

Appendix A List of rice varieties assessed and the identification results with Pi1-In and Pikp-Del markers in 531 rice varieties

Variety	Origin	<i>Pik-p</i> / K -type /N-type	<i>Pi-1</i> / K -type /N-type
IRRI's differential lines			
IRBLk-Ka-Pik	IRRI	+	+
IRBL1-CL-Pi1	IRRI	+	<i>Pi-1</i>
IRBLkh-K3-Pik-h	IRRI	+	+
IRBLkm-Ts-Pik-m	IRRI	+	+
IRBLkp-K60-Pik-p	IRRI	<i>Pik-p</i>	+
IRBLks-S-Pik-s	IRRI	+	+
Conventional varieties(Indica)			
Aihechi	Jiangxi, China	-	-
Aijiaonante	Guangdong, China	-	-
Aimi	Jiangxi, China	-	-
Aituogu 151	Sichuan, China	-	-
Aizizhan	Guangxi, China	-	-
Baikehualuo	Guangdong, China	+	+
Baoxuan 21	Guangdong, China	-	-
Benbanggu	Yunnan, China	-	-
Biwusheng	Yunnan, China	+	+
Chaojidao	Hunan, China	+	+
CY85-43	Hunan, China	-	-
CP112	Unknown	+	+
Chengnongshuijing	Sichuan, China	+	+
Chikenuo	Guangdong, China	+	+
Co39	Unknown	-	-
Da224	Unknown	+	+
Dabainuo	North China	+	+
Dangyu 5	Anhui, China	+	+
Dazilaishan	Unknown	+	+
DP4	Unknown	+	+
Erjiunan 1	Zhejiang, China	-	-
Esiniu	Guangdong, China	+	+
Ezao 11	Hubei, China	+	+
Fanhaopi	Yunnan, China	-	-
Fengaizhan 2	Guangdong, China	-	-
Fengxinzhan	Guangdong, China	-	-
FSJ001(Bph14)	Unknown	+	+
Funingzipi	Hebei, China	+	+
Gangannuo	Unknown	+	+
Gaoshan 32	Unknown	-	-
Gaoyangdiandao	Hebei, China	+	+

gk1019	Fujian, China	-	-
GK729	Fujian, China	-	-
Guanggangu	Unknown	-	-
Guangluai 4	Guangdong, China	+	+
Guicchao 2/Yinzhan	Guangdong, China	-	-
Guichao 2	Guangdong, China	+	+
Guisixiangnuo	Guangxi, China	+	+
Hanmadao	Henan, China	+	+
Haolai	Yunnan, China	+	+
Heidu 4	Guangdong, China	-	-
Heimi	Unknown	+	+
Hengxianliangchunzuogu	Guangxi, China	-	-
Hongainuo	Guangxi, China	-	-
Hongchaxiazhi	Unknown	+	+
Hp5046	Unknown	+	+
Hua 2-1	Hunan, China	+	+
Huagujianglai	Unknown	+	+
Huajienuo	Unknown	-	-
Huajingxian74	Guangdong, China	-	-
Huangluai 15	Guangxi, China	-	-
Huangmaozaohe	Unknown	-	-
Huangsiguizhan	Guangdong, China	-	-
Hubeixiangdao	Hubei, China	-	-
Hunannuo	Hunan, China	-	-
IR0401	IRRI	-	-
IR0402-1	IRRI	-	-
IR0404	IRRI	+	+
IR0405	IRRI	+	+
IR0406	IRRI	+	+
IR0407	IRRI	-	-
IR04075-2	IRRI	-	-
IR0408-1	IRRI	-	-
IR04086-2	IRRI	-	-
IR0409-1	IRRI	+	+
IR0410	IRRI	+	+
IR04100	IRRI	-	-
IR04101	IRRI	-	-
IR04102-1	IRRI	-	-
IR04103	IRRI	+	+
IR0411	IRRI	+	+
IR0412	IRRI	+	+
IR0413	IRRI	+	+
IR0414-1	IRRI	-	-
IR0415	IRRI	-	-

IR0416	IRRI	+	+
IR0417	IRRI	+	+
IR0419	IRRI	-	-
IR0420	IRRI	-	-
IR0422	IRRI	-	-
IR0424	IRRI	+	+
IR0425	IRRI	+	+
IR0426	IRRI	+	+
IR0427	IRRI	+	+
IR0428	IRRI	+	+
IR0429-1	IRRI	+	+
IR0432-1	IRRI	+	+
IR0433-1	IRRI	+	+
IR0434	IRRI	-	-
IR0435	IRRI	+	+
IR0436	IRRI	+	<i>Pi-1</i>
IR0437	IRRI	+	<i>Pi-1</i>
IR0440	IRRI	+	+
IR0443-1	IRRI	-	-
IR0444-1	IRRI	-	-
IR0445	IRRI	-	-
IR0446	IRRI	-	-
IR0449	IRRI	+	+
IR0450-1	IRRI	-	-
IR0452	IRRI	-	-
IR04551	IRRI	-	-
IR04552	IRRI	-	-
IR04553	IRRI	+	+
IR04554	IRRI	+	+
IR04555	IRRI	+	+
IR04556	IRRI	+	+
IR04557	IRRI	+	+
IR04558	IRRI	+	+
IR04559	IRRI	+	+
IR0459	IRRI	+	+
IR0460	IRRI	-	-
IR0461	IRRI	+	+
IR0462	IRRI	+	+
IR0464	IRRI	+	+
IR0465	IRRI	-	-
IR0466	IRRI	+	+
IR0467	IRRI	+	+
IR0468	IRRI	+	+
IR0469-1	IRRI	+	+

IR0472J2	IRRI	-	-
IR100-7	IRRI	+	+
IR101-3	IRRI	-	-
IR1317	IRRI	+	+
IR13427-60-1-3-2-2	IRRI	+	+
IR14632-2-3	IRRI	+	+
IR1469-1	IRRI	+	+
IR21937-26-2-3	IRRI	+	+
IR26	IRRI	+	+
IR34631-18-3-2	IRRI	+	+
IR4774-295-2-3	IRRI	+	+
IR55433-63	IRRI	+	+
IR5629-64-3	IRRI	+	+
IR56455-206-2-1-2R	IRRI	+	<i>Pi-1</i>
IR59552-63-2-3	IRRI	+	+
IR6560-126-2-B	IRRI	-	-
IR63896-60-3-1-2	IRRI	-	-
IR65600-27-1-2-2	IRRI	-	-
IR71137-243-2-2-3-3	IRRI	+	+
IR71604-4-1	IRRI	-	-
IR71700-247-1-1-1	IRRI	-	-
IR72158-16-16-3-3	IRRI	-	-
IR72163-279-9-1-1-1	IRRI	+	+
IR72164-368-6-2-2-2	IRRI	+	+
IR72769-9-1-1	IRRI	-	-
IR72798-14-1-2	IRRI	+	+
IR72967-12-2-3	IRRI	+	+
IR73001-13-2-2-2	IRRI	+	+
IR73459-120-2-2-3-1	IRRI	+	+
IR73712-68-3-1-2	IRRI	+	+
IR73963-86-1-5-2-2	IRRI	-	-
IR74371-54-1-1	IRRI	-	-
IR74642-195-1-3-2	IRRI	+	+
IR74731-70-1-1	IRRI	-	-
IR74963-262-5-3-3	IRRI	+	+
IR76-3	IRRI	-	-
IR76560-126-2-13	IRRI	-	-
IR76569	IRRI	+	+
IR76928-74-3-2-1	IRRI	+	+
IR9256-59	IRRI	-	-
IR95-3	IRRI	-	-
IR96-3	IRRI	-	-
IR9671-1-4-6-8	IRRI	+	+
IR9852-93-2-2-2-3	IRRI	-	-

