Table S2. The distribution of 14 resistance genes in 119 rice main varieties in Jiangus province.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variety number | Sample | Rice types | Rice-growing regions | Composite index | Resistance genes | | | | | | | | | | | | | |
| *Pit* | *Pish* | *Pib* | *Pi54* | *Pita* | *Pi9* | *Pi2* | *Pi1* | *Pikm* | *Pigm* | *Pia* | *Pi5* | *Pb1* | *Piz-t* |
| 1 | Suxianggeng1785 | *Japonica* | Central Jiangsu | 5 | + | + | + | + | - | - | - | + | + | - | + | - | + | - |
| 2 | Suxianggeng100 | *Japonica* | Southern Jiangsu | 1 | + | + | + | - | + | - | - | - | - | - | + | - | + | - |
| 3 | Suxianggeng1176 | *Japonica* | Southern Jiangsu | 5 | + | + | - | - | + | - | - | + | + | - | + | - | + | - |
| 4 | Kendao808 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | - | + | - | - | - | + | - |
| 5 | Ningxianggeng11 | *Japonica* | Southern Jiangsu | 3 | + | + | + | + | + | + | - | + | - | - | + | - | - | - |
| 6 | Jingeng698 | *Japonica* | Northern Jiangsu | 3 | + | + | - | + | - | - | + | - | + | - | - | - | + | + |
| 7 | Jingeng818 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | + | + | - | + | - | - | + | - | + | - |
| 8 | Nangeng9036 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | - | + | - | + | - | - | + | - | + | - |
| 9 | Fenggeng1606 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | - | - | - | + | + | - | + | - | + | - |
| 10 | Ninggeng8 | *Japonica* | Southern Jiangsu | 3 | + | + | - | + | + | - | - | - | - | - | + | - | + | - |
| 11 | Ninggeng11 | *Japonica* | Southern Jiangsu | 3 | + | + | + | + | + | + | - | + | - | - | + | - | - | - |
| 12 | Nanjinggenggu | *Japonica* | Southern Jiangsu | 3 | + | + | + | + | - | - | - | + | + | - | + | - | + | - |
| 13 | Biandao1 | *Japonica* | Northern Jiangsu | 5 | + | + | - | - | + | + | - | - | - | - | - | - | + | - |
| 14 | Suxiu867 | *Japonica* | Northern Jiangsu | 3 | - | + | + | - | - | - | + | + | + | - | + | - | + | + |
| 15 | Suxiu8608 | *Japonica* | Northern Jiangsu | 3 | - | + | + | - | - | - | + | + | - | - | + | - | - | + |
| 16 | Zhonggeng616 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | + | + | - | - | + | - | + | - | - | - |
| 17 | Zaoxianggeng1 | *Japonica* | Southern Jiangsu | 9 | + | + | + | + | - | + | - | + | - | - | - | - | - | - |
| 18 | Jinxiangyu1 | *Japonica* | Central Jiangsu | 1 | + | + | + | - | - | - | - | + | - | + | + | - | - | - |
| 19 | Zhongjianggeng1 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | - | - | - | + | + | - | + | - | + | - |
| 20 | Wuxianggeng113 | *Japonica* | Central Jiangsu | 3 | + | + | + | - | + | - | + | - | - | - | - | - | - | + |
| 21 | Xudao9 | *Japonica* | Northern Jiangsu | 3 | + | + | - | + | - | - | + | + | - | - | + | - | + | + |
| 22 | Xudao10 | *Japonica* | Northern Jiangsu | 3 | + | + | + | - | - | + | - | - | + | - | + | + | - | - |
| 23 | Huaidao5 | *Japonica* | Central Jiangsu | 3 | + | + | - | - | + | + | - | + | + | - | + | - | - | - |
| 24 | Zhongdao1 | *Japonica* | Northern Jiangsu | 3 | - | + | + | - | - | + | - | + | + | - | + | - | - | - |
| 25 | Huaidao35 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | - | - | - | + | + | - | + | - | + | + |
| 26 | Xinnongdao5 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | + | + | - | + | - | - | + | - | - | - |
| 27 | Xinkedao29 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | - | + | - | + | - | - | + | - | - | - |
| 28 | Xindao25 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | - | - | + | + | - | - | + | - | + | + |
| 29 | Wangeng096 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | + | + | - | + | - | - | + | - | - | + |
| 30 | Jia58 | *Japonica* | Southern Jiangsu | 1 | - | + | + | - | - | - | + | + | + | - | + | - | - | + |
| 31 | Jinggeng1 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | - | - | + | + | - | - | + | - | - | + |
| 32 | Yanggeng687 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | - | - |
| 33 | Yinxiang38 | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | - | - | - | + | - | - | + | - | - | - |
| 34 | Xiushui519 | *Japonica* | Southern Jiangsu | 3 | + | + | + | - | + | + | - | + | + | - | + | - | - | - |
| 35 | Huruan1212 | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | + | - | + | - | - | - | + | - | - | + |
| 36 | Guangmingnuo1 | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | + | - | - | + | - | - | + | - | + | - |
