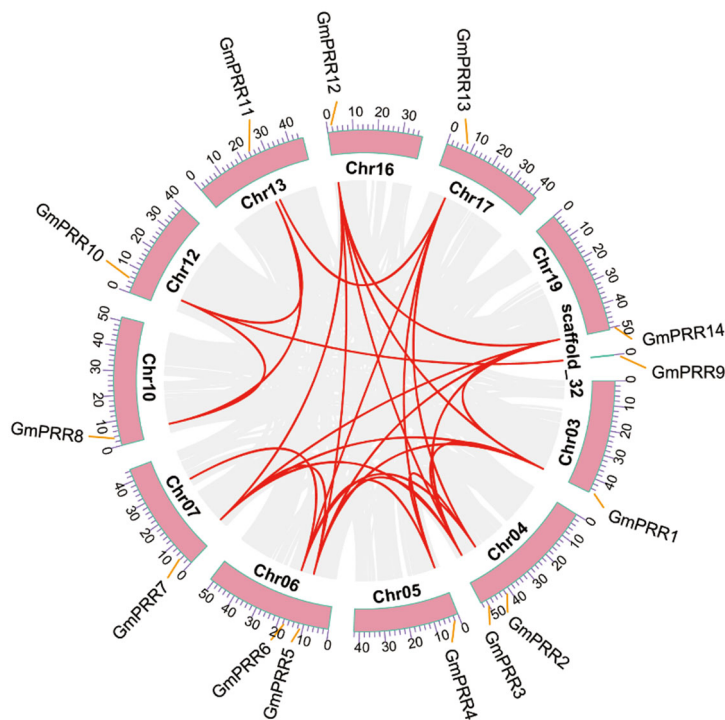


Supplementary Materials

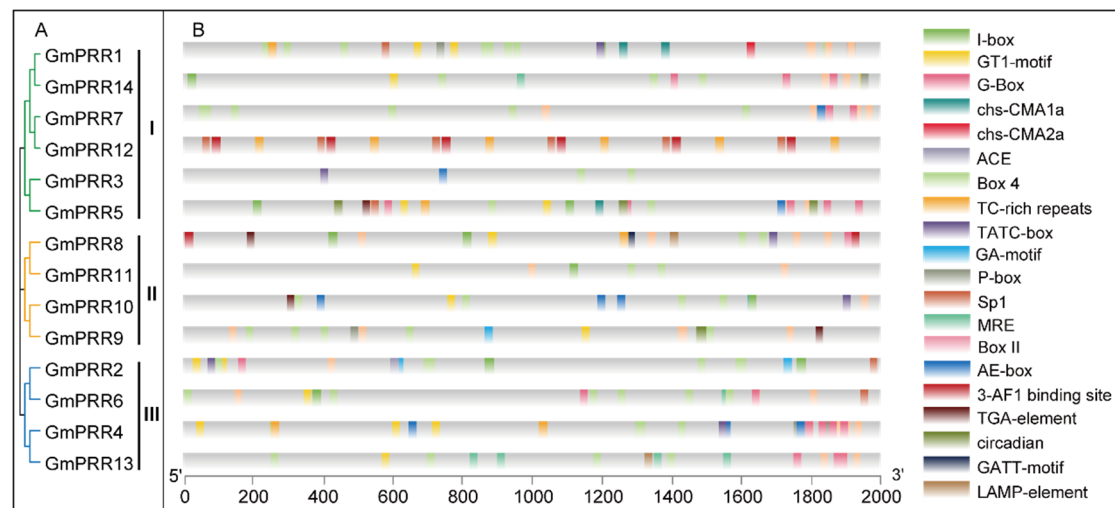
This PDF file includes:

Supplementary Figures S1–S4

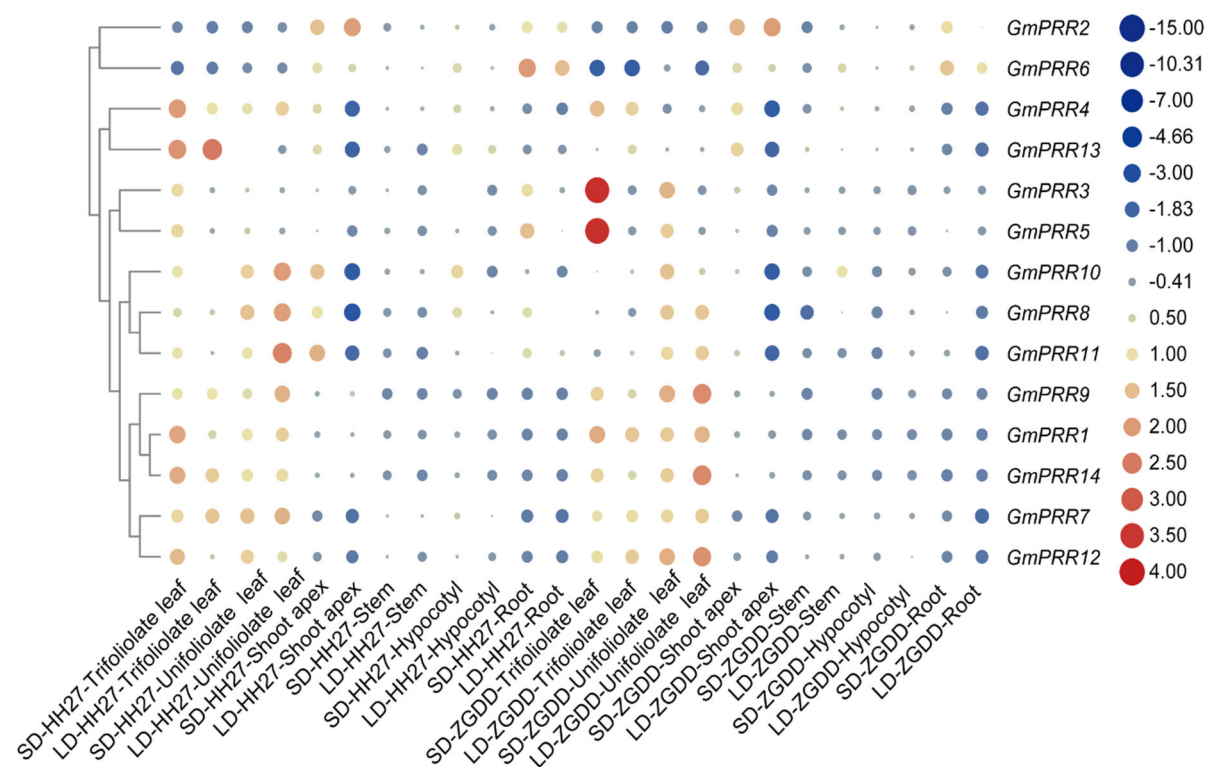
Supplementary Tables S1–S4



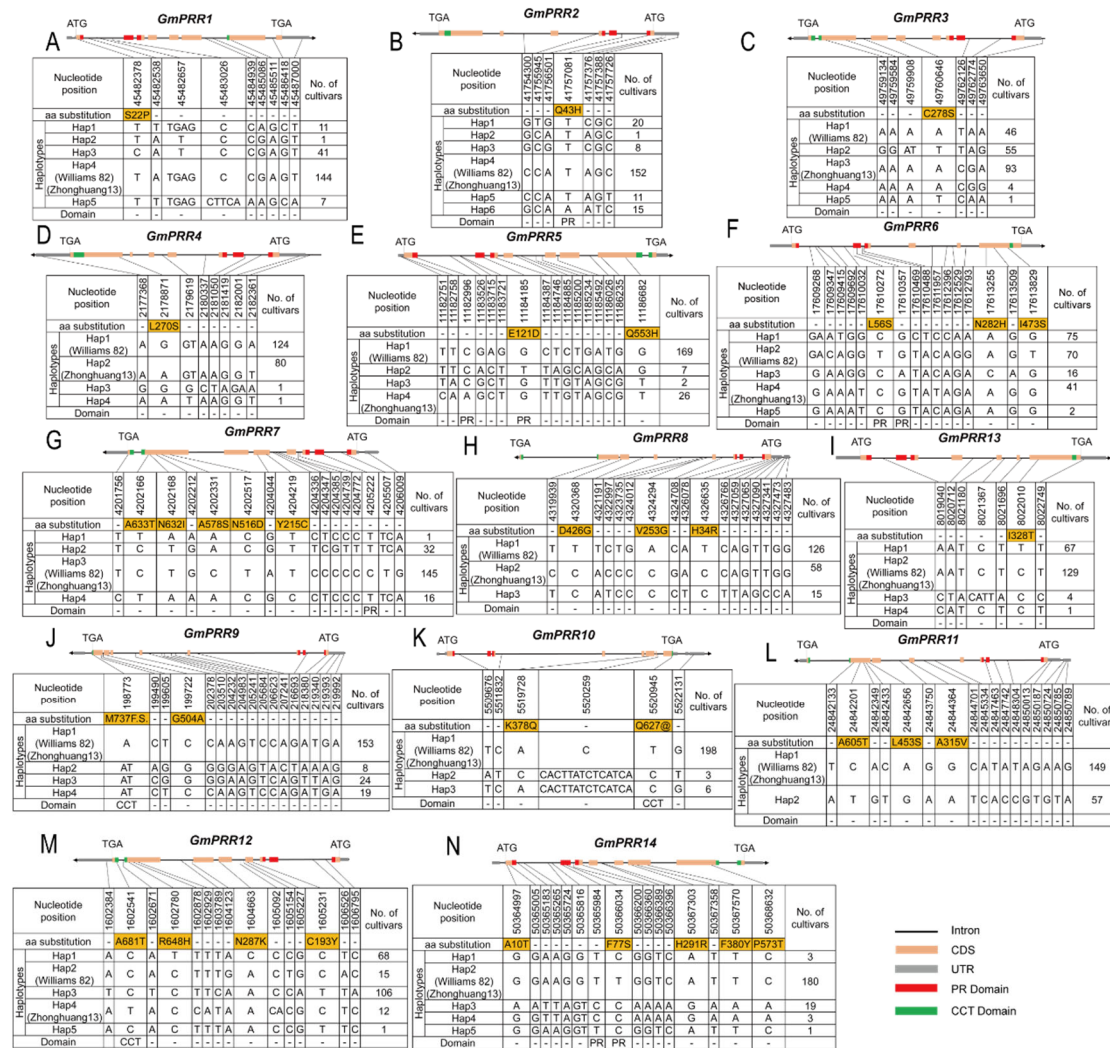
Supplementary Figure S1. Synteny analysis and gene duplication events of *GmPRRs*. Gray lines indicate all syntenic blocks in the soybean genome, and the red lines indicate duplicated PRR gene pairs.



Supplementary Figure S2. Analysis of cis-acting elements in the promoter region of *GmPRRs*. (A) Phylogenetic tree of soybean PRR proteins. Details of groups are represented by different colors. (B) Types and positions of cis-acting elements in the 2 kb promoter region. The cis-elements are displayed in different color boxes.



Supplementary Figure S3. Expression profile analysis of *GmPRRs* in different tissues from soybean varieties Zigongdongdou (ZGDD) and Heihe 27 (HH27) under long-day (LD, 16: 8 h, light: dark) and short-day (SD, 12: 12 h, light: dark) treatments. Samples were collected 4 h after exposure to light.



Supplementary Table S1. Physicochemical properties of PRR family proteins in soybean

Gene name	Gene ID	Molecular weight/kDa	isoelectric point	Amino acid number/aa	Predicted Subcellular location
<i>GmPRR1</i>	<i>Glyma.03G261300</i>	76.5	6.30	692	Nuclear
<i>GmPRR2</i>	<i>Glyma.04G166300</i>	62.6	5.64	560	Nuclear
<i>GmPRR3</i>	<i>Glyma.04G228300</i>	76.4	6.43	691	Nuclear
<i>GmPRR4</i>	<i>Glyma.05G025000</i>	64.2	5.55	575	Nuclear
<i>GmPRR5</i>	<i>Glyma.06G136600</i>	77.1	6.67	700	Nuclear
<i>GmPRR6</i>	<i>Glyma.06G196200</i>	62.2	5.56	558	Nuclear
<i>GmPRR7</i>	<i>Glyma.07G049400</i>	79.7	5.69	722	Nuclear
<i>GmPRR8</i>	<i>Glyma.10G048100</i>	81.8	6.77	753	Nuclear
<i>GmPRR9</i>	<i>Glyma.U034500</i>	83.3	5.85	765	Nuclear
<i>GmPRR10</i>	<i>Glyma.12G073900</i>	68.4	6.04	626	Nuclear
<i>GmPRR11</i>	<i>Glyma.13G135900</i>	81.9	8.01	755	Nuclear
<i>GmPRR12</i>	<i>Glyma.16G018000</i>	78.3	5.70	706	Nuclear
<i>GmPRR13</i>	<i>Glyma.17G102200</i>	64.7	5.93	579	Nuclear
<i>GmPRR14</i>	<i>Glyma.19G260400</i>	76.1	6.63	685	Nuclear

Supplementary Table S2. The information of 207 resequencing soybean varieties

Variety	Region	Ecotype	MG	Source
Beihudou	NE	NSP	MG 00	Heilongjiang, China
Beifeng2	NE	NSP	MG 0	Heilongjiang, China
Beifeng9	NE	NSP	MG 0	Heilongjiang, China
Beifeng11	NE	NSP	MG 0	Heilongjiang, China
Beidou5	NE	NSP	MG 0	Heilongjiang, China
Dengke1	NE	NSP	MG 0	Inner Mongolia, China
Dongnong4	NE	NSP	MG 0	Heilongjiang, China
Dongnong72-806	NE	NSP	MG 0	Heilongjiang, China
Fengshou10	NE	NSP	MG 0	Heilongjiang, China
Fengshou12	NE	NSP	MG 0	Heilongjiang, China
Fengshou17	NE	NSP	MG 0	Heilongjiang, China
Fengshou19	NE	NSP	MG 0	Heilongjiang, China
Fengshou24	NE	NSP	MG 0	Heilongjiang, China
Hefeng25	NE	NSP	MG 0	Heilongjiang, China
Hefeng35	NE	NSP	MG 0	Heilongjiang, China
Heihe3	NE	NSP	MG 0	Heilongjiang, China
Heihe9	NE	NSP	MG 0	Heilongjiang, China
Heihe18	NE	NSP	MG 0	Heilongjiang, China
Heihe19	NE	NSP	MG 0	Heilongjiang, China
Heihe27	NE	NSP	MG 0	Heilongjiang, China
Heihe38	NE	NSP	MG 0	Heilongjiang, China
Heihe51	NE	NSP	MG 0	Heilongjiang, China
Heihe54	NE	NSP	MG 0	Heilongjiang, China
Heilongjiang41	NE	NSP	MG 0	Heilongjiang, China
Huajiang4	NE	NSP	MG 0	Heilongjiang, China
Jinyuan2	NE	NSP	MG 0	Heilongjiang, China
JianMGodou1	NE	NSP	MG 0	Heilongjiang, China
Jingshanpu	NE	NSP	MG 0	Heilongjiang, China
Kexi283	NE	NSP	MG 0	Heilongjiang, China
Kangxian4	NE	NSP	MG 0	Heilongjiang, China
Mancangjin	NE	NSP	MG 0	Heilongjiang, China
Suinong3	NE	NSP	MG 0	Heilongjiang, China
Suinong28	NE	NSP	MG 0	Heilongjiang, China
Suinong41	NE	NSP	MG 0	Heilongjiang, China
Mengdou30	NE	NSP	MG 0	Inner Mongolia, China
Hejiao6	NE	NSP	MG I	Heilongjiang, China
Hejiao8	NE	NSP	MG I	Heilongjiang, China
Hefeng22	NE	NSP	MG I	Heilongjiang, China
Hefeng45	NE	NSP	MG I	Heilongjiang, China
Hefeng47	NE	NSP	MG I	Heilongjiang, China
Hefeng50	NE	NSP	MG I	Heilongjiang, China
Hefeng55	NE	NSP	MG I	Heilongjiang, China
Heinong16	NE	NSP	MG I	Heilongjiang, China
Heinong26	NE	NSP	MG I	Heilongjiang, China
Heinong33	NE	NSP	MG I	Heilongjiang, China
Heinong35	NE	NSP	MG I	Heilongjiang, China
Heinong37	NE	NSP	MG I	Heilongjiang, China
Heinong43	NE	NSP	MG I	Heilongjiang, China
Heinong44	NE	NSP	MG I	Heilongjiang, China

Variety	Region	Ecotype	MG	Source
Heinong48	NE	NSP	MG I	Heilongjiang, China
Kenfeng16	NE	NSP	MG I	Heilongjiang, China
Suinong8	NE	NSP	MG I	Heilongjiang, China
Suinong10	NE	NSP	MG I	Heilongjiang, China
Changnong4	NE	NSP	MG I	Jilin, China
Miquanhuangdou	NW	NSP	MG I	Xinjiang, China
Changjihuangdou	NW	NSP	MG I	Xinjiang, China
Zhi2	NE	NSP	MG I	Jilin, China
Zihua4	NE	NSP	MG II	Heilongjiang, China
Changnong5	NE	NSP	MG II	Jilin, China
Fengdihuang	NE	NSP	MG II	Jilin, China
Huangbaozhu	NE	NSP	MG II	Jilin, China
Jilin3	NE	NSP	MG II	Jilin, China
Jilin6	NE	NSP	MG II	Jilin, China
Jilin13	NE	NSP	MG II	Jilin, China
Jilin20	NE	NSP	MG II	Jilin, China
Jilin30	NE	NSP	MG II	Jilin, China
Jilin47	NE	NSP	MG II	Jilin, China
Jiti5	NE	NSP	MG II	Jilin, China
Jiyu57	NE	NSP	MG II	Jilin, China
Jiunong9	NE	NSP	MG II	Jilin, China
Jiunong22	NE	NSP	MG II	Jilin, China
Xiaojinhuang1	NE	NSP	MG II	Jilin, China
Zaofeng1	NE	NSP	MG II	Jilin, China
Jiti1	NE	NSP	MG II	Liaoning, China
Jin6604-24	NE	NSP	MG II	Liaoning, China
Kaiyu3	NE	NSP	MG II	Liaoning, China
Kaiyu8	NE	NSP	MG II	Liaoning, China
Kaiyu10	NE	NSP	MG II	Liaoning, China
Tiefeng3	NE	NSP	MG II	Liaoning, China
Tiefeng8	NE	NSP	MG II	Liaoning, China
Tiefeng18	NE	NSP	MG II	Liaoning, China
Tiefeng19	NE	NSP	MG II	Liaoning, China
Tiefeng20	NE	NSP	MG II	Liaoning, China
Fushou	NE	NSP	MG II	Liaoning, China
Jindou2	NE	NSP	MG II	Shanxi, China
Jindou3	NE	NSP	MG II	Shanxi, China
Dandou2	NE	NSP	MG III	Liaoning, China
Dandou4	NE	NSP	MG III	Liaoning, China
Jin8-14	NE	NSP	MG III	Liaoning, China
Jindou33	NE	NSP	MG III	Liaoning, China
Liaodou15	NE	NSP	MG III	Liaoning, China
Tiefeng31	NE	NSP	MG III	Liaoning, China
Dandou1	NE	NSP	MG IV	Liaoning, China
Tiefeng29	NE	NSP	MG IV	Liaoning, China
Changpingqingdou	NE	NSP	MG IV	Beijing, China
Huairouhuangdou	HHH	NSP	MG III	Beijing, China
Qunyingdou	HHH	NSP	MG III	Hebei, China
Zhonghuang30	HHH	NSP	MG III	Beijing, China
Zhonghuang35	HHH	NSP	MG III	Beijing, China

Variety	Region	Ecotype	MG	Source
Jindou19	HHH	NSP	MG III	Shanxi, China
Jindou21	HHH	NSP	MG III	Shanxi, China
Jindou25	HHH	NSP	MG III	Shanxi, China
Bahong1	HHH	NSP	MG IV	Hebei, China
Youbian30	HHH	NSP	MG IV	Beijing, China
Jindou23	HHH	NSP	MG IV	Shanxi, China
Hai94	HHH	NSP	MG V	Shanxi, China
Jidou7	HHH	HSU	MG II	Hebei, China
Ludou11	HHH	HSU	MG II	Shandong, China
Qihuang10	HHH	HSU	MG II	Shandong, China
Henanzaofeng1	HHH	HSU	MG II	Henan, China
Kefeng6	HHH	HSU	MG III	Beijing, China
Handou5	HHH	HSU	MG III	Hebei, China
Jidou12	HHH	HSU	MG III	Hebei, China
Jidou17	HHH	HSU	MG III	Hebei, China
Zhongdou19	HHH	HSU	MG III	Henan, China
Zhonghuang13	HHH	HSU	MG III	Beijing, China
Zhonghuang37	HHH	HSU	MG III	Beijing, China
Hedou13	HHH	HSU	MG III	Shandong, China
Heze Niumaohuang	HHH	HSU	MG III	Shandong, China
Ludou4	HHH	HSU	MG III	Shandong, China
Yanhuang1	HHH	HSU	MG III	Shandong, China
Yidu Pingdinghuang	HHH	HSU	MG III	Shandong, China
Wenfeng5	HHH	HSU	MG III	Shandong, China
Wenfeng7	HHH	HSU	MG III	Shandong, China
Shangcai Ercaopingdingshi	HHH	HSU	MG III	Henan, China
Weiqingdou	HHH	HSU	MG III	Henan, China
Zhengzhou135	HHH	HSU	MG III	Henan, China
Naiyinheidou	HHH	HSU	MG IV	Hebei, China
Haiyang Pawanqing	HHH	HSU	MG IV	Shandong, China
Yuejin4	HHH	HSU	MG IV	Shandong, China
Yudou2	HHH	HSU	MG IV	Henan, China
Yudou8	HHH	HSU	MG IV	Henan, China
Yudou22	HHH	HSU	MG IV	Henan, China
Zheng92116	HHH	HSU	MG IV	Henan, China
Xudou1	HHH	HSU	MG IV	Jiangsu, China
Xudou2	HHH	HSU	MG IV	Jiangsu, China
Xudou5	HHH	HSU	MG IV	Jiangsu, China
Xudou9	HHH	HSU	MG IV	Jiangsu, China
58-161	HHH	HSU	MG IV	Jiangsu, China
Wandou24	HHH	HSU	MG IV	Anhui, China
Yuejin5	HHH	HSU	MG V	Shandong, China
Taixingheidou	SC	SSP	MG I	Jiangsu, China
Edou8	SC	SSP	MG I	Hubei, China
Aijiaozao	SC	SSP	MG II	Hubei, China
Tianlong1	SC	SSP	MG II	Hubei, China
Guichun1	SC	SSP	MG III	Guangxi, China
Heibiqing	SC	SSP	MG III	Guangdong, China
Zigongqingpidou	SC	SSP	MG IV	Sichuan, China
Liuyuehuang	SC	SSP	MG IV	Guizhou, China

Variety	Region	Ecotype	MG	Source
Qiandou6	SC	SSP	MG IV	Guizhou, China
Jinjiang Daqingren	SC	SSP	MG IV	Fujian, China
Taiwan75 (Green 75)	SC	SSP		Taiwan, China
Guichun8	SC	SSP	MG IV	Guangxi, China
Baihuadou	SC	SSP	MG IV	Guangdong, China
Yuling Dahuangdou	SC	SSP	MG V	Guangxi, China
Juhuangdadou	SC	SSP	MG VI	Guangdong, China
Wuhua Siyuehuang	SC	SSP	MG VI	Guangdong, China
Shangyu Kanshanbai	SC	SSP	MG VIII	Zhejiang, China
Zhechun3	SC	SSP	MG VIII	Zhejiang, China
Chengliu Niumaohuang	SC	HSU	MG IV	Henan, China
Fengcheng Niupidou	SC	SSU	MG II	Jiangxi, China
Yunyizao	SC	SSU	MG IV	Hunan, China
Dian86-4	SC	SSU	MG IV	Yunnan, China
Jinning Dahuangdou	SC	SSU	MG IV	Yunnan, China
Suidaohuang	SC	SSU	MG V	Jiangsu, China
Edou2	SC	SSU	MG V	Hubei, China
Houzimao	SC	SSU	MG V	Hubei, China
Nannong493-1	SC	SSU	MG VI	Jiangsu, China
Suxie1	SC	SSU	MG VI	Jiangsu, China
Bayueqing	SC	SSU	MG VI	Hunan, China
Jingda332	SC	SSU	MG VII	Jiangsu, China
Pingguohuangdou	SC	SSU	MG VII	Guangxi, China
Nandou12	SC	SSU	MG VIII	Sichuan, China
Yangchunqingdou	SC	SAU	MG VI	Guangdong, China
Lanxi Daqingdou	SC	SAU	MG VIII	Zhejiang, China
Zigongdongdou	SC	SAU	MG VIII	Sichuan, China
Shangrao Daqingsi	SC	SAU	MG VIII	Jiangxi, China
Qiudou1	SC	SAU	MG VIII	Hunan, China
Merit	USA	USA	MG 0	USA
Clay	USA	USA	MG 0	USA
McCall	USA	USA	MG 0	USA
Norman	USA	USA	MG 0	USA
Portage	USA	USA	MG 0	USA
Wilkin	USA	USA	MG 0	USA
Chippewa64	USA	USA	MG I	USA
Evans	USA	USA	MG I	USA
Amsoy	USA	USA	MG II	USA
Amsoy71	USA	USA	MG II	USA
Beeson	USA	USA	MG II	USA
Corsoy	USA	USA	MG II	USA
Hark	USA	USA	MG II	USA
Harosoy63	USA	USA	MG II	USA
Wayne	USA	USA	MG III	USA
Clark	USA	USA	MG IV	USA
Cutler	USA	USA	MG IV	USA
Bedford	USA	USA	MG V	USA
Dare	USA	USA	MG V	USA
Forrest	USA	USA	MG V	USA
Centennial	USA	USA	MG VI	USA

Variety	Region	Ecotype	MG	Source
Hood	USA	USA	MG VI	USA
Tracy	USA	USA	MG VI	USA
Bragg	USA	USA	MG VII	USA
Braxton	USA	USA	MG VII	USA
Dowling	USA	USA	MG VII	USA
Jupiter	USA	USA	MG VIII	USA

* MG: Maturity Group; HHH: Huang-Huai-Hai; NE: Northeast China; NW: Northwest China; SC: South China. NSP: Northern Spring Planting ecotype; HSU: Huang-Huai-Hai Summer Planting ecotype; SSP: Southern Spring Planting ecotype; SSU: Southern Summer Planting ecotype; SAU: Southern Autumn Planting ecotype.

Supplementary Table S3. The haplotype combinations of *GmPRRs* among the 207 soybean varieties

Variety	<i>GmPRR1</i>	<i>GmPRR2</i>	<i>GmPRR3</i>	<i>GmPRR4</i>	<i>GmPRR5</i>	<i>GmPRR6</i>	<i>GmPRR7</i>	<i>GmPRR8</i>	<i>GmPRR9</i>	<i>GmPRR10</i>	<i>GmPRR11</i>	<i>GmPRR12</i>	<i>GmPRR13</i>	<i>GmPRR14</i>
Huajiang4	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	/	<i>GmPRR14</i> ^{H2}
Hefeng25	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	/	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Suinong14	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Suinong28	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Beifeng11	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Beifeng9	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Heihe9	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Heinong35	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	/
Jilin47	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H2}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Beidou5	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H3}	/	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Dwngeke1	<i>GmPRR1</i> ^{H1}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H3}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Zhonghuang35	<i>GmPRR1</i> ^{H2}	<i>GmPRR2</i> ^{H4}	/	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	/	/	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	/	/	<i>GmPRR14</i> ^{H2}
Suinong10	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H1}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H2}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Tiefeng3	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H1}	<i>GmPRR3</i> ^{H2}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Tiefeng 19	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H1}	<i>GmPRR3</i> ^{H2}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Jilin3	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H1}	/	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Jilin4	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H1}	<i>GmPRR3</i> ^{H2}	<i>GmPRR4</i> ^{H2}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
clay	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H3}	<i>GmPRR3</i> ^{H2}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H2}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H2}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
PI548531	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H3}	<i>GmPRR3</i> ^{H2}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H3}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}
Jin8-14	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H3}	<i>GmPRR3</i> ^{H3}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H2}	<i>GmPRR9</i> ^{H3}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H2}	<i>GmPRR12</i> ^{H2}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Heinong44	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H1}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H1}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H1}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Jidou7	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H2}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H2}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	/	<i>GmPRR12</i> ^{H2}	<i>GmPRR13</i> ^{H1}	<i>GmPRR14</i> ^{H2}
Wayne	<i>GmPRR1</i> ^{H3}	<i>GmPRR2</i> ^{H4}	<i>GmPRR3</i> ^{H1}	<i>GmPRR4</i> ^{H2}	<i>GmPRR5</i> ^{H1}	<i>GmPRR6</i> ^{H2}	<i>GmPRR7</i> ^{H3}	<i>GmPRR8</i> ^{H1}	<i>GmPRR9</i> ^{H1}	<i>GmPRR10</i> ^{H1}	<i>GmPRR11</i> ^{H1}	<i>GmPRR12</i> ^{H2}	<i>GmPRR13</i> ^{H2}	<i>GmPRR14</i> ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Qihuang10	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Clark	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H2}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Kaiyu3	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jindou1	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	/
Hai94	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Jidou12	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H2}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Suxie1	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	/	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jinyuan2	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jilin20	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Changnong5	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Changnong4	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jilin30	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Zheng92116	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	/	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Edou8	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Handou5	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H2}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Haiyangpamanqing	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H2}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H3}	GmPRR14 ^{H2}
Zhengzhou135	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Aijiaozao	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H3}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	/	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zhonghuang37	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Shangyukanshangbai	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H4}	GmPRR8 ^{H2}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Yudou22	GmPRR1 ^{H3}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	/	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Wandou24	GmPRR1 ^{H3}	GmPRR2 ^{H4}	/	GmPRR4 ^{H2}	/	/	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	/	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Nannong493-1	GmPRR1 ^{H3}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H2}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zhongdou19	GmPRR1 ^{H3}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H2}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Zhechun3	GmPRR1 ^{H3}	GmPRR2 ^{H5}	GmPRR3 ^{H4}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Yidupingdinghuang	GmPRR1 ^{H3}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H3}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	GmPRR8 ^{H1}	/	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Fengshouhuang1	GmPRR1 ^{H3}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	GmPRR8 ^{H3}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H3}	GmPRR14 ^{H2}
Jindou21	GmPRR1 ^{H3}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	/	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Henanzaofeng1	GmPRR1 ^{H3}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	/	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H2}	/	GmPRR14 ^{H2}
Mengdou30	GmPRR1 ^{H3}	/	/	/	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	/	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Suinong3	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Kexi283	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Kenfeng16	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Mancangjin	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jingshanpu	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Huangbaozhu	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Tiefeng18	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	/	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	/
Xiaojinhuang1	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jiti1	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jilin6	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jin6604-24	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jin33	GmPRR1 ^{H4}	GmPRR2 ^{H1}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Dandou4	GmPRR1 ^{H4}	GmPRR2 ^{H3}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Hefeng35	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Hefeng47	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Hefeng50	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Fushou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heihe27	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	/	GmPRR13 ^{H2}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Dongnong4	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Hejiao8	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Suinong8	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heinong43	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Beifeng2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Beihudou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
PI 548540	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Harosoy63	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Hefeng55	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Changjihuanguadou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Amsoy	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Amsoy71	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Fengshou19	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heihe38	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Wilkin	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Heihe3	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H1}
Heihe51	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H1}
Heihe54	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H1}
Heilongjiang41	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H1}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Fengshou24	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	/	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heinong16	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heinong26	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Hefeng22	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	/	/	GmPRR14 ^{H2}
Heinong33	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H2}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zhi2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Hejiao6	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
McCall	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Hark	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jindou2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jiunong9	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Tiefeng20	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Tiefeng8	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Fengdihuang	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Changpingqingdou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	/	GmPRR9 ^{H3}	GmPRR10 ^{H1}	/	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jindou25	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H4}	GmPRR8 ^{H2}	/	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Qiandou6	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H4}	/	/	GmPRR8 ^{H1}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zaofeng1	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jinjiangdaqingren	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H4}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ³²
Yangchunqingpidou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H5}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Bedford	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Hezeniumaohuang	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	/	GmPRR6 ^{H4}	GmPRR7 ^{H4}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Xudou5	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H2}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Yudou2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Xudou2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H2}	GmPRR7 ^{H4}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zaofeng12	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Heihe18	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Kaiyu10	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H4}
Portage	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Dongnong72-806	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Zihua4	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Evans	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jiyu57	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Fengshou10	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Fengshou17	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Liaodou15	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H4}
Yunyizao	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H4}	GmPRR8 ^{H3}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Baihuadou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	/	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Dandou2	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H2}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Houzimao	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Tracy	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Guichun8	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	/	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Merit	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H2}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Taiwan75	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H2}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Nandou12	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H2}	GmPRR10 ^{H3}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Yudou8	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	/	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Xiangdou3	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Dandou1	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H2}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
77-14	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H2}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Lanxadaqingdou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Yulindahuangdou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Qiudou1	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H5}	GmPRR7 ^{H2}	/	GmPRR9 ^{H3}	GmPRR10 ^{H3}	GmPRR11 ^{H2}	/	GmPRR13 ^{H2}	/
Heibiqing	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H3}	GmPRR6 ^{H3}	GmPRR7 ^{H4}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H3}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Liuyuehuang	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H3}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Yuejin5	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jidou17	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Youbian30	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H2}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Guichun1	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	/	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jinningdahuangdou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	/
Jupiter	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H3}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zhonghuang13	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Hedou13	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Zigongdongdou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	6-2	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H3}	GmPRR10 ^{H2}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Juhuangdadou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H4}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Wuhuasiyuehuang	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H4}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Daoshuihuang	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H4}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Shangraodaqingsi	GmPRR1 ^{H4}	GmPRR2 ^{H4}	GmPRR3 ^{H5}	GmPRR4 ^{H1}	GmPRR5 ^{H4}	GmPRR6 ^{H5}	7-2	GmPRR8 ^{H2}	GmPRR9 ^{H3}	GmPRR10 ^{H3}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Baishuidou	GmPRR1 ^{H4}	GmPRR2 ^{H4}	/	/	GmPRR5 ^{H1}	/	/	/	/	/	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Beeson	GmPRR1 ^{H4}	GmPRR2 ^{H5}	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Jindou19	GmPRR1 ^{H4}	GmPRR2 ^{H5}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Tiefeng31	GmPRR1 ^{H4}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H2}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Centennial	GmPRR1 ^{H4}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Wenfeng7	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H4}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jindou3	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H3}
Naiyinheidou	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H4}	GmPRR6 ^{H2}	GmPRR7 ^{H4}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H3}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Chenliuniumaohuang	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H4}	GmPRR6 ^{H4}	GmPRR7 ^{H4}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Bahong1	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H3}	GmPRR7 ^{H4}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	/	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H5}
Hengyangbayueqing	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H2}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}

Variety	GmPRR1	GmPRR2	GmPRR3	GmPRR4	GmPRR5	GmPRR6	GmPRR7	GmPRR8	GmPRR9	GmPRR10	GmPRR11	GmPRR12	GmPRR13	GmPRR14
Miquanhuangdou	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H1}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
Yanhuang1	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H3}	/	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H3}	GmPRR14 ^{H2}
Ludou4	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	/	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H4}	/	GmPRR14 ^{H2}
Weiqingdou	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Yuejin4	GmPRR1 ^{H4}	GmPRR2 ^{H6}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H4}	GmPRR8 ^{H3}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H3}	GmPRR14 ^{H2}
Heinong48	GmPRR1 ^{H4}	/	GmPRR3 ^{H1}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	/	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Jiti5	GmPRR1 ^{H4}	/	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Ludou11	GmPRR1 ^{H4}	/	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	/	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Dian86-4	GmPRR1 ^{H4}	/	GmPRR3 ^{H1}	/	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H3}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H3}
PI 548655	GmPRR1 ^{H5}	GmPRR2 ^{H4}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
PI 548660	GmPRR1 ^{H5}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Braxton	GmPRR1 ^{H5}	GmPRR2 ^{H4}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}
Cutler	GmPRR1 ^{H5}	GmPRR2 ^{H5}	GmPRR3 ^{H2}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H2}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
Dare	GmPRR1 ^{H5}	GmPRR2 ^{H5}	GmPRR3 ^{H2}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H3}	GmPRR13 ^{H2}	GmPRR14 ^{H4}
Hood	GmPRR1 ^{H5}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H1}	GmPRR5 ^{H1}	GmPRR6 ^{H1}	GmPRR7 ^{H3}	GmPRR8 ^{H2}	GmPRR9 ^{H1}	GmPRR10 ^{H1}	GmPRR11 ^{H2}	GmPRR12 ^{H1}	GmPRR13 ^{H1}	GmPRR14 ^{H2}
PI 548663	GmPRR1 ^{H5}	GmPRR2 ^{H5}	GmPRR3 ^{H3}	GmPRR4 ^{H2}	GmPRR5 ^{H1}	GmPRR6 ^{H4}	GmPRR7 ^{H3}	GmPRR8 ^{H1}	GmPRR9 ^{H4}	GmPRR10 ^{H1}	GmPRR11 ^{H1}	GmPRR12 ^{H1}	GmPRR13 ^{H2}	GmPRR14 ^{H2}

* Each line in the table represents the division of different haplotype combinations. "/" represents that the loci in *GmPRRs* of the variety has not been detected.

Supplementary Table S4. Primer sequences used for qRT-PCR analysis of *GmPRRs*

Gene name	Forward primer sequence (5'-3')	Reverse primer sequence (5'-3')
<i>GmPRR1</i>	ACAAGGGTTCGATGCAGACC	TTCGACAAGCAAGACCCGAA
<i>GmPRR2</i>	AGCAACTTGGAAGGGGTTGT	ATGCCTCTCCATTTTCCCGT
<i>GmPRR3</i>	TGACCCTGTCGGTAACATGC	CGTGCTTGCCTCACCATTTT
<i>GmPRR4</i>	GCGCATGCTTGGACTTGTAG	CAGCAGCAATGGTGGCAATA
<i>GmPRR5</i>	CAGCTTCAGAGGGCAAGCAT	GGATGCACTTGACGCACAAA
<i>GmPRR6</i>	GAATGTGGGCCTGATGTGGA	ACTTCCATCCCAACATGCGT
<i>GmPRR7</i>	ATCCAAGAACGCCCCAGATG	GCCAGTCTTTTCCGGCTTTG
<i>GmPRR8</i>	GCAACAATTCTGGCACCACC	GTGGAGCAGCAGTAGCCATT
<i>GmPRR9</i>	AAGTTGGCAGTCCTCATCCG	GTCGCATGCACCCATCTACT
<i>GmPRR10</i>	GAAAGTGCGACCCTCACCAG	TCTGAGTGCCACTTCCATTGT
<i>GmPRR11</i>	CACAGCCTCAAGGGGCAATA	ACAATTGCGAAGCAGTGCAG
<i>GmPRR12</i>	TGCATGGATGCAATGCTGAG	GCTTGTTTACCTGAGCTGCC
<i>GmPRR13</i>	GTCAACAGAAAACGGCTCGC	AGTGGAAGCAGGTTGTCCAT
<i>GmPRR14</i>	TGGAGAAGGCACGCCATAAG	CCAAAAATGGCGATGGGCAA
<i>GmActin</i>	CGGTGGTTCTATCTTGGCATC	GTCTTTCGCTTCAATAACCCTA