IR-BB54	IRRI	+	+
Jiabala	Xizang, China	+	+
Jiangnongzao 1 hao	Jiangxi China	+	+
Jiangsuhui	Jiangsu, China	-	-
Jiaoshuizao	Unknown	-	-
Jiayu 164	Zhejiang, China	+	+
Jiayu 948	Zhejiang, China	-	-
Jiazao 1hao	Fujian, China	-	-
Jiazao 935	Zhejiang, China	+	+
Jiefangxian	Jiangxi, China	+	+
Jingyouzao 48	Hubei, China	+	+
Jingyouzao 8	Hubei, China	+	+
Jinsinuo	Unknown	+	+
Jinxibai	Jiangxi, China	+	+
Jinzhinuo	Yunnan, China	-	-
JN-2	Zhejiang, China	-	-
JN509	Zhejiang, China	-	-
JN510	Zhejiang, China	-	-
JN511	Zhejiang, China	+	+
JN709	Zhejiang, China	-	-
JN711-0	Zhejiang, China	+	+
JN726	Zhejiang, China	+	+
Kajinuo	Henan, China	+	+
Kangwenqinzhao	Guangdong, China	-	-
KB-1	Unknown	-	-
KB-2	Unknown	-	-
KOKKO	Unknown	-	-
KROSNORARSKI424	Unknown	-	-
Laohonggu	Anhui, China	-	-
Laolaihuang	Yunnan, China	-	-
Liaodong 218	Liaoning, China	-	-
2428	Jiangsu, China	+	+
Liusha 1	Guangxi, China	+	+
Liushizao	Anhui, China	+	+
Liuyezhan	Hubei, China	-	-
Longpinzhili	Hunan, China	-	-
Lucaihao	Fujian, China	+	+
M3122/IR50	Unknown	-	-
Mamagu	Sichuan, China	+	+
Maweizhan	Guizhou, China	-	-
Menjiading 2	Hainan, China	-	-
Minbeiwaxian	Fujian, China	+	+
Ming 77	Fujian, China	-	-
Momi	Guangxi, China	-	-

Nanjing 11	Jiangsu, China	-	-
Nantehao	Jiangxi, China	-	-
Nantiangangjiu	Sichuan, China	-	-
Nanxiongzaoyouzhao	Guangdong, China	-	-
NDR117	Unknown	+	+
NDR308	Unknown	+	+
NDR96	Unknown	+	+
NPT-1	IRRI	-	-
P03092	Guangdong, China	-	-
P03094	Guangdong, China	+	+
P70	Unknown	-	-
PSBRC82	Unknown	-	-
Qibaitou	Yunnan, China	-	-
Qinke	Yunnan, China	-	-
Qitoubaidu	Yunnan, China	-	-
R02w05	Fujian, China	-	-
RCPL3-2	Unknown	<i>Pik-p</i>	+
RK007	Fujian, China	-	-
RK222-1	Fujian, China	+	+
RK317-1	Fujian, China	+	+
Ruanmigu	Yunnan, China	<i>Pik-p</i>	+
Sanbaili	Jiangxi, China	-	-
Sankecun	Sichuan, China	-	-
Sanlicun	Guangdong, China	-	-
SER Eendah KUNIN	Unknown	-	-
Shangjiu	Sichuan, China	-	-
Shuiyuan 290	South Korea	+	+
Shuiyuan 377	South Korea	+	+
Shuyazhan	Guangdong, China	-	-
Sibeitibeifengsanhao	Unknown	+	+
Sibeitizhaofengwuhao	Unknown	+	+
Simiao	Guangdong, China	+	+
TB154E-TB-2	Unknown	+	+
Taidongludao	Taiwan, China	-	-
Taiguosimiao	Thailand	-	-
Taishannuo	Jiangxi, China	+	+
Taiyou	Zhejiang, China	+	+
Taizhong 65	Taiwan, China	+	+
Taizhongxianxuan 2	Taiwan, China	+	+
Taizhongzailai 1	Taiwan, China	-	-
Tumangdao	Unknown	-	-
Up15	Unknown	-	-
URASAN	Unknown	-	-
VN132	Unknown	+	+

W01201-2	Unknown	+	+
W162	Fujian, China	+	+
w31	Fujian, China	+	+
W68-1	Fujian, China	+	+
W70	Fujian, China	+	+
Wanlixian	Hunan, China	+	+
WCR1	Fujian, China	-	-
WJ413	Zhejiang, China	-	-
Wuhongxian	Unknown	+	+
Wujuhonggu	Yunnan, China	-	-
Wukezhan	Fujian, China	-	-
Wunong 1	Guangxi, China	+	+
Xiangzaizao 10	Hunan, China	+	+
Xiangdao	Henan, China	+	+
Xiangnuo	Guizhou, China	+	+
Xiangwanxian	Hunan, China	+	+
Xiangwanxian 1hao	Hunan, China	-	-
Xiangzaoxian 7 hao	Hunan, China	+	+
Xiaobaigu	Guizhou, China	-	-
Xiaohuangma	Unknown	+	+
Xiaojiugu	Sichuan, china	-	-
Xiaoyangu	Unknown	-	-
Xikangxiaobaigu	Sichuan, china	-	-
Xin 1221	Guangdong, China	-	-
Xin 1223	Guangdong, China	-	-
Xinfengzhan 1	Guangdong, China	-	-
Xinruanzhan	Guangdong, China	-	-
Yangkenuo	Guizhou, China	-	-
Yanshuichi	Fujian, China	+	+
Yeweipan	Unknown	-	-
Yigendao	Unknown	-	-
Yinchaozhan	Guangdong, China	-	-
Yixianhong	Unknown	+	+
Yizhixiang	Fujian, China	-	-
YR688-ACP36	Unknown	+	+
Yueyezhan6hao	Guangdong, China	-	-
Yuxian 7	Henan, China	-	-
Yuxian 8	Henan, China	-	-
Zaonuo 1003	Hubei, China	+	+
Zaoshuiyinzhan	Unknown	-	-
Zaoxian 1061	Unknown	-	-
Zhankenuo	Guizhou, China	-	-
Zhe 733	Zhejiang, China	+	+
Zhefu 802	Zhejiang, China	+	+

Zhengda 109	Fujian, China	-	-
Zhengda 116	Fujian, China	-	-
Zhengda 118	Fujian, China	-	-
Zhengda 119	Fujian, China	-	-
Zhengda 131	Fujian, China	-	-
Zhengda 133	Fujian, China	-	-
Zhengda 146	Fujian, China	-	-
Zhengda 175	Fujian, China	-	-
Zhengda 2	Fujian, China	+	+
Zhengda 210	Fujian, China	+	+
Zhengda 219	Fujian, China	-	-
Zhengda 22	Fujian, China	+	+
Zhengda 29	Fujian, China	+	+
Zhengda 3119	Fujian, China	-	-
Zhengda 36	Fujian, China	-	-
Zhengda 4	Fujian, China	-	-
Zhengda 69	Fujian, China	-	-
Zhengda 86	Fujian, China	-	-
Zhengda122	Fujian, China	-	-
Zhenxian 232	Jiangsu, China	+	+
Zhi 02	Fujian, China	+	+
Zhi 05 W	Fujian, China	+	+
Zhong413-2	Zhejiang, China	-	-
Zhongjian 100	Zhejiang, China	-	-
Zhongnong 4 hao	Sichuan, China	-	-
Zhongpinzao 49	Unknown	+	+
Zhou 903	Zhejiang, China	+	+
Ziguangdou	Unknown	+	+
Zihui 100/IKAN 469	Unknown	-	-
Zimangfeie	Guizhou, China	+	+
Zinuo	Yunnan, China	+	+
ZR22	Fujian, China	-	-
ZR3298-3	Fujian, China	+	+

Maintainer(or male sterile)lines of hybrid rice

Anfeng A	Hunan, China	-	-
Annongwanjing A	Hunan, China	-	-
Baoxie 123A	Hunan, China	+	+
Baoxie1-7 A	Hunan, China	+	+
Bobai A	Guangxi, China	-	-
D297 A	Sichuan, China	+	+
D702 A	Sichuan, China	-	-
Dianrui409 A	Yunnan, China	+	+
Dixiang A	Fujian, China	+	+

G-zhenshan 97 A	Sichuan, China	+	+
II-32A	Hunan, China	-	-
Feng 008 A	Unknown	-	-
Fuyi A	Fujian, China	-	-
Fei A	Sichuan, China	+	+
Gang 46 A	Sichuan, China	-	-
Gufeng A	Fujian, China	+	+
Guangkang 13A	Fujian, China	-	-
Hua1 A	Fujian, China	-	-
HuifengA	Fujian, China	<i>Pik-p</i>	+
IR688998B	IRRI	+	+
IR68902B	IRRI	-	-
IR68903B	IRRI	+	+
IR75502-61-1-1B	IRRI	-	-
IR75517-23-1-1B	IRRI	-	-
IR58025B	IRRI	-	-
JinghuB	Anhui, China	+	+
JinnanteB	Hunan, China	-	-
Jinnante 43B	Hunan, China	+	+
Jinkang1A	Unknown	+	<i>Pi-1</i>
L301A	Hunan, China	+	+
LimingA	Liaoning, China	+	+
Qinsiai 16 A	Guangdong, China	-	-
710S	Fujian, China	-	-
RGD-7S	Guangdong, China	+	<i>Pi-1</i>
Si B	Jiangsu, China	-	-
T55 A	Fujian, China	-	-
XieB	Zhejiang, China	-	-
Yi A-1	Unknown	-	-
Yue 4 A	Hunan, China	-	-
Yuefeng A	Guangdong, China	+	+
Zaogang A	Sichuan, China	-	-
ZaoteA	Guangdong, China	-	-
Zhenbai A	Fujian, China	-	-
Zhong 9A	Zhejiang, China	-	-
ZhuzhenA	Hunan, China	+	+
XiangaiA	Jiangxi, China	-	-
You1 A	Hunan, China	-	-
Zhenshan 97 A	Jiangxi, China	-	-
Zaoshunonghu 6A	Hunan, China	+	+
Restorer lines of hybrid rice			
6078	Chongqing, China	-	-
9311	Jiangsu, China	-	-
8L124	Fujian, China	+	+

BL123	Guangdong, China	+	<i>Pi-1</i>
C418	Liaoning, China	+	+
Ce 148	Sichuan, China	+	+
Ce 64	Hunan, China	-	-
Changlizhua	Hunan, China	-	-
Chenghui 448	Sichuan, China	+	<i>Pi-1</i>
Chenghui 707	Sichuan, China	-	-
Duohui43	Sichuan, China	+	+
Ehui 928	Hubei, China	-	-
Enhui 99-64	Hubei, China	+	<i>Pi-1</i>
Fuhui 016	Fujian, China	-	-
Fuhui 101	Sichuan, China	+	+
Fuhui 718	Sichuan, China	-	-
Fuhui 838	Sichuan, China	-	-
G115	Sichuan, China	-	-
G96-16-0	Sichuan, China	+	+
Gu154	Guba	+	+
Guanghui 128	Guangdong, China	-	-
Guangxi1-0	Guangxi, China	+	+
GuangxiRzao 02	Guangxi, China	-	-
Gui 32	Guangxi, China	+	+
Gui44	Guangxi, China	+	+
Gui630	Fujian, China	-	-
GuixianR 12	Guangxi, China	-	-
Hang 1hao	Fujian, China	+	+
Huaming 921	Fujian, China	+	+
Huazhan	Zhejiang, China	-	-
Huhui628	Hunan, China	+	+
Hui 010	Unknown	+	+
Hui 1826	Hubei, China	-	-
Hui 92	Fujian, China	+	+
Hui501-1	Guangxi, China	+	+
Hui68	Fujian, China	+	+
IR661-1	Hunan, China	+	+
Jinghui 4932	Unknown	+	+
JingzhouR(zao)	Hubei, China	-	-
Keyou 80	Sichuan, China	+	+
Lehui 188	Sichuan, China	-	-
Luhui 17	Sichuan, China	-	-
Luhui 6	Sichuan, China	-	-
Lunhui 422	Hunan, China	-	-
Minfeng 617	Fujian, China	+	+
Minghui 63	Fujian, China	-	-
Minghui 69	Fujian, China	-	-

Minghui 77	Fujian, China	-	-
Minghui 81	Fujian, China	-	-
Minghui 86	Fujian, China	+	+
Minghui 88	Fujian, China	+	+
Minghui1259	Fujian, China	+	+
MingRzao 01	Unknown	+	+
Minhui 3139	Fujian, China	-	-
Minhui 3189	Fujian, China	-	-
Minhui 3229	Fujian, China	-	-
Minhui 3301	Fujian, China	+	+
Minhui 6118	Fujian, China	+	+
Miyang 46	korea	-	-
MR-1	Fujian, China	-	-
Nanhui 397	Fujian, China	-	-
Nanhui 511	Fujian, China	-	-
Ninghui 21	Jiangsu, China	+	+
Ninghui 266	Jiangsu, China	-	-
Ninghui 302	Jiangsu, China	+	+
Ninghui 311	Jiangsu, China	+	+
Ninghui 627	Jiangsu, China	-	-
R-1	Fujian, China	<i>Pik-p</i>	+
R128	Guangdong, China	+	+
R187	Hubei, China	+	+
R402	Hunan, China	-	-
R524	Guangdong, China	-	-
R527	Sichuan, China	+	+
R537	Sichuan, China	-	-
R95	Unknown	-	-
Shuhui 188	Sichuan, China	-	-
Shuhui 881	Sichuan, China	+	+
Wan3	Hunan, China	-	-
Wuhui 898	Fujian, China	+	+
Xiang 976	Sichuan, China	+	+
Xiang 978	Sichuan, China	-	-
Xianghui 91269	Hunan, China	+	+
Xianhui 207	Hunan, China	+	+
Yanhui 559	Jiangsu,china	-	-
Yuehui 94	Hunan, China	+	+
Yunhui72	Yunnan, China	-	-
Zaodaohui	Unknown	+	+
Zaohui 61	Fujian, China	+	+
Zaohui 62	Fujian, China	<i>Pik-p</i>	+
Zaohui 63	Fujian, China	+	+
ZaoR 100-1	Fujian, China	-	-

ZaoR-1	Fujian, China	-	-
ZaoR-2	Fujian, China	+	+
ZaoR-3	Fujian, China	-	-
Zhehui	Zhejiang, China	+	+
Zhenghui-5	Jiangsu, China	-	-
Zhenhui 084	Jiangsu, China	-	-
Zhi 07	Fujian, China	+	+
Conventional varieties(Japonica)			
96IR-49	IRRI	-	-
Baimanggeng	Guangxi, China	-	-
Baimaodao	Heilongjiang, China	+	+
Baixianghe	Guangxi, China	+	+
Baizhugeng	Liaoning, China	+	+
Chenwan 3	Hunan, China	+	+
CR1zhong	Zhejiang, China	+	+
Cunsanli	Jiangsu, China	+	+
Dandongludao	Liaoning, China	-	-
Gaoyou 35	Shenyang, China	-	-
GIZA176	GIZA	+	+
Gongju 73	Yunnan, China	+	+
Guangchaoyihao	Anhui, China	-	-
Guangkexiangnuo	Guangxi, China	-	-
Haomake(K)	Yunnan, China	+	+
Heidao	Hainan, China	+	+
Heimangdao	Ningxia, China	+	+
heizhugeng	Heilongjiang, China	+	+
HG394	Jiangsu, China	+	+
Hongqi 5hao	Tianjin, China	+	+
Huangdao	Unknown	+	+
Huangnuo 3	Huangshan, China	+	+
ITA233	Italy	-	-
Jing 4	Unknown	-	-
Jing 7623	Shanghai, China	+	+
Katy	American	+	+
Laoguangtou 83	Heilongjiang, China	+	+
Laohongdao	Shanxi, China	+	+
Lemont	American	+	+
Liaojing 287	Liaoning, China	-	-
Lijiangxintuanheigu	Yunnan, China	-	-
Lixingeng	Sichuan, China	-	-
Longhuamaohu	Hebei, China	-	-

Luyu 132	Japan	+	+
Maguzi	Shanxi, China	+	+
Mojing	Unknown	+	+
Nanbagu	Ganshu, China	+	+
NDR89	Unknown	+	+
Niumunuo	Fujian, China	-	-
SibeitiBalilla	Hubei, China	+	+
Taibei 309	Taiwan, China	+	+
Tieganwu	Zhejiang, China	+	+
UNBONG8	Unknown	+	+
Weiguo	Liaoning, China	+	+
Xingguo	Jilin, China	+	+
Xinyouzaoshen	Liaoning, China	+	+
Xiushui13	Zhejiang, China	-	-
Yelicanghua	Hebei, China	-	-
Youmangzaogeng	Shanghai, China	-	-
Zhengdao 5	Henan, China	+	+
Zhonghua 13	Beijing, China	-	-
Zhonghua 15	Beijing, China	-	-
Zhonghua 16	Beijing, China	-	-
Zhonghua 8	Beijing, China	+	+
Zhonglou 1	Shanxi, China	-	-
Zidao	Yunnan, China	-	-

+ , K-type; -, N-type