| 37 | Jinxiangruan2 | *Japonica* | Southern Jiangsu | 3 | + | + | + | - | - | - | + | + | - | - | + | - | - | + |
| 38 | Yangeng15 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | - | + | - | - | + | - | + | - | - | - |
| 39 | Yangeng16 | *Japonica* | Northern Jiangsu | 5 | + | + | - | + | - | + | - | + | - | - | + | - | + | - |
| 40 | Yanfeng47 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | - | - | + | + | - | - | - | - | - |
| 41 | Huodao008 | *Japonica* | Northern Jiangsu | 5 | + | + | - | - | - | + | - | + | - | - | + | + | + | - |
| 42 | Sidao12 | *Japonica* | Northern Jiangsu | 5 | + | + | - | - | - | + | - | + | - | - | + | + | + | - |
| 43 | Nangeng46 | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | - | - | - | + | - | - | + | - | - | - |
| 44 | Nangeng505 | *Japonica* | Northern Jiangsu | 7 | + | + | + | - | - | + | - | + | - | - | + | + | + | + |
| 45 | Nangeng5055 | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | - | - | - | + | - | - | + | - | + | + |
| 46 | Nangeng9108 | *Japonica* | Central Jiangsu | 7 | + | + | + | - | - | + | - | + | - | - | + | - | + | - |
| 47 | Huarun1 | *Indica* | Central Jiangsu | 5 | + | + | - | - | - | + | - | + | - | - | + | + | + | - |
| 48 | Huafeng1 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | + | + |
| 49 | Huageng5 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | - | - |
| 50 | Huageng9 | *Japonica* | Northern Jiangsu | 7 | + | + | + | - | - | + | - | - | - | - | + | + | + | - |
| 51 | HuafengY1306 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | - | - | - | + | + | - | - | - | - | + |
| 52 | Yangguang958 | *Japonica* | Northern Jiangsu | 3 | - | + | + | + | - | - | + | + | + | - | + | - | + | + |
| 53 | Runnong11 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | + | - | + | - | - | - | + | - | + | + |
| 54 | Rundao118 | *Japonica* | Northern Jiangsu | 3 | + | + | + | - | + | + | - | + | + | - | + | - | + | - |
| 55 | Xinfeng5 | *Japonica* | Northern Jiangsu | 7 | + | + | + | - | + | + | - | - | - | - | + | - | + | - |
| 56 | Xinfeng6 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | + | - |
| 57 | Yangnongdao1 | *Japonica* | Central Jiangsu | 7 | + | + | + | - | + | - | - | + | + | - | + | - | + | - |
| 58 | Yanggeng113 | *Japonica* | Northern Jiangsu | 7 | + | + | + | - | - | - | - | + | - | - | + | - | + | - |
| 59 | Yangnongxiang28 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | + | + | - | + | - | - | + | - | + | - |
| 60 | Yanggeng805 | *Japonica* | Central Jiangsu | 5 | + | + | - | + | + | + | - | + | - | - | + | - | + | - |
| 61 | Liangeng12 | *Japonica* | Northern Jiangsu | 5 | + | + | - | - | + | + | - | + | - | - | + | - | + | - |
| 62 | Liangeng11 | *Japonica* | Northern Jiangsu | 7 | + | + | - | - | - | + | - | + | - | - | + | + | + | - |
| 63 | Wuyungeng21 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | + | + | - | + | - | - | + | - | + | - |
| 64 | Shengdao16 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | - | + | - | + | - | - | + | - | + | - |
| 65 | Shengdao19 | *Japonica* | Northern Jiangsu | 7 | + | + | + | + | - | + | - | - | + | - | - | - | - | - |
| 66 | Shengdao22 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | - | + | - | - | - | - | - |
| 67 | Jiayuangeng1 | *Japonica* | Northern Jiangsu | 3 | + | + | + | - | + | + | - | + | - | - | + | + | - | - |
| 68 | Wandao68 | *Japonica* | Northern Jiangsu | 5 | + | + | - | + | - | + | - | + | - | - | + | - | - | - |
| 69 | Wandao153 | *Indica* | Northern Jiangsu | 3 | + | + | + | - | + | - | - | - | + | + | - | - | - | - |
| 70 | Wankengeng11036 | *Japonica* | Southern Jiangsu | 5 | + | + | + | + | - | - | - | + | - | - | + | - | + | - |
| 71 | Wankennuo1 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | - | + | - | + | - | - | + | - | - | + |
| 72 | Suken118 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | + | - | - | - | - | - | + | - | - | - |
| 73 | Changnonggeng10 | *Japonica* | Central Jiangsu | 3 | + | + | + | + | + | - | - | + | + | - | + | - | - | - |
| 74 | Nonggeng8 | *Japonica* | Central Jiangsu | 3 | + | + | + | - | + | - | - | + | - | - | + | - | + | - |
| 75 | Yangfugeng9 | *Japonica* | Central Jiangsu | 5 | + | + | + | + | - | - | + | + | - | - | - | - | - | + |
| 76 | Yuandao108 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | - | - |
| 77 | Jiangdao501 | *Japonica* | Northern Jiangsu | 5 | + | + