3011	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.27
W3012	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.83
W3013	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.78
W3014	<i>O. rufipogon</i>	Or-III	Guangdong, China	3.6
W3015	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.97
W3016	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.57



W3017	<i>O. rufipogon</i>	Or-III	Guangdong, China	2
W3018	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.57
W3019	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.83
W3020	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.17
W3021	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.43
W3022	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.58
W3023	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.84
W3024	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.66
W3025	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.53
W3026	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.87
W3029	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.67
W3030	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.41
W3033	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.3
W3034	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.01
W3035	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.94
W3036	<i>O. rufipogon</i>	Or-III	Guangdong, China	0.56
W3037	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.05
W3038	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.23
W3039	<i>O. rufipogon</i>	Or-III	Guangdong, China	1
W3040	<i>O. rufipogon</i>	Or-III	Guangdong, China	1.75
W3045	<i>O. rufipogon</i>	Or-III	Guangdong, China	2.1
W3046	<i>O. rufipogon</i>	Or-III	Guangdong, China	5.1
W3027	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.94
W3028	<i>O. rufipogon</i>	Or-III	Guangxi, China	2.65
W3031	<i>O. rufipogon</i>	Or-III	Guangxi, China	1.32
W3032	<i>O. rufipogon</i>	Or-III	Guangxi, China	0.73
W3041	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.55
W3042	<i>O. rufipogon</i>	Or-III	Guangxi, China	1.63
W3043	<i>O. rufipogon</i>	Or-III	Guangxi, China	2.55
W3044	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.99
W3047	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.88
W3048	<i>O. rufipogon</i>	Or-III	Guangxi, China	4.58
W3049	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.96
W3050	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.77
W3051	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.23
W3052	<i>O. rufipogon</i>	Or-III	Guangxi, China	3.73
W3053	<i>O. rufipogon</i>	Or-III	Hainan, China	1.22
W3054	<i>O. rufipogon</i>	Or-III	Hainan, China	1.89
W3055	<i>O. rufipogon</i>	Or-III	Hainan, China	1.11
W3056	<i>O. rufipogon</i>	Or-III	Hainan, China	0.74
W3057	<i>O. rufipogon</i>	Or-III	Hainan, China	1.38
W3058	<i>O. rufipogon</i>	Or-III	Hainan, China	1.42
W3059	<i>O. rufipogon</i>	Or-III	Hainan, China	1.72

W3060	<i>O. rufipogon</i>	Or-III	Hainan, China	1.77
W3061	<i>O. rufipogon</i>	Or-III	Hainan, China	1.22
W3062	<i>O. rufipogon</i>	Or-III	Hainan, China	2.25
W3063	<i>O. rufipogon</i>	Or-III	Hainan, China	1.32
W3064	<i>O. rufipogon</i>	Or-III	Hainan, China	0.87
W3065	<i>O. rufipogon</i>	Or-III	Hainan, China	4.02
W3066	<i>O. rufipogon</i>	Or-III	Hainan, China	3.44
W3069	<i>O. rufipogon</i>	Or-III	Hainan, China	2.73
W3070	<i>O. rufipogon</i>	Or-III	Hainan, China	4.16
W3071	<i>O. rufipogon</i>	Or-III	Hainan, China	3.11
W3073	<i>O. rufipogon</i>	Or-III	Hainan, China	3.27
W3074	<i>O. rufipogon</i>	Or-III	Hainan, China	2.76
W0125	<i>O. rufipogon</i>	Or-III	India	2.27
W0126	<i>O. rufipogon</i>	Or-III	India	1.62
W0133	<i>O. rufipogon</i>	Or-III	India	0.81
W0134	<i>O. rufipogon</i>	Or-III	India	1.17
W0135	<i>O. rufipogon</i>	Or-III	India	0.85
W0136	<i>O. rufipogon</i>	Or-III	India	0.57
W0137	<i>O. rufipogon</i>	Or-III	India	0.89
W0138	<i>O. rufipogon</i>	Or-III	India	1.02
W0141	<i>O. rufipogon</i>	Or-III	India	1.11
W0149	<i>O. rufipogon</i>	Or-III	India	1.58
W0153	<i>O. rufipogon</i>	Or-III	India	2.54
W0549	<i>O. rufipogon</i>	Or-III	India	1.35
W1102	<i>O. rufipogon</i>	Or-III	India	0.85
W1114	<i>O. rufipogon</i>	Or-III	India	1.2
W1119	<i>O. rufipogon</i>	Or-III	India	1.75
W1534	<i>O. rufipogon</i>	Or-III	India	0.63
W1668	<i>O. rufipogon</i>	Or-III	India	1.36
W1669	<i>O. rufipogon</i>	Or-III	India	3.56
W1732	<i>O. rufipogon</i>	Or-III	India	1.39
W1739	<i>O. rufipogon</i>	Or-III	India	1.3
W1746	<i>O. rufipogon</i>	Or-III	India	2.37
W1748	<i>O. rufipogon</i>	Or-III	India	6.41
W1759	<i>O. rufipogon</i>	Or-III	India	2.8
W1766	<i>O. rufipogon</i>	Or-III	India	3.19
W1777	<i>O. rufipogon</i>	Or-III	India	4.84
W1782	<i>O. rufipogon</i>	Or-III	India	3.48
W1783	<i>O. rufipogon</i>	Or-III	India	0.42
W1784	<i>O. rufipogon</i>	Or-III	India	0.54
W1989	<i>O. rufipogon</i>	Or-III	India	1.25
W1990	<i>O. rufipogon</i>	Or-III	India	1.34
W1991	<i>O. rufipogon</i>	Or-III	India	1.84

W1993	<i>O. rufipogon</i>	Or-III	India	1.33
W1995	<i>O. rufipogon</i>	Or-III	India	0.85
W1998	<i>O. rufipogon</i>	Or-III	India	2.24
W2003	<i>O. rufipogon</i>	Or-III	India	1.88
W2005	<i>O. rufipogon</i>	Or-III	India	1.97
W2007	<i>O. rufipogon</i>	Or-III	India	1.53
W2008	<i>O. rufipogon</i>	Or-III	India	1.64
W2010	<i>O. rufipogon</i>	Or-III	India	1.06
W2012	<i>O. rufipogon</i>	Or-III	India	1.08
W2014	<i>O. rufipogon</i>	Or-III	India	0.88
W1973	<i>O. rufipogon</i>	Or-III	Indonesia	2.74
W2267	<i>O. rufipogon</i>	Or-III	Laos	2.09
W0573	<i>O. rufipogon</i>	Or-III	Malaya	1.86
W0593	<i>O. rufipogon</i>	Or-III	Malaya	0.84
W1542	<i>O. rufipogon</i>	Or-III	Malaya	1.06
W0172	<i>O. rufipogon</i>	Or-III	Thailand	1.13
W1560	<i>O. rufipogon</i>	Or-III	Thailand	1.45
W1725	<i>O. rufipogon</i>	Or-III	Thailand	6.92
W3075	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.53
W3076	<i>O. rufipogon</i>	Or-III	Yangzi, China	0.44
W3077	<i>O. rufipogon</i>	Or-III	Yangzi, China	0.65
W3078	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.05
W3079	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.62
W3080	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.69
W3081	<i>O. rufipogon</i>	Or-III	Yangzi, China	0.93
W3082	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.46
W3092	<i>O. rufipogon</i>	Or-III	Yangzi, China	2.7
W3093	<i>O. rufipogon</i>	Or-III	Yangzi, China	0.27
W3094	<i>O. rufipogon</i>	Or-III	Yangzi, China	2.89
W3095	<i>O. rufipogon</i>	Or-III	Yangzi, China	1.66
W3096	<i>O. rufipogon</i>	Or-III	Yangzi, China	0.86

1. Clades were classified by Huang et al.,2012

Reference:

**Huang X, Kurata N, Wei X, Wang ZX, Wang A, Zhao Q, Zhao Y, Liu K, Lu H, Li W, et al. 2012.** A map of rice genome variation reveals the origin of cultivated rice. *Nature* **490**(7421): 497-501.

**Table S5** SNP genotype of DR-I. We genotyped all the SNPs within DR-I regions and classified them as Japonica type or Indica type.

Name	Depth	Clade <sup>1</sup>	Original Place	Japonica_Type		Indica_Type		Hete	Unmap
				SNP num	%	SNP num	%		
W1725	5.7	Or-III	Thailand	2582	0.863	410	0.137	439	261
W1114	1.11	Or-III	India	1568	0.859	258	0.141	3	1863
W1560	1.31	Or-III	Thailand	1798	0.849	319	0.151	18	1557
W3093	0.25	Or-III	Yangzi	524	0.849	93	0.151	0	3075
W3096	0.8	Or-III	Yangzi	1442	0.841	272	0.159	31	1947
W3077	0.63	Or-III	Yangzi	1266	0.841	240	0.159	18	2168
W0637	0.79	Or-III	Burma	1153	0.837	224	0.163	12	2303
W3095	1.56	Or-III	Yangzi	2041	0.825	433	0.175	56	1162
P46	14.78	-	Hainan;China	2465	0.824	526	0.176	664	37
W3081	0.83	Or-III	Yangzi	1471	0.824	315	0.176	36	1870
W2198	3.88	Or-III	China	2637	0.818	586	0.182	62	407
W3040	1.49	Or-III	Guangdong	2017	0.817	453	0.183	114	1108
W3015	1.74	Or-III	Guangdong	2038	0.814	467	0.186	190	997
W3092	2.5	Or-III	Yangzi	2346	0.812	542	0.188	166	638
W3037	0.92	Or-III	Guangdong	1534	0.808	364	0.192	61	1733
W3002	2.52	Or-III	Guangdong	2277	0.806	548	0.194	207	660
W3079	1.39	Or-III	Yangzi	1988	0.806	480	0.194	46	1178
W3039	0.91	Or-III	Guangdong	1554	0.805	376	0.195	39	1723
W3078	0.97	Or-III	Yangzi	1669	0.805	405	0.195	8	1610
W1943	20.8	Or-III	Jiangxi	2852	0.800	715	0.200	116	9
W3046	4.36	Or-III	Guangdong	2408	0.796	616	0.204	281	387
W3013	1.6	Or-III	Guangdong	1964	0.789	526	0.211	68	1134
W3076	0.41	Or-III	Yangzi	957	0.788	258	0.212	2	2475
W3005	1.02	Or-III	Guangdong	1469	0.787	398	0.213	47	1778
W3043	2.32	Or-III	Guangxi	2023	0.785	555	0.215	215	899
W3018	1.44	Or-III	Guangdong	1775	0.781	498	0.219	113	1306
W3080	1.58	Or-III	Yangzi	1979	0.780	558	0.220	181	974
W3075	1.46	Or-III	Yangzi	1990	0.779	564	0.221	10	1128
W3026	0.55	Or-III	Guangdong	928	0.776	268	0.224	40	2456
W3038	1.1	Or-III	Guangdong	1706	0.775	495	0.225	21	1470
W3027	3.49	Or-III	Guangxi	2170	0.766	662	0.234	312	548
W3032	0.63	Or-III	Guangxi	1110	0.763	344	0.237	27	2211
W3042	1.48	Or-III	Guangxi	1658	0.762	518	0.238	102	1414
W3045	1.87	Or-III	Guangdong	1771	0.757	569	0.243	178	1174
W3036	0.46	Or-III	Guangdong	860	0.750	287	0.250	19	2526
Yuan3_9	12.83		Yunnan	2676	0.740	938	0.260	23	55
W3048	3.81	Or-III	Guangxi	2322	0.739	821	0.261	80	469

W3024	0.35	Or-III	Guangdong	578	0.730	214	0.270	21	2879
W3074	2.59	Or-III	Hainan	2076	0.727	778	0.273	48	790
W3044	3.38	Or-III	Guangxi	1892	0.727	711	0.273	549	540
W3030	2.27	Or-III	Guangdong	2128	0.726	802	0.274	176	586
W3050	3.56	Or-III	Guangxi	2118	0.719	827	0.281	247	500
W3000	0.89	Or-III	Guangdong	1224	0.707	508	0.293	116	1844
W3047	3.45	Or-III	Guangxi	1942	0.704	818	0.296	417	515
W3028	2.4	Or-III	Guangxi	1699	0.698	735	0.302	351	907
W3029	0.59	Or-III	Guangdong	967	0.695	425	0.305	30	2270
W3052	3.46	Or-III	Guangxi	1891	0.693	839	0.307	386	576
W3009	1.93	Or-III	Guangdong	1581	0.689	714	0.311	341	1056
W3094	2.75	Or-III	Yangzi	1460	0.684	673	0.316	1015	544
W3041	3.18	Or-III	Guangxi	1866	0.682	871	0.318	329	626
W3082	1.36	Or-III	Yangzi	1675	0.680	787	0.320	59	1171
W3071	2.85	Or-III	Hainan	1760	0.666	884	0.334	350	698
W3025	0.3	Or-III	Guangdong	512	0.664	259	0.336	23	2898
W2036	1.18	Or-III	Burma	1336	0.663	680	0.337	136	1540
W3020	1.46	Or-III	Guangdong	1464	0.657	764	0.343	140	1324
W3016	0.52	Or-III	Guangdong	856	0.652	457	0.348	48	2331
W3051	2.6	Or-III	Guangxi	1674	0.651	896	0.349	268	854
W3070	3.82	Or-III	Hainan	1844	0.650	995	0.350	401	452
W3049	3.45	Or-III	Guangxi	1794	0.649	972	0.351	329	597
W3069	2.48	Or-III	Hainan	1689	0.642	943	0.358	270	790
W3006	1.51	Or-III	Guangdong	1314	0.631	767	0.369	224	1387
W3011	1.25	Or-III	Guangdong	1124	0.628	666	0.372	335	1567
W3066	2.97	Or-III	Hainan	1775	0.626	1061	0.374	224	632
W3021	1.36	Or-III	Guangdong	1271	0.621	776	0.379	318	1327
W3058	1.31	Or-III	Hainan	1471	0.619	906	0.381	33	1282
W3059	1.58	Or-III	Hainan	1509	0.616	939	0.384	75	1169
W3061	1.06	Or-III	Hainan	1298	0.613	820	0.387	20	1554
W3031	1.22	Or-III	Guangxi	1292	0.611	823	0.389	186	1391
VOC4	18.52	-	Nepal	1814	0.610	1158	0.390	678	42
W3063	1.2	Or-III	Hainan	1322	0.606	860	0.394	102	1408
W1766	2.79	Or-III	India	1671	0.601	1109	0.399	71	841
W1973	2.33	Or-III	Indonesia	1187	0.598	799	0.402	11	1695
W3062	2.1	Or-III	Hainan	1637	0.594	1118	0.406	163	774
W3008	0.7	Or-III	Guangdong	932	0.592	641	0.408	19	2100
W1759	2.47	Or-III	India	1526	0.592	1050	0.408	175	941
W3073	2.91	Or-III	Hainan	1630	0.591	1126	0.409	244	692
W3057	1.28	Or-III	Hainan	1321	0.579	961	0.421	64	1346
W1746	2.07	Or-III	India	1413	0.573	1053	0.427	130	1096
W3014	3.2	Or-III	Guangdong	1366	0.573	1018	0.427	744	564
W1102	0.72	Or-III	India	810	0.573	604	0.427	9	2269

W3017	1.76	Or-III	Guangdong	1281	0.573	956	0.427	438	1017
W0625	0.49	Or-III	Burma	597	0.567	456	0.433	2	2637
W0623	0.49	Or-III	Burma	572	0.562	446	0.438		2674
W3055	1	Or-III	Hainan	1058	0.561	829	0.439	99	1706
W3012	1.74	Or-III	Guangdong	1437	0.555	1152	0.445	26	1077
W3034	1.78	Or-III	Guangdong	1365	0.554	1099	0.446	345	883
W3033	1.08	Or-III	Guangdong	1067	0.553	864	0.447	117	1644
W3007	2.58	Or-III	Guangdong	1479	0.551	1206	0.449	222	785
W1096	4.16	Or-II	India	1544	0.550	1262	0.450	317	569
W0629	0.34	Or-III	Burma	401	0.547	332	0.453		2959
W3054	1.8	Or-III	Hainan	1341	0.546	1117	0.454	256	978
W3022	1.56	Or-III	Guangdong	1064	0.544	892	0.456	559	1177
W2005	1.61	Or-III	India	1343	0.543	1130	0.457	10	1209
W1534	0.54	Or-III	India	613	0.539	524	0.461	3	2552
W0133	0.69	Or-III	India	744	0.538	639	0.462	4	2305
W1119	1.49	Or-III	India	1145	0.537	988	0.463	11	1548
W1783	0.39	Or-III	India	521	0.537	450	0.463		2721
W3053	1.13	Or-III	Hainan	1088	0.536	941	0.464	147	1516
W0634	0.83	Or-II	Burma	748	0.535	651	0.465	41	2252
W1782	3.01	Or-III	India	1634	0.535	1423	0.465	17	618
W0593	0.75	Or-III	Malaya	753	0.534	656	0.466	4	2279
W2010	0.92	Or-III	India	963	0.534	839	0.466	2	1888
W0621	1.4	Or-III	Burma	1124	0.534	980	0.466	2	1586
W3001	0.63	Or-III	Guangdong	685	0.534	598	0.466	102	2307
W1976	1.58	Or-II	Indonesia	1308	0.532	1149	0.468	45	1190
W0172	0.95	Or-III	Thailand	876	0.532	770	0.468	2	2044
W1989	1.16	Or-III	India	1095	0.531	966	0.469	3	1628
W0136	0.5	Or-III	India	531	0.530	470	0.470	3	2688
W0134	1.04	Or-III	India	892	0.528	796	0.472	4	2000
W0137	0.81	Or-III	India	810	0.528	724	0.472	1	2157
W2003	1.65	Or-III	India	1325	0.527	1189	0.473	10	1168
W1784	0.49	Or-III	India	602	0.526	542	0.474	6	2542
W2014	0.74	Or-III	India	858	0.526	773	0.474	2	2059
W0138	0.89	Or-III	India	841	0.526	758	0.474	3	2090
W0132	1.21	Or-II	India	1017	0.523	928	0.477	34	1713
W1998	1.97	Or-III	India	1452	0.523	1325	0.477	9	906
W0135	0.72	Or-III	India	762	0.523	696	0.477	3	2231
W3065	3.57	Or-III	Hainan	1510	0.522	1383	0.478	269	530
W3064	0.82	Or-III	Hainan	902	0.521	829	0.479	47	1914
W1990	1.32	Or-III	India	1172	0.520	1081	0.480	8	1431
W2008	1.36	Or-III	India	1175	0.519	1087	0.481	3	1427
W1780	1.92	Or-II	India	1379	0.519	1277	0.481	25	1011
W0549	1.19	Or-III	India	1048	0.518	977	0.482	2	1665

W1542	0.94	Or-III	Malaya	894	0.517	835	0.483	2	1961
W0573	1.57	Or-III	Malaya	1176	0.515	1108	0.485	6	1402
W2007	1.28	Or-III	India	1131	0.515	1067	0.485	4	1490
W1739	1.12	Or-III	India	1007	0.514	952	0.486	4	1729
W0120	0.74	Or-II	India	733	0.513	695	0.487	19	2245
W0141	0.99	Or-III	India	839	0.511	802	0.489	4	2047
W1993	1.24	Or-III	India	1147	0.511	1097	0.489	7	1441
W0153	2.29	Or-III	India	1340	0.510	1286	0.490	9	1057
W1991	1.68	Or-III	India	1240	0.510	1192	0.490	8	1252
W3056	0.7	Or-III	Hainan	722	0.509	697	0.491	28	2245
W1995	0.77	Or-III	India	822	0.507	798	0.493	1	2071
W2024	3.74	Or-II	Indonesia	1620	0.506	1581	0.494	40	451
W1971	1.65	Or-II	Indonesia	1233	0.505	1209	0.495	87	1163
W2197	2.85	Or-II	Indonesia	1488	0.504	1465	0.496	159	580
W0624	0.69	Or-II	Burma	664	0.503	656	0.497	3	2369
W1880	2.56	Or-II	Thailand	1465	0.503	1450	0.497	171	606
W2284	0.95	Or-II	Thailand	939	0.502	931	0.498	8	1814
W1979	1.85	Or-II	Indonesia	1313	0.501	1306	0.499	24	1049
W0125	2.03	Or-III	India	1321	0.500	1320	0.500	12	1039
W2012	0.98	Or-III	India	924	0.498	930	0.502	4	1834
W1977	3.46	Or-II	Indonesia	1504	0.497	1521	0.503	160	507
W1857	3.19	Or-II	Thailand	1397	0.492	1443	0.508	184	668
W2017	1.9	Or-II	Indonesia	1227	0.492	1269	0.508	151	1045
W1891	1.43	Or-II	Thailand	1232	0.491	1278	0.509	52	1130
W0600	0.9	Or-II	Malaya	805	0.490	838	0.510	29	2020
W2308	2.23	Or-II	Laos	1318	0.489	1376	0.511	68	930
W1884	2.07	Or-II	Thailand	1356	0.488	1420	0.512	128	788
W2022	3.71	Or-II	Indonesia	1474	0.486	1560	0.514	208	450
W0149	1.43	Or-III	India	1006	0.486	1065	0.514	98	1523
W1890	2.93	Or-II	Thailand	1533	0.486	1624	0.514	26	509
W3010	2.46	Or-III	Guangdong	1023	0.483	1094	0.517	870	705
W1940	4.82	Or-II	Thailand	1621	0.480	1758	0.520	56	257
W1126	2.46	Or-II	India	1334	0.480	1447	0.520	154	757
W1850	4.02	Or-II	Thailand	1450	0.477	1587	0.523	153	502
W0174	2.84	Or-II	Thailand	1382	0.477	1514	0.523	34	762
W1798	3	Or-II	Thailand	1427	0.477	1564	0.523	212	489
W1669	3.45	Or-III	India	1434	0.477	1572	0.523	307	379
PADI_PADIAN	16.48	-	Kromat Watu;Indonesia	1560	0.476	1717	0.524	320	95
W1978	1.7	Or-II	Indonesia	1181	0.476	1301	0.524	61	1149
W0180	2.74	Or-II	Thailand	1335	0.475	1475	0.525	10	872
W1777	4.35	Or-III	India	1432	0.475	1583	0.525	281	396
W1972	2.37	Or-II	Indonesia	1328	0.475	1469	0.525	109	786

W1919	1.61	Or-II	Thailand	1204	0.474	1335	0.526	53	1100
W0108	1.68	Or-II	India	1128	0.474	1252	0.526	20	1292
W3060	1.63	Or-III	Hainan	1146	0.470	1292	0.530	212	1042
W0628	1.92	Or-II	Burma	1161	0.468	1318	0.532	43	1170
W2282	2.99	Or-II	Thailand	1352	0.468	1538	0.532	209	593
W1981	1.2	Or-II	Indonesia	1020	0.467	1162	0.533	3	1507
W1558	2.36	Or-II	Thailand	1299	0.467	1480	0.533	48	865
W1939	1.44	Or-II	Thailand	1121	0.467	1278	0.533	75	1218
W2025	0.97	Or-II	Indonesia	848	0.466	972	0.534	42	1830
W1790	5.59	Or-II	Thailand	1608	0.466	1845	0.534	13	226
W1849	9.13	Or-II	Thailand	1560	0.465	1793	0.535	203	136
W2272	1.48	Or-II	Thailand	1117	0.465	1286	0.535	15	1274
W2021	2.33	Or-II	Indonesia	1337	0.465	1540	0.535	47	768
W2266	1.16	Or-II	Laos	872	0.465	1005	0.535	17	1798
W3091	1.62	Or-II	Yangzi	1082	0.464	1248	0.536	262	1100
W1683	5.63	Or-II	India	1527	0.463	1770	0.537	104	291
W2288	2.7	Or-II	Cambodia	1370	0.463	1592	0.537	128	602
W2283	1.9	Or-II	Thailand	1190	0.462	1384	0.538	126	992
W0171	5.7	Or-II	Thailand	1499	0.459	1770	0.541	173	250
W2030	2.22	Or-II	Indonesia	1284	0.458	1522	0.542	52	834
W3035	0.82	Or-III	Guangdong	737	0.456	878	0.544	199	1878
W3004	1.75	Or-III	Guangdong	944	0.456	1126	0.544	530	1092
W2267	1.77	Or-III	Laos	1234	0.455	1476	0.545	10	972
W1896	2.83	Or-II	Thailand	1351	0.453	1634	0.547	224	483
W1122	2.97	Or-II	India	1367	0.452	1658	0.548	56	611
W1975	2.5	Or-II	Indonesia	1349	0.452	1638	0.548	13	692
W0157	0.89	Or-II	India	656	0.449	804	0.551	25	2207
W1292	0.86	Or-II	Indonesia	703	0.448	865	0.552	35	2089
W1854	4.24	Or-II	Thailand	1457	0.446	1810	0.554	12	413
W1553	1	Or-II	Thailand	763	0.445	950	0.555	37	1942
W3097	1.83	Or-II	Yangzi	1136	0.445	1419	0.555	151	986
W1093	4.47	Or-II	India	1229	0.444	1537	0.556	500	426
W1974	1.98	Or-II	Indonesia	1176	0.444	1473	0.556	42	1001
W3098	1.67	Or-II	Yangzi	1090	0.442	1378	0.558	175	1049
W0576	3.32	Or-II	Malaya	1229	0.441	1556	0.559	294	613
W1552	1.28	Or-II	Thailand	866	0.440	1101	0.560	76	1649
W0169	0.99	Or-II	Thailand	763	0.440	971	0.560	4	1954
W1732	1.24	Or-III	India	846	0.440	1077	0.560	31	1738
W1862	2.18	Or-II	Thailand	1209	0.437	1555	0.563	152	776
W1916	3.31	Or-II	Thailand	1307	0.432	1715	0.568	248	422
W1882	1.96	Or-II	Thailand	1113	0.424	1509	0.576	235	835
W0175	3.47	Or-II	Thailand	1255	0.424	1702	0.576	181	554
W0596	0.97	Or-II	Malaya	727	0.419	1009	0.581	9	1947



W0166	0.53	Or-II	Thailand	407	0.418	566	0.582	1	2718
W1870	3.76	Or-II	Thailand	1334	0.417	1865	0.583	145	348
W1554	2.14	Or-II	Thailand	1062	0.404	1566	0.596	41	1023
W1715		Or-II		1116	0.397	1695	0.603	513	368
W1556	1.01	Or-II	Thailand	726	0.393	1120	0.607	19	1827
W3023	1.47	Or-III	Guangdong	781	0.391	1216	0.609	450	1245
W1859	4.27	Or-II	Thailand	1154	0.377	1906	0.623	212	420
W1983	1.78	Or-I	India	970	0.375	1618	0.625	11	1093
W1756	1.01	Or-I	India	688	0.371	1168	0.629	1	1835
W0606	1.13	Or-II	Malaya	678	0.365	1179	0.635	36	1799
W1087	5.48	Or-II	India	1086	0.364	1901	0.636	319	386
W0165	0.79	Or-II	Thailand	483	0.363	846	0.637		2363
W1748	5.59	Or-III	India	973	0.360	1729	0.640	661	329
DAL_DHAN	17.78	-	Chakaria;Bangladesh	974	0.354	1777	0.646	886	55
W1550	3.29	Or-II	Thailand	883	0.341	1710	0.659	488	611
W3019	0.67	Or-III	Guangdong	460	0.334	917	0.666	110	2205
W0164	1.4	Or-II	Thailand	687	0.334	1372	0.666	55	1578
W0163	3.3	Or-II	Thailand	957	0.327	1969	0.673	237	529
W1895	1.71	Or-II	Thailand	822	0.322	1728	0.678	91	1051
W3068	1.55	Or-II	Hainan	605	0.319	1293	0.681	440	1354
W0126	1.46	Or-III	India	641	0.317	1384	0.683	247	1420
W0594	1.21	Or-II	Malaya	596	0.311	1322	0.689	97	1677
W1740	1.87	Or-I	India	803	0.300	1878	0.700	4	1007
W0151	1.7	Or-I	India	685	0.295	1634	0.705	7	1366
W1743	1.06	Or-I	India	556	0.289	1365	0.711	1	1770
W0234	1.78	Or-II	Thailand	705	0.288	1744	0.712	11	1232
W1858	1.14	Or-II	Thailand	581	0.286	1451	0.714	37	1623
W1927	1.17	Or-II	Thailand	573	0.278	1489	0.722	109	1521
W0639	0.61	Or-I	Burma	337	0.274	892	0.726	6	2457
W1080	1.04	Or-I	India	501	0.274	1329	0.726	61	1801
W1753	1.28	Or-I	India	607	0.271	1630	0.729	4	1451
W1741	1.19	Or-I	India	569	0.267	1562	0.733	1	1560
W2277	1.13	Or-I	Thailand	554	0.266	1531	0.734	1	1606
HK47	15.54	-	Madhya Pradesh;India	951	0.265	2631	0.735	35	75
W0170	1.6	Or-I	Thailand	554	0.257	1604	0.743	8	1526
W2263	1.47	Or-I	Cambodia	525	0.254	1544	0.746	5	1618
W1762	0.75	Or-I	India	390	0.253	1151	0.747		2151
W1687	1.95	Or-II	India	529	0.252	1570	0.748	331	1262
W0106	1.77	Or-I	India	621	0.252	1846	0.748	7	1218
W1866	1.39	Or-I	Thailand	598	0.252	1778	0.748	14	1302
W1832	1.32	Or-I	Thailand	594	0.251	1769	0.749	4	1325
W1736	1.55	Or-II	India	556	0.251	1657	0.749	12	1467

W1698	1.48	Or-I	Thailand	535	0.251	1599	0.749	2	1556
W0633	0.42	Or-I	Burma	216	0.251	646	0.749	3	2827
W1533	0.79	Or-I	India	380	0.250	1138	0.750	1	2173
W1546	0.93	Or-I	Thailand	428	0.249	1291	0.751	1	1972
W2265	2.51	Or-I	Laos	742	0.249	2239	0.751	4	707
W1551	1.38	Or-I	Thailand	516	0.249	1559	0.751	10	1607
W2303	1.28	Or-I	Laos	567	0.248	1715	0.752	3	1407
W0121	0.88	Or-I	India	332	0.245	1024	0.755	155	2181
W1853	1.19	Or-I	Thailand	522	0.244	1614	0.756	1	1555
W1747	1.2	Or-I	India	528	0.244	1633	0.756	2	1529
W1738	1.75	Or-I	India	568	0.244	1760	0.756	7	1357
W1865	1.1	Or-I	Thailand	495	0.242	1547	0.758	9	1641
W0107	1.85	Or-I	India	604	0.242	1891	0.758	7	1190
W2296	1.29	Or-I	Cambodia	522	0.242	1638	0.758	7	1525
W2310	2.03	Or-II	Laos	667	0.242	2094	0.758	44	887
W1555	0.8	Or-II	Thailand	376	0.241	1182	0.759	10	2124
W1685	1.17	Or-I	India	434	0.240	1372	0.760	3	1883
W1727	1.22	Or-I	Thailand	470	0.240	1487	0.760	4	1731
W1749	1.25	Or-I	India	520	0.239	1653	0.761		1519
W1619	0.9	Or-I	Thailand	387	0.239	1231	0.761		2074
W1912	1.48	Or-I	Thailand	552	0.239	1760	0.761	8	1372
W1726	1.18	Or-I	Thailand	453	0.238	1447	0.762	3	1789
W0630	0.73	Or-I	Burma	313	0.237	1008	0.763		2371
W0168	1.41	Or-I	Thailand	509	0.236	1644	0.764	4	1535
W2275	0.79	Or-I	Thailand	378	0.233	1243	0.767	2	2069
W2304	2.38	Or-I	Laos	696	0.233	2291	0.767	8	697
W0574	1.95	Or-I	Malaya	611	0.232	2017	0.768	9	1055
W3067	3.4	Or-II	Hainan	489	0.232	1617	0.768	1028	558
W1547	1.48	Or-I	Thailand	503	0.231	1670	0.769	4	1515
W3105	8.36	Or-I	India	827	0.231	2757	0.769	14	94
W1700	0.91	Or-I	Thailand	369	0.230	1237	0.770	4	2082
W1921	1.04	Or-I	Thailand	458	0.227	1557	0.773	5	1672
W1754	1.93	Or-I	India	620	0.227	2112	0.773	4	956
W1731	1.31	Or-I	India	459	0.227	1566	0.773	9	1658
W0638	1	Or-I	Burma	366	0.224	1268	0.776	4	2054
W1681	0.85	Or-I	India	341	0.224	1182	0.776	2	2167
W1792	2.42	Or-I	Thailand	649	0.224	2250	0.776	17	776
W2307	2.33	Or-I	Laos	659	0.224	2285	0.776	4	744
W0124	0.86	Or-I	India	332	0.224	1152	0.776	1	2207
W2268	1.5	Or-I	Thailand	544	0.224	1890	0.776	7	1251
W0101	1.37	Or-I	India	475	0.223	1651	0.777	5	1561
W0102	1.19	Or-I	India	424	0.223	1474	0.777	9	1785
W0627	1.01	Or-I	Burma	375	0.223	1304	0.777	4	2009

W1557	0.62	Or-II	Thailand	277	0.223	965	0.777	8	2442
W1532	0.81	Or-I	India	344	0.222	1208	0.778	2	2138
W3072	4.33	Or-II	Hainan	438	0.221	1542	0.779	1363	349
W1925	0.83	Or-I	Thailand	316	0.221	1117	0.779	4	2255
W1757	3.41	Or-I	India	709	0.220	2516	0.780	6	461
W1852	1.36	Or-I	Thailand	495	0.219	1764	0.781	53	1380
W0631	0.4	Or-I	Burma	184	0.217	664	0.783		2844
W2306	2.74	Or-I	Laos	651	0.213	2410	0.787	19	612
W2305	1.44	Or-I	Laos	498	0.212	1850	0.788	12	1332
W0589	1.03	Or-I	Malaya	376	0.212	1400	0.788	1	1915
W0626	1.17	Or-I	Burma	371	0.212	1382	0.788	1	1938
W1787	1.53	Or-I	Thailand	516	0.211	1933	0.789	8	1235
W0130	0.9	Or-I	India	330	0.209	1246	0.791	2	2114
W1121	0.94	Or-I	India	317	0.209	1201	0.791	4	2170
W0148	1.39	Or-I	India	443	0.209	1679	0.791	4	1566
W1083	1.28	Or-I	India	429	0.207	1646	0.793	6	1611
W1084	1.36	Or-I	India	442	0.206	1703	0.794	6	1541
W1142	0.95	Or-I	India	338	0.206	1304	0.794	5	2045
W1105	1.39	Or-I	India	443	0.205	1716	0.795	7	1526
W0123	0.17	Or-I	India	73	0.204	285	0.796		3334
W0605	0.8	Or-I	Malaya	302	0.203	1183	0.797	1	2206
W1676	1.01	Or-I	India	340	0.202	1343	0.798	6	2003
W1928	0.95	Or-I	Thailand	312	0.201	1241	0.799	34	2105
W1879	1.21	Or-I	Thailand	428	0.198	1735	0.802	28	1501
W1770	1.05	Or-I	India	387	0.198	1571	0.802	1	1733
W1143	0.68	Or-I	India	244	0.197	995	0.803		2453
042_87_34	19.15	-	Dhoni;India	527	0.195	2175	0.805	915	75
W1082	1.33	Or-I	India	417	0.194	1729	0.806		1546
W0173	1.7	Or-I	Thailand	456	0.192	1915	0.808	4	1317
W0152	1.57	Or-I	India	420	0.192	1766	0.808	3	1503
L89_12	16.34	-	Vientiane;Laos	682	0.190	2899	0.810	46	65
W1795	1.93	Or-I	Thailand	506	0.190	2154	0.810	10	1022
W1873	0.67	Or-II	Thailand	287	0.190	1223	0.810	26	2156
W1124	2.11	Or-II	India	467	0.190	1995	0.810	6	1224
W2271	1.42	Or-I	Thailand	445	0.189	1913	0.811	2	1332
W2193	1.35	Or-I	India	410	0.189	1764	0.811	8	1510
W0147	0.14	Or-I	India	62	0.182	279	0.818		3351
W1751	0.62	Or-I	India	239	0.177	1111	0.823		2342
MV89_80	18.25	-	Medinipur;India	613	0.172	2944	0.828	41	94
W1295	0.92	Or-I	Cambodia	280	0.171	1358	0.829	16	2038
W2298	0.79	Or-I	Laos	255	0.169	1250	0.831	2	2185
W2299	1.23	Or-I	Laos	348	0.169	1710	0.831	5	1629
W1788	2.7	Or-I	Thailand	492	0.164	2503	0.836	3	694

W0145	0.22	Or-II	Thailand	84	0.164	428	0.836	1	3179
W2302	2.31	Or-I	Laos	469	0.162	2429	0.838	4	790
W1893	1.28	Or-I	Thailand	330	0.159	1744	0.841	1	1617
IRGC88812	71.5	-	Laos	573	0.157	3078	0.843	26	15
W1679	1.21	Or-I	India	301	0.154	1658	0.846	4	1729
W2301	1.68	Or-I	Laos	390	0.153	2151	0.847	12	1139
W1914	2.67	Or-I	Thailand	424	0.152	2370	0.848	13	885
W3003	0.38	Or-II	Guangdong	127	0.144	752	0.856	24	2789
W1695	1.04	Or-I	Thailand	256	0.144	1519	0.856		1917
W1690	1.24	Or-I	Thailand	274	0.144	1629	0.856	2	1787
W1737	1.02	Or-I	India	248	0.141	1506	0.859	5	1933
W0587	1.15	Or-II	Malaya	268	0.141	1631	0.859	34	1759
W1742	1.44	Or-II	India	316	0.140	1942	0.860	47	1387
W0635	0.49	Or-II	Burma	125	0.140	770	0.860		2797
W2276	1.18	Or-II	Thailand	272	0.135	1739	0.865	9	1672
W0176	1.17	Or-I	Thailand	241	0.122	1732	0.878	1	1718
W2311	1.92	Or-II	Laos	264	0.122	1899	0.878	62	1467
W2278	2.33	Or-I	Thailand	300	0.115	2318	0.885	292	782
W1750	1.77	Or-I	India	281	0.108	2323	0.892	11	1077
W1668	1.19	Or-III	India	181	0.096	1699	0.904	20	1792
W1881	1.09	Or-I	Thailand	163	0.090	1651	0.910	41	1837
W0632	1.04	Or-I	Burma	161	0.090	1632	0.910	3	1896
W1761	1.11	Or-I	India	183	0.089	1878	0.911	14	1617
W1735	1.51	Or-I	India	179	0.081	2030	0.919	15	1468
W0610	0.61	Or-I	Burma	97	0.080	1123	0.920	2	2470
W1107	1.42	Or-I	India	170	0.076	2053	0.924	3	1466
W0103	0.94	Or-I	India	119	0.072	1538	0.928	2	2033
W1666	0.58	Or-I	India	80	0.067	1112	0.933	10	2490
W1970	1.22	Or-I	Indonesia	124	0.066	1759	0.934	69	1740
W2269	0.99	Or-I	Thailand	118	0.065	1703	0.935	11	1860
W0128	2.14	Or-I	India	156	0.062	2379	0.938	200	957
W1696	0.54	Or-I	Thailand	60	0.056	1018	0.944	6	2608
W1794	1.68	Or-I	Thailand	133	0.052	2424	0.948	3	1132
W0590	1.71	Or-I	Malaya	99	0.042	2238	0.958	80	1275
W1677	2.09	Or-I	India	73	0.029	2425	0.971	30	1164
W0178	0.85	Or-I	Thailand	39	0.025	1528	0.975	1	2124
W1112	0.66	Or-I	India	27	0.022	1179	0.978		2486
CA97_053	16.62	-	Cambodia	55	0.021	2556	0.979	1008	73
W0179	0.88	Or-I	Thailand	33	0.021	1576	0.979	1	2082
W1935	0.76	Or-I	Thailand	26	0.018	1382	0.982	5	2279
W1092	1.17	Or-I	India	36	0.018	1981	0.982	2	1673
W1111	1.53	Or-I	India	32	0.014	2196	0.986	7	1457
W1559	3.92	Or-I	Thailand	40	0.013	2983	0.987	159	510

W1675	1.05	Or-I	India	5	0.003	1781	0.997	2	1904
W1090	0.24	Or-I	India	1	0.002	588	0.998	3	3100
W1117	1.32	Or-I	India	3	0.002	1974	0.998	3	1712
W1086	1.33	Or-I	India	3	0.001	2166	0.999	2	1521

1, Clades were classified by Huang et al.,2012

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**Table S6** SNP genotype of DR-II. We genotyped all the SNPs within DR-II regions and classified them as Cultivar type or Wild type.

Individual	Depth	Clade <sup>1</sup>	Original place	Cultivar_Type	%	Hete	Unmap
W1086	1.35	Or-I	India	10506	0.998	87	8243
W0178	0.84	Or-I	Thailand	8112	0.997	45	10677
W1090	0.23	Or-I	India	2757	0.996	6	16086
CA97_053	17.2	-	Sopoir Tep;Cambodia	15086	0.995	3243	461
W0639	0.58	Or-I	Burma	5988	0.995	26	12818
W1092	1.2	Or-I	India	9889	0.995	101	8822
W0638	1.06	Or-I	Burma	8682	0.995	94	10041
W1675	1.08	Or-I	India	9255	0.995	66	9493
W0179	0.92	Or-I	Thailand	8633	0.995	91	10091
W1080	1.11	Or-I	India	9575	0.994	77	9156
W1111	1.61	Or-I	India	11587	0.994	186	7017
W1112	0.72	Or-I	India	6606	0.992	42	12163
W0234	1.9	Or-II	Thailand	12688	0.991	188	5875
W1117	1.41	Or-I	India	10145	0.991	145	8483
W0606	1.2	Or-II	Malaya	9165	0.991	108	9506
W0103	0.97	Or-I	India	7961	0.988	87	10720
W1295	0.89	Or-I	Cambodia	8356	0.988	75	10330
W0632	1.08	Or-I	Burma	8596	0.987	109	10040
W0637	0.77	Or-III	Burma	6981	0.985	27	11750
W1559	3.9	Or-I	Thailand	14556	0.985	972	3108
W1119	1.44	Or-III	India	9946	0.985	160	8599
W3094	2.83	Or-III	Yangzi	14794	0.984	605	3228
W1751	0.68	Or-I	India	7384	0.984	28	11329
042_87_34	18.82	-	Dhoni;India	14394	0.983	3061	1163
W1107	1.48	Or-I	India	10747	0.983	108	7824
W3091	1.64	Or-II	Yangzi	11934	0.983	279	6440
W3072	4.26	Or-II	Hainan	14808	0.983	1053	2741
W1858	1.16	Or-II	Thailand	10749	0.982	99	7817
W2036	1.19	Or-III	Burma	10645	0.982	101	7920
W3023	1.41	Or-III	Guangdong	10739	0.982	299	7626
DAL_DHAN	18.54	-	Chakaria;Bangladesh	15027	0.981	2686	852
W3025	0.43	Or-III	Guangdong	5255	0.979	69	13425
W0594	1.27	Or-II	Malaya	9647	0.979	185	8822
W3067	3.37	Or-II	Hainan	14095	0.979	864	3599
W1725	5.3	Or-III	Thailand	15515	0.978	742	2260
W1741	1.17	Or-I	India	10994	0.978	103	7520
W1102	0.74	Or-III	India	6574	0.978	97	12041
W3041	2.97	Or-III	Guangxi	13675	0.977	200	4669
W3030	2.3	Or-III	Guangdong	14653	0.977	674	3186

W3006	1.47	Or-III	Guangdong	10404	0.976	145	8059
P46	14.95	-	Hainan,China	16238	0.975	1261	938
W1742	1.45	Or-II	India	11367	0.972	191	6974
W3068	1.54	Or-II	Hainan	10444	0.972	324	7788
W1935	0.82	Or-I	Thailand	8015	0.971	99	10508
W3044	3.33	Or-III	Guangxi	13828	0.970	567	4042
W3035	0.84	Or-III	Guangdong	8964	0.970	119	9503
W1666	0.62	Or-I	India	6061	0.970	62	12551
W1735	1.51	Or-I	India	10490	0.970	98	7944
W1668	1.21	Or-III	India	9606	0.969	109	8840
W3043	2.19	Or-III	Guangxi	12018	0.969	377	6082
W1757	3.32	Or-I	India	15101	0.969	260	3016
W3001	0.61	Or-III	Guangdong	6223	0.968	67	12368
W0596	0.98	Or-II	Malaya	8277	0.968	195	10115
W3021	1.37	Or-III	Guangdong	10450	0.968	350	7715
W1093	4.86	Or-II	India	13666	0.968	1131	3611
W3022	1.48	Or-III	Guangdong	10786	0.968	302	7415
W0176	1.17	Or-I	Thailand	9211	0.967	66	9274
W1756	0.92	Or-I	India	9151	0.967	126	9274
W3010	2.47	Or-III	Guangdong	12725	0.967	630	5069
W0610	0.63	Or-I	Burma	6126	0.967	40	12483
W3007	2.59	Or-III	Guangdong	13156	0.967	557	4692
W3002	2.6	Or-III	Guangdong	13473	0.966	504	4407
W3004	1.77	Or-III	Guangdong	11562	0.966	368	6521
W3013	1.55	Or-III	Guangdong	11173	0.966	264	7027
W1740	1.82	Or-I	India	12933	0.966	146	5322
W3050	3.4	Or-III	Guangxi	13895	0.965	542	3918
W1943	20.8	Or-III	Jiangxi	17305	0.964	536	370
W3033	1.08	Or-III	Guangdong	9635	0.964	292	8571
W3045	1.77	Or-III	Guangdong	10871	0.963	239	7332
W3028	2.35	Or-III	Guangxi	12085	0.963	424	5882
W0145	0.25	Or-II	Thailand	2344	0.962	7	16418
W1732	1.21	Or-III	India	8658	0.962	104	9755
W3074	2.49	Or-III	Hainan	12512	0.962	272	5576
W0587	1.24	Or-II	Malaya	9361	0.961	121	9004
W1750	1.77	Or-I	India	12360	0.961	249	5755
W0121	0.87	Or-I	India	7410	0.961	211	10938
W3024	0.47	Or-III	Guangdong	5043	0.961	83	13529
W3079	1.45	Or-III	Yangzi	11289	0.961	257	6852
W3040	1.48	Or-III	Guangdong	11993	0.960	331	6041
W3082	1.36	Or-III	Yangzi	11406	0.960	265	6715
W3081	0.88	Or-III	Yangzi	8981	0.960	137	9366
W3080	1.53	Or-III	Yangzi	11483	0.960	248	6647

W3015	1.68	Or-III	Guangdong	11324	0.959	311	6746
W3078	0.94	Or-III	Yangzi	9313	0.958	120	9024
W3092	2.44	Or-III	Yangzi	13418	0.958	436	4418
W3026	0.7	Or-III	Guangdong	6423	0.958	117	12038
W3052	3.26	Or-III	Guangxi	13176	0.958	851	4251
W3060	1.56	Or-III	Hainan	11446	0.958	465	6442
W2311	2.1	Or-II	Laos	11199	0.957	218	6936
W3042	1.38	Or-III	Guangxi	9272	0.956	272	8893
W3014	3	Or-III	Guangdong	13426	0.956	379	4441
W3039	0.91	Or-III	Guangdong	8843	0.956	80	9532
W2193	1.37	Or-I	India	10266	0.956	124	7996
W1534	0.56	Or-III	India	5710	0.956	60	12826
W2269	1.02	Or-I	Thailand	8815	0.955	147	9486
W1114	1.05	Or-III	India	7781	0.955	68	10646
W3019	0.64	Or-III	Guangdong	6567	0.955	157	11826
W0574	1.96	Or-I	Malaya	11501	0.955	147	6667
W3005	0.95	Or-III	Guangdong	8242	0.954	125	10100
W3049	3.23	Or-III	Guangxi	12484	0.954	857	4912
W1737	0.94	Or-I	India	7565	0.953	69	10858
W3105	8.26	Or-I	India	16803	0.953	264	973
W3095	1.48	Or-III	Yangzi	11107	0.953	186	7020
W3027	3.32	Or-III	Guangxi	13413	0.953	945	3835
W3000	0.88	Or-III	Guangdong	8100	0.952	173	10183
W1983	1.76	Or-I	India	11585	0.952	267	6422
W3046	4.08	Or-III	Guangdong	13470	0.952	963	3745
W3077	0.6	Or-III	Yangzi	6638	0.951	52	11832
W1788	2.58	Or-I	Thailand	13170	0.951	205	4813
W1542	0.94	Or-III	Malaya	7442	0.951	80	10957
W3038	1.12	Or-III	Guangdong	10475	0.951	162	7683
W1715	4.5	Or-II	China	13630	0.950	1187	3332
W3075	1.42	Or-III	Yangzi	11753	0.950	360	6134
W3076	0.41	Or-III	Yangzi	4939	0.950	54	13608
W3037	0.89	Or-III	Guangdong	8675	0.949	165	9554
W1928	1.07	Or-I	Thailand	8625	0.949	268	9503
W3011	1.18	Or-III	Guangdong	8808	0.949	284	9293
W1105	1.38	Or-I	India	9606	0.948	115	8618
W1560	1.25	Or-III	Thailand	9249	0.948	137	8968
W0141	0.91	Or-III	India	6596	0.948	87	11816
W2007	1.3	Or-III	India	9947	0.948	154	8213
W1852	1.35	Or-I	Thailand	10982	0.948	264	7010
W0631	0.4	Or-I	Burma	3893	0.947	12	14740
W1124	2.07	Or-II	India	11457	0.947	157	6602
W2008	1.39	Or-III	India	10050	0.947	152	8093



W3093	0.24	Or-III	Yangzi	2896	0.946	4	15797
W1087	5.94	Or-II	India	13661	0.946	1172	3248
W0130	0.75	Or-I	India	6098	0.945	50	12361
W3020	1.41	Or-III	Guangdong	9626	0.945	493	8180
W3034	1.7	Or-III	Guangdong	12312	0.945	638	5191
W0589	0.98	Or-I	Malaya	8024	0.945	88	10279
W3096	0.82	Or-III	Yangzi	7612	0.945	64	10739
W2198	3.74	Or-III	China	14377	0.945	574	3067
W1669	3.12	Or-III	India	14069	0.944	718	3247
W0157	0.96	Or-II	India	7285	0.944	89	11057
W0175	3.38	Or-II	Thailand	12990	0.944	390	4714
W1121	0.96	Or-I	India	7342	0.944	86	10998
W3047	3.23	Or-III	Guangxi	12566	0.944	1267	4283
W1292	0.83	Or-II	Indonesia	7030	0.943	132	11277
W1762	0.7	Or-I	India	6630	0.943	57	11775
W3009	1.84	Or-III	Guangdong	10820	0.943	367	7018
W0590	1.68	Or-I	Malaya	10472	0.943	198	7554
W0151	1.56	Or-I	India	9891	0.942	128	8228
W3016	0.53	Or-III	Guangdong	6035	0.941	78	12371
W1143	0.65	Or-I	India	5685	0.941	29	12789
W1748	5.42	Or-III	India	13159	0.941	1839	3033
W3051	2.4	Or-III	Guangxi	11380	0.940	723	6029
W0128	2.01	Or-I	India	10630	0.939	639	6906
W1753	1.24	Or-I	India	10131	0.939	166	7907
W1084	1.28	Or-I	India	9338	0.939	178	8738
W1083	1.18	Or-I	India	8851	0.938	193	9234
W1532	0.81	Or-I	India	7149	0.937	44	11188
W3048	3.66	Or-III	Guangxi	13553	0.937	394	3998
W1677	2.07	Or-I	India	11180	0.937	233	6691
W1795	1.87	Or-I	Thailand	11377	0.936	459	6246
W1082	1.25	Or-I	India	9087	0.936	168	8983
W3018	1.33	Or-III	Guangdong	9261	0.936	277	8686
W3036	0.47	Or-III	Guangdong	5307	0.935	93	13095
W0126	1.36	Or-III	India	9039	0.935	121	9072
W1738	1.63	Or-I	India	10096	0.934	194	7862
W3031	1.13	Or-III	Guangxi	9729	0.933	346	8090
W2278	2.39	Or-I	Thailand	12716	0.933	518	4714
W1927	1.22	Or-II	Thailand	9419	0.933	194	8568
W1687	1.82	Or-II	India	9911	0.933	542	7692
W1553	0.97	Or-II	Thailand	7092	0.932	194	11061
W0621	1.27	Or-III	Burma	8375	0.932	80	9792
W0163	3.18	Or-II	Thailand	12663	0.931	889	4376
W1794	1.72	Or-I	Thailand	10445	0.931	349	7292

W1782	2.82	Or-III	India	12773	0.930	299	4832
MV89_80	17.93	-	Medinipur,India	15363	0.929	773	1542
W1676	0.97	Or-I	India	7318	0.928	86	10893
W3017	1.62	Or-III	Guangdong	10311	0.928	427	7324
W1122	2.81	Or-II	India	12087	0.928	600	5235
W3070	3.65	Or-III	Hainan	12727	0.927	936	4198
W0629	0.34	Or-III	Burma	3156	0.927	4	15452
W2310	1.88	Or-II	Laos	11696	0.927	311	5927
W3032	0.63	Or-III	Guangxi	6737	0.926	87	11501
W0148	1.33	Or-I	India	9049	0.925	86	8993
W3069	2.35	Or-III	Hainan	11168	0.925	618	6163
W0625	0.45	Or-III	Burma	4050	0.924	20	14460
W3097	1.74	Or-II	Yangzi	10512	0.924	613	6869
W3029	0.58	Or-III	Guangdong	5760	0.924	81	12543
W3098	1.6	Or-II	Yangzi	10090	0.923	536	7398
W0147	0.14	Or-I	India	1753	0.923	4	16958
W1739	1.09	Or-III	India	8733	0.922	184	9208
W1991	1.6	Or-III	India	9415	0.922	165	8484
W2010	0.9	Or-III	India	7621	0.922	79	10512
W1998	1.83	Or-III	India	10590	0.920	147	7206
W0623	0.43	Or-III	Burma	4045	0.920	15	14447
W1989	1.07	Or-III	India	7796	0.919	127	10250
W1784	0.48	Or-III	India	4625	0.919	72	13755
W3008	0.61	Or-III	Guangdong	5854	0.918	85	12401
W3066	2.84	Or-III	Hainan	12421	0.918	334	4998
W1890	2.92	Or-II	Thailand	12509	0.918	686	4550
W2003	1.64	Or-III	India	10198	0.918	154	7599
W1993	1.13	Or-III	India	8402	0.918	154	9555
W2014	0.73	Or-III	India	6354	0.918	63	11876
W1759	2.26	Or-III	India	10569	0.918	1107	6240
W0173	1.61	Or-I	Thailand	9348	0.917	137	8531
W1761	1.03	Or-I	India	8327	0.917	119	9660
W1556	0.97	Or-II	Thailand	7193	0.917	284	10731
W3065	3.38	Or-III	Hainan	11958	0.916	910	4902
W1783	0.36	Or-III	India	3482	0.916	47	15011
W1995	0.74	Or-III	India	6515	0.915	108	11629
W1746	2.02	Or-III	India	10362	0.913	761	6746
W0573	1.47	Or-III	Malaya	8478	0.912	163	9407
W1990	1.25	Or-III	India	8825	0.912	192	8995
W1914	2.53	Or-I	Thailand	11760	0.912	294	5670
W3073	2.74	Or-III	Hainan	11518	0.912	934	5295
W3061	1.01	Or-III	Hainan	8506	0.912	186	9345
W1882	1.83	Or-II	Thailand	10670	0.912	540	6617

W1696	0.5	Or-I	Thailand	4317	0.911	69	14055
W0138	0.76	Or-III	India	5236	0.911	123	12989
W2012	0.88	Or-III	India	7124	0.911	76	10962
W0633	0.38	Or-I	Burma	3478	0.910	9	15030
W1873	0.68	Or-II	Thailand	6308	0.909	135	11790
W0172	0.91	Or-III	Thailand	6421	0.909	88	11710
W1880	2.33	Or-II	Thailand	11426	0.909	955	5336
W3059	1.49	Or-III	Hainan	10096	0.909	369	7380
W0125	1.9	Or-III	India	9666	0.909	240	7982
W0171	5.25	Or-II	Thailand	13015	0.908	1194	3337
W0153	2.08	Or-III	India	9965	0.907	269	7611
W3003	0.35	Or-II	Guangdong	3451	0.907	53	15004
W0134	0.88	Or-III	India	5658	0.907	141	12480
W0136	0.44	Or-III	India	3375	0.906	62	15075
W1096	3.75	Or-II	India	11100	0.906	1484	5122
W1550	3.04	Or-II	Thailand	11387	0.905	1036	5249
W2276	1.11	Or-II	Thailand	9000	0.905	124	8795
W1891	1.39	Or-II	Thailand	9332	0.905	346	8198
W0634	0.78	Or-II	Burma	5821	0.904	146	12278
IRGC103937	10.03	-	Africa	14472	0.904	940	1915
W0164	1.28	Or-II	Thailand	8311	0.904	205	9463
W3056	0.63	Or-III	Hainan	6157	0.903	144	11901
W1747	1.14	Or-I	India	8664	0.903	177	9086
W0593	0.72	Or-III	Malaya	5496	0.902	69	12701
W0628	1.74	Or-II	Burma	9114	0.902	305	8454
W1766	2.58	Or-III	India	11344	0.902	536	5751
W0576	3.02	Or-II	Malaya	10795	0.902	1259	5632
W2282	2.91	Or-II	Thailand	11200	0.901	927	5504
W2306	2.64	Or-I	Laos	12509	0.901	226	4746
W1862	2.04	Or-II	Thailand	10473	0.900	974	6250
W0133	0.59	Or-III	India	4535	0.900	108	13713
W1940	4.36	Or-II	Thailand	12291	0.899	1414	3780
W0549	1.11	Or-III	India	7310	0.899	160	10572
W1881	1.04	Or-I	Thailand	7822	0.899	72	10086
W0132	1	Or-II	India	6199	0.899	178	11785
W1916	3.03	Or-II	Thailand	12164	0.897	1056	4251
W0137	0.68	Or-III	India	4988	0.897	106	13197
W1857	2.93	Or-II	Thailand	11106	0.897	861	5624
W1790	5.28	Or-II	Thailand	13623	0.897	626	3053
W2265	2.36	Or-I	Laos	12124	0.897	233	5115
W2303	1.21	Or-I	Laos	8801	0.896	110	8930
W1142	0.85	Or-I	India	6108	0.896	63	11981
W1749	1.13	Or-I	India	8259	0.896	99	9544

W0624	0.61	Or-II	Burma	4988	0.896	85	13207
W2030	1.99	Or-II	Indonesia	10302	0.895	405	6943
W3012	1.61	Or-III	Guangdong	9982	0.894	290	7409
W2298	0.71	Or-I	Laos	6112	0.894	42	11984
W0168	1.23	Or-I	Thailand	7980	0.894	38	9899
W3054	1.73	Or-III	Hainan	9937	0.894	620	7128
W0135	0.63	Or-III	India	4664	0.894	99	13546
W1832	1.24	Or-I	Thailand	9098	0.894	101	8582
W3064	0.76	Or-III	Hainan	6357	0.894	191	11558
W1974	1.83	Or-II	Indonesia	10112	0.894	435	7112
W1970	1.26	Or-I	Indonesia	8049	0.894	172	9683
W1533	0.75	Or-I	India	6282	0.893	59	11771
IRGC103472	10.29	-	Africa	14340	0.893	868	1943
W2301	1.54	Or-I	Laos	9797	0.893	161	7730
W1780	1.88	Or-II	India	9799	0.892	863	7013
W2284	0.93	Or-II	Thailand	6913	0.892	230	10881
W2022	3.5	Or-II	Indonesia	11513	0.892	817	5136
W0123	0.18	Or-I	India	2071	0.892	8	16531
W2304	2.21	Or-I	Laos	11679	0.892	228	5537
W3062	1.91	Or-III	Hainan	11255	0.891	434	5802
W1685	1.09	Or-I	India	7033	0.891	76	10893
W1879	1.17	Or-I	Thailand	8723	0.891	233	8834
W2299	1.21	Or-I	Laos	8285	0.890	92	9464
W3058	1.21	Or-III	Hainan	8916	0.890	318	8529
W2296	1.24	Or-I	Cambodia	8612	0.890	176	9012
W2307	2.2	Or-I	Laos	11480	0.890	261	5705
W1770	0.97	Or-I	India	7576	0.890	100	10245
W2271	1.29	Or-I	Thailand	8898	0.889	79	8777
W3071	2.6	Or-III	Hainan	10334	0.889	789	6450
W2283	1.9	Or-II	Thailand	9668	0.889	580	7404
W2024	3.61	Or-II	Indonesia	11792	0.889	1117	4477
W3063	1.16	Or-III	Hainan	9068	0.888	236	8419
W1896	2.69	Or-II	Thailand	11883	0.888	555	4929
W1558	2.24	Or-II	Thailand	10113	0.888	571	6903
IRGC103632	10.13	-	Africa	13885	0.887	793	2420
W0149	1.32	Or-III	India	7997	0.887	165	9683
W3053	0.99	Or-III	Hainan	7687	0.887	338	9858
W0170	1.47	Or-I	Thailand	8027	0.887	68	9744
W0635	0.44	Or-II	Burma	4043	0.887	25	14277
W1736	1.39	Or-II	India	8037	0.887	161	9636
W0166	0.55	Or-II	Thailand	3959	0.886	49	14346
W1977	3.22	Or-II	Indonesia	11290	0.886	1253	4870
IRGC104574	7.35	-	Africa	13549	0.886	767	2800

TOG7102	6.25	-	Africa	12125	0.886	271	4902
W1912	1.4	Or-I	Thailand	9187	0.886	157	8332
W2288	2.55	Or-II	Cambodia	10926	0.886	821	5702
IRGC88812	78.63	-	Laos	15359	0.885	629	884
W1126	2.29	Or-II	India	10281	0.885	662	6585
W1893	1.25	Or-I	Thailand	8092	0.885	97	9622
W2305	1.36	Or-I	Laos	9111	0.885	149	8418
W1787	1.36	Or-I	Thailand	8867	0.885	196	8645
W1853	1.11	Or-I	Thailand	8732	0.885	100	8893
W2021	2.15	Or-II	Indonesia	10019	0.885	726	6810
W0106	1.53	Or-I	India	8643	0.885	109	8982
W0630	0.67	Or-I	Burma	5045	0.884	34	13123
W0165	0.75	Or-II	Thailand	5198	0.884	74	12908
W1557	0.55	Or-II	Thailand	4703	0.884	68	13473
W2302	2.22	Or-I	Laos	11089	0.883	344	5964
Yuan3_9	12.46	-	Yunnan	14304	0.883	938	1724
IRGC103469	12.12	-	Africa	13215	0.883	373	3521
W1859	4.02	Or-II	Thailand	11336	0.883	1395	4623
W0605	0.71	Or-I	Malaya	5494	0.883	41	12595
TOG5949	7.75	-	Africa	13030	0.882	344	3745
IRGC104206	9.72	-	Africa	13806	0.882	610	2598
W3055	0.92	Or-III	Hainan	7684	0.882	338	9811
TOG5923	6.05	-	Africa	12739	0.882	328	4089
W1754	1.78	Or-I	India	10503	0.882	185	6765
W0102	1.08	Or-I	India	6721	0.882	69	11170
W1895	1.63	Or-II	Thailand	9535	0.882	593	7453
VOC4	18.27	-	Nepal	12534	0.882	2644	2000
W2005	1.6	Or-III	India	9048	0.882	121	8477
W1619	0.81	Or-I	Thailand	6148	0.882	51	11836
TOG5457	9.63	-	Africa	13196	0.881	471	3420
W1866	1.29	Or-I	Thailand	9402	0.881	121	8072
W1695	0.95	Or-I	Thailand	6503	0.881	176	11305
TOG5467	14.23	-	Africa	13480	0.881	518	3039
W1792	2.26	Or-I	Thailand	10829	0.881	246	6320
W1743	0.96	Or-I	India	7540	0.881	105	10194
W0124	0.83	Or-I	India	5856	0.881	43	12168
IRGC104955	6.67	-	Africa	13607	0.880	600	2805
W2263	1.48	Or-I	Cambodia	8364	0.880	72	9288
W0107	1.62	Or-I	India	8747	0.880	80	8842
W2197	2.7	Or-II	Indonesia	11058	0.880	828	5465
W1981	1.2	Or-II	Indonesia	8067	0.880	372	9320
W1925	0.92	Or-I	Thailand	6597	0.880	104	11258
W3057	1.25	Or-III	Hainan	9005	0.880	421	8203

W1690	1.19	Or-I	Thailand	7434	0.879	116	10290
W0180	2.49	Or-II	Thailand	10287	0.879	292	6869
W0152	1.44	Or-I	India	7922	0.879	100	9750
W0626	1.08	Or-I	Burma	6836	0.879	89	10996
W0101	1.24	Or-I	India	7531	0.879	52	10242
W1921	0.96	Or-I	Thailand	7377	0.879	92	10377
TOG7025	11.7	-	Africa	13111	0.879	377	3566
W2275	0.75	Or-I	Thailand	6241	0.879	48	11711
W0120	0.73	Or-II	India	5706	0.879	168	12199
W1865	1.04	Or-I	Thailand	8364	0.877	121	9207
W0627	0.9	Or-I	Burma	6122	0.877	44	11839
W1546	0.87	Or-I	Thailand	6191	0.877	51	11753
W1681	0.78	Or-I	India	5468	0.877	72	12555
W1679	1.17	Or-I	India	7042	0.877	83	10746
W1854	3.99	Or-II	Thailand	12226	0.877	444	4469
IRGC103520	14.03	-	Africa	13955	0.876	605	2327
W0174	2.5	Or-II	Thailand	10142	0.876	739	6545
W2268	1.42	Or-I	Thailand	9424	0.876	151	7952
W1727	1.15	Or-I	Thailand	7097	0.876	109	10649
W1798	2.78	Or-II	Thailand	11365	0.875	578	5288
W2277	1.08	Or-I	Thailand	7908	0.874	166	9648
W1975	2.23	Or-II	Indonesia	10384	0.874	346	6634
W1547	1.36	Or-I	Thailand	8059	0.874	86	9552
W1726	1.07	Or-I	Thailand	6792	0.873	86	10998
W2266	1.18	Or-II	Laos	7462	0.873	112	10202
W1731	1.23	Or-I	India	7128	0.873	112	10582
W1700	0.86	Or-I	Thailand	5709	0.872	74	12243
W1551	1.23	Or-I	Thailand	7717	0.871	111	9890
W1849	8.42	Or-II	Thailand	13546	0.870	831	2456
W1552	1.19	Or-II	Thailand	7646	0.869	164	9896
IRGC67563	112.31	-	Africa	14369	0.869	732	1587
IRGC68939	118.26	-	Africa	14385	0.868	739	1551
W2025	0.88	Or-II	Indonesia	7074	0.868	158	10553
W0169	0.87	Or-II	Thailand	5623	0.868	56	12324
IRGC101049	114.35	-	Africa	14111	0.867	706	1886
W2272	1.42	Or-II	Thailand	9217	0.867	160	8069
IRGC75500	112.8	-	Africa	14323	0.866	733	1596
IRGC68976	113.32	-	Africa	14152	0.866	703	1821
W1698	1.36	Or-I	Thailand	7692	0.866	135	9845
W1973	2.09	Or-III	Indonesia	7761	0.865	177	9712
IRGC96841	117.5	-	Africa	14102	0.865	713	1844
HK47	14.44	-	Madhya Pradesh;India	13643	0.862	804	2239
L89_12	15.57	-	Vientiane;Laos	13699	0.862	834	2140

W1884	1.9	Or-II	Thailand	9927	0.862	885	6462
W0600	0.84	Or-II	Malaya	5879	0.862	221	11821
W1850	3.93	Or-II	Thailand	11568	0.861	505	4914
W1919	1.49	Or-II	Thailand	9220	0.860	429	7709
W1554	1.92	Or-II	Thailand	9230	0.856	171	7912
W1777	4.1	Or-III	India	11889	0.851	618	4269
W1971	1.5	Or-II	Indonesia	8348	0.850	503	8538
PADI_PADIAN	15.75	-	Kromat Watu;Indonesia	11952	0.844	1925	2776
W2267	1.72	Or-III	Laos	9157	0.842	237	7755
W1979	1.79	Or-II	Indonesia	8739	0.842	384	8103
W1870	3.48	Or-II	Thailand	11213	0.840	964	4555
W1978	1.57	Or-II	Indonesia	8053	0.835	521	8696
W2017	1.8	Or-II	Indonesia	8654	0.835	417	8079
W2308	2.11	Or-II	Laos	9256	0.835	327	7445
W1976	1.49	Or-II	Indonesia	8328	0.830	242	8586
W1683	5.09	Or-II	India	11018	0.825	900	4613
W1972	2.29	Or-II	Indonesia	9285	0.825	495	7115
W1939	1.36	Or-II	Thailand	8253	0.825	218	8636
W0108	1.47	Or-II	India	7470	0.822	278	9491
W1555	0.7	Or-II	Thailand	4959	0.818	63	12739

**Table S7** List of 163 genes in the 28 DR-I regions.

#Region	Gene	Ka	Ks	Ka/Ks	Possible Function
chr01:35499730-35510003	LOC_Os01g61380	0.002	0.007	0.337	seed
chr01:35499730-35510003	LOC_Os01g61390	0.001	0.002	0.707	
chr01:35499730-35510003	LOC_Os01g61400	0.001	0	-	
chr01:35499730-35510003	LOC_Os01g61410	0	0	-	
chr01:35839043-35890683	LOC_Os01g61920	0	0.012	0	
chr01:35839043-35890683	LOC_Os01g61930	0.001	0.002	0.629	
chr01:35839043-35890683	LOC_Os01g61940	0.001	0	-	
chr01:35839043-35890683	LOC_Os01g61950	0.010	0.013	0.777	
chr01:35839043-35890683	LOC_Os01g61960	0	0.005	0	
chr01:35839043-35890683	LOC_Os01g61970	0.001	0	-	
chr01:35839043-35890683	LOC_Os01g61980	0.001	0	-	
chr01:35839043-35890683	LOC_Os01g61990	0.002	0	-	
chr01:35839043-35890683	LOC_Os01g62000	0	0.004	0	
chr02:13139975-13160003	LOC_Os02g22084	0	0	-	
chr02:13139975-13160003	LOC_Os02g22090	0.001	0.001	0.614	
chr02:13139975-13160003	LOC_Os02g22100	0.003	0.007	0.465	
chr02:13349983-13360044	LOC_Os02g22370	0.001	0.002	0.616	
chr02:14944936-14962544	LOC_Os02g25580	0.001	0.005	0.144	
chr02:14944936-14962544	LOC_Os02g25590	0	0	-	
chr02:27708263-27721727	LOC_Os02g45540	0.003	0.004	0.638	
chr02:27708263-27721727	LOC_Os02g45550	0	0	-	
chr03:1579192-1602557	LOC_Os03g03600	0	0.013	0	
chr03:1579192-1602557	LOC_Os03g03610	0.001	0	-	
chr03:2483329-2542460	LOC_Os03g05100	0.002	0.017	0.093	
chr03:2483329-2542460	LOC_Os03g05110	0.001	0.010	0.072	
chr03:2483329-2542460	LOC_Os03g05120	0.010	0.010	1.040	
chr03:2483329-2542460	LOC_Os03g05130	0	0	-	
chr03:2483329-2542460	LOC_Os03g05140	0.002	0.001	1.854	anther;shoot
chr03:2483329-2542460	LOC_Os03g05150	0	0	-	
chr03:2483329-2542460	LOC_Os03g05160	0	0	-	
chr03:2483329-2542460	LOC_Os03g05170	0.004	0	-	
chr03:2483329-2542460	LOC_Os03g05180	0.002	0	-	
chr03:2483329-2542460	LOC_Os03g05200	0.003	0.003	0.953	
chr03:2483329-2542460	LOC_Os03g05210	0.001	0.003	0.390	
chr03:2483329-2542460	LOC_Os03g05220	0	0	-	
chr03:2483329-2542460	LOC_Os03g05225	0	0	-	
chr03:2483329-2542460	LOC_Os03g05240	0.002	0.011	0.206	
chr03:2483329-2542460	LOC_Os03g05250	0.004	0.007	0.611	
chr03:2706518-2724355	LOC_Os03g05470	0	0.006	0	
chr03:2706518-2724355	LOC_Os03g05480	0.004	0.002	1.815	



chr03:2706518-2724355	LOC_Os03g05490	0	0.006	0	
chr03:2706518-2724355	LOC_Os03g05500	0	0	-	
chr03:2832279-2854311	LOC_Os03g05680	0.001	0	-	
chr03:2832279-2854311	LOC_Os03g05690	0.003	0	-	
chr03:2832279-2854311	LOC_Os03g05700	0	0	-	
chr03:2832279-2854311	LOC_Os03g05710	0	0	-	
chr03:2832279-2854311	LOC_Os03g05720	0	0.005	0.101	
chr03:2832279-2854311	LOC_Os03g05730	0.001	0	-	
chr03:2896026-2923841	LOC_Os03g05800	0.004	0	-	
chr03:2896026-2923841	LOC_Os03g05806	0.001	0	-	
chr03:2896026-2923841	LOC_Os03g05812	0.001	0.002	0.614	
chr03:2896026-2923841	LOC_Os03g05820	0.001	0.011	0.084	seed
chr03:2896026-2923841	LOC_Os03g05830	0.003	0	-	
chr03:2997394-3195565	LOC_Os03g06000	0	0.011	0	
chr03:2997394-3195565	LOC_Os03g06010	0	0	-	coleoptile
chr03:2997394-3195565	LOC_Os03g06020	0.002	0	-	coleoptile
chr03:2997394-3195565	LOC_Os03g06030	0.005	0.016	0.338	coleoptile
chr03:2997394-3195565	LOC_Os03g06040	0	0.017	0	coleoptile
chr03:2997394-3195565	LOC_Os03g06050	0.002	0	-	coleoptile
chr03:2997394-3195565	LOC_Os03g06060	0.006	0	-	coleoptile
chr03:2997394-3195565	LOC_Os03g06070	0.001	0.005	0.178	
chr03:2997394-3195565	LOC_Os03g06080	0.003	0	-	
chr03:2997394-3195565	LOC_Os03g06090	0.001	0	-	
chr03:2997394-3195565	LOC_Os03g06100	0.002	0	-	
chr03:2997394-3195565	LOC_Os03g06110	0.001	0	-	
chr03:2997394-3195565	LOC_Os03g06120	0	0.003	0	seed
chr03:2997394-3195565	LOC_Os03g06139	0.001	0	-	
chr03:2997394-3195565	LOC_Os03g06160	0.001	0	-	
chr03:2997394-3195565	LOC_Os03g06170	0	0	-	
chr03:2997394-3195565	LOC_Os03g06180	0.001	0.008	0.157	
chr03:2997394-3195565	LOC_Os03g06190	0.001	0	-	
chr03:2997394-3195565	LOC_Os03g06200	0	0.006	0	
chr03:2997394-3195565	LOC_Os03g06210	0.005	0.005	1.060	
chr03:2997394-3195565	LOC_Os03g06220	0	0.003	0	
chr03:2997394-3195565	LOC_Os03g06230	0.004	0.003	1.208	
chr03:2997394-3195565	LOC_Os03g06240	0.004	0.004	0.977	
chr03:2997394-3195565	LOC_Os03g06250	0.002	0	-	
chr03:2997394-3195565	LOC_Os03g06260	0	0	-	
chr03:2997394-3195565	LOC_Os03g06270	0	0	-	
chr03:2997394-3195565	LOC_Os03g06280	0.005	0	-	
chr03:2997394-3195565	LOC_Os03g06290	0.004	0.003	1.320	
chr03:2997394-3195565	LOC_Os03g06330	0	0	-	
chr03:2997394-3195565	LOC_Os03g06340	0.001	0.003	0.325	

chr03:2997394-3195565	LOC_Os03g06350	0	0	-	
chr03:2997394-3195565	LOC_Os03g06360	0.002	0	-	seed
chr03:2997394-3195565	LOC_Os03g06370	0.003	0	-	
chr03:2997394-3195565	LOC_Os03g06379	0.005	0	-	
chr03:2997394-3195565	LOC_Os03g06390	0	0	-	
chr03:3479756-3498823	LOC_Os03g06880	0.001	0.006	0.168	
chr03:3479756-3498823	LOC_Os03g06890	0.001	0.006	0.193	seed
chr03:3479756-3498823	LOC_Os03g06900	0	0	-	
chr03:24189350-24230136	LOC_Os03g43390	0.001	0.007	0.221	
chr03:24189350-24230136	LOC_Os03g43400	0.002	0.005	0.376	root
chr03:24189350-24230136	LOC_Os03g43410	0	0.006	0	root
chr03:24189350-24230136	LOC_Os03g43420	0.001	0.004	0.349	
chr03:24189350-24230136	LOC_Os03g43430	0	0	-	
chr03:24189350-24230136	LOC_Os03g43440	0.001	0	-	
chr03:28469725-28489493	LOC_Os03g49940	0.001	0.006	0.175	
chr03:28469725-28489493	LOC_Os03g49960	0.003	0	-	
chr04:34409908-34420007	LOC_Os04g57780	0.002	0	-	
chr04:34409908-34420007	LOC_Os04g57790	0.002	0	-	
chr04:34409908-34420007	LOC_Os04g57800	0.001	0.002	0.384	
chr04:34469603-34500654	LOC_Os04g57880	0.002	0.003	0.694	
chr04:34469603-34500654	LOC_Os04g57890	0.001	0	-	
chr04:34469603-34500654	LOC_Os04g57900	0.001	0	-	
chr05:21659599-21670204	LOC_Os05g37070	0	0	-	
chr05:21659599-21670204	LOC_Os05g37080	0.003	0	-	
chr05:22789981-22800012	LOC_Os05g38850	0.001	0.006	0.101	
chr05:22869880-22880236	LOC_Os05g38984	0	0.027	0	
chr05:22869880-22880236	LOC_Os05g38990	0.003	0	-	flower
chr05:22869880-22880236	LOC_Os05g39000	0.001	0.007	0.078	
chr05:24026607-24070766	LOC_Os05g40990	0.003	0	-	
chr05:24026607-24070766	LOC_Os05g41000	0	0.003	0	
chr05:24026607-24070766	LOC_Os05g41010	0.001	0	-	
chr05:24026607-24070766	LOC_Os05g41030	0.002	0	-	seed storage
chr05:24026607-24070766	LOC_Os05g41040	0	0	-	
chr05:24026607-24070766	LOC_Os05g41050	0	0.008	0	
chr05:24026607-24070766	LOC_Os05g41060	0.002	0	-	
chr05:24026607-24070766	LOC_Os05g41070	0.005	0.037	0.142	
chr05:24026607-24070766	LOC_Os05g41080	0.006	0	-	
chr05:24300403-24330214	LOC_Os05g41510	0	0.001	0.278	
chr05:24300403-24330214	LOC_Os05g41520	0	0.004	0	
chr05:24300403-24330214	LOC_Os05g41530	0	0	-	
chr05:24300403-24330214	LOC_Os05g41540	0	0.006	0	
chr05:24300403-24330214	LOC_Os05g41550	0.008	0.016	0.503	
chr05:26824033-26840483	LOC_Os05g46250	0.004	0	-	

chr05:26824033-26840483	LOC_Os05g46260	0.001	0.002	0.642	
chr05:26824033-26840483	LOC_Os05g46270	0	0.004	0	
chr05:26824033-26840483	LOC_Os05g46280	0	0.014	0	
chr05:26824033-26840483	LOC_Os05g46290	0.001	0.003	0.297	
chr07:4149981-4163826	LOC_Os07g08170	0.002	0	-	pollen
chr07:4149981-4163826	LOC_Os07g08180	0.002	0.004	0.645	
chr07:25598750-25620217	LOC_Os07g42750	0.002	0.004	0.586	
chr07:25598750-25620217	LOC_Os07g42760	0.003	0.003	0.993	
chr07:25598750-25620217	LOC_Os07g42770	0.002	0.003	0.572	
chr09:22759164-22771433	LOC_Os09g39660	0.002	0.005	0.296	
chr09:22759164-22771433	LOC_Os09g39670	0.001	0.004	0.325	
chr09:22759164-22771433	LOC_Os09g39680	0	0.005	0	
chr09:22910542-22930021	LOC_Os09g39960	0.002	0	-	
chr09:22910542-22930021	LOC_Os09g39970	0.001	0.004	0.308	
chr09:22910542-22930021	LOC_Os09g39980	0.002	0	-	
chr10:21289972-21400480	LOC_Os10g39780	0	0.007	0	
chr10:21289972-21400480	LOC_Os10g39790	0.003	0	-	
chr10:21289972-21400480	LOC_Os10g39800	0.003	0.009	0.307	
chr10:21289972-21400480	LOC_Os10g39810	0	0	-	plant cuticular wax
chr10:21289972-21400480	LOC_Os10g39820	0.002	0	-	light
chr10:21289972-21400480	LOC_Os10g39830	0	0.006	0	
chr10:21289972-21400480	LOC_Os10g39840	0.001	0	-	
chr10:21289972-21400480	LOC_Os10g39850	0.002	0.002	1.001	
chr10:21289972-21400480	LOC_Os10g39860	0.004	0.019	0.224	
chr10:21289972-21400480	LOC_Os10g39870	0	0	-	
chr10:21289972-21400480	LOC_Os10g39880	0.012	0.006	1.931	light
chr10:21289972-21400480	LOC_Os10g39890	0	0.032	0	
chr10:21289972-21400480	LOC_Os10g39900	0.001	0.004	0.203	
chr10:21289972-21400480	LOC_Os10g39910	0.001	0.005	0.152	
chr10:21289972-21400480	LOC_Os10g39920	0.008	0	-	
chr10:21289972-21400480	LOC_Os10g39930	0.002	0.002	0.670	
chr10:21289972-21400480	LOC_Os10g39932	0	0	-	
chr10:21289972-21400480	LOC_Os10g39934	0.003	0	-	
chr10:21289972-21400480	LOC_Os10g39936	0.004	0.005	0.736	
chr10:21289972-21400480	LOC_Os10g39940	0.011	0	-	
chr10:21289972-21400480	LOC_Os10g39950	0.002	0.003	0.945	

**Table S8** List of 110 genes in the 28 DR-II regions.

Gene_ID	Possible Function	Gene_ID	Possible Function
LOC_Os01g15438		LOC_Os07g05740	
LOC_Os01g15448		LOC_Os07g05750	
LOC_Os01g15460	rice resistance	LOC_Os07g05820	
LOC_Os03g46320		LOC_Os07g05830	
LOC_Os03g46325		LOC_Os07g05840	
LOC_Os03g46330	root	LOC_Os07g05950	
LOC_Os03g46340		LOC_Os07g05960	
LOC_Os04g43840	<i>LABA1</i> , awns	LOC_Os07g05970	
LOC_Os04g43850		LOC_Os07g05984	
LOC_Os04g43860		LOC_Os07g06000	
LOC_Os04g43870		LOC_Os07g06010	
LOC_Os04g43880		LOC_Os07g06130	
LOC_Os04g43890		LOC_Os07g06274	
LOC_Os04g43900		LOC_Os07g06380	
LOC_Os04g43910		LOC_Os07g06390	
LOC_Os04g43916		LOC_Os07g06400	
LOC_Os04g43922		LOC_Os07g07410	
LOC_Os04g44030		LOC_Os07g07420	light
LOC_Os04g44050		LOC_Os07g07430	
LOC_Os04g44060		LOC_Os07g07540	dwarf
LOC_Os04g44290		LOC_Os07g07550	
LOC_Os04g44300		LOC_Os07g07560	cell growth and shape formation
LOC_Os04g44320		LOC_Os07g07570	
LOC_Os04g44330		LOC_Os07g07974	
LOC_Os04g44340		LOC_Os07g07990	
LOC_Os04g44530		LOC_Os07g08030	
LOC_Os04g44540		LOC_Os07g08040	
LOC_Os04g45320		LOC_Os07g08050	
LOC_Os04g45330	flower	LOC_Os07g08060	
LOC_Os04g45340		LOC_Os07g08070	
LOC_Os04g45550		LOC_Os08g37490	response to environmental stress, pathogens and light conditions
LOC_Os04g45560		LOC_Os08g37500	
LOC_Os04g45570		LOC_Os08g37520	
LOC_Os04g45580		LOC_Os08g37530	
LOC_Os04g45665		LOC_Os08g37595	
LOC_Os04g45670		LOC_Os08g37600	metal

LOC_Os04g45690		LOC_Os08g37605	
LOC_Os04g45700	root	LOC_Os08g37610	
LOC_Os04g45710		LOC_Os08g37630	
LOC_Os04g45720		LOC_Os08g37640	
LOC_Os04g45730		LOC_Os08g37650	
LOC_Os04g45670		LOC_Os08g37660	
LOC_Os04g45680		LOC_Os08g37670	
LOC_Os04g454710		LOC_Os08g37760	
LOC_Os04g56850	growth	LOC_Os08g37770	
LOC_Os04g56995		LOC_Os08g37780	
LOC_Os04g57010	resistance	LOC_Os08g37790	
LOC_Os04g57020		LOC_Os08g37874	
LOC_Os04g57520		LOC_Os08g37890	<i>GAD1</i> , awn, grain number/length
LOC_Os04g57530	<i>sh4</i> , seed shattering	LOC_Os08g37904	
LOC_Os04g57540		LOC_Os08g37920	
LOC_Os04g57550		LOC_Os08g37930	
LOC_Os04g57560		LOC_Os08g37940	
LOC_Os05g51790		LOC_Os08g37950	
LOC_Os07g05720		LOC_Os12g40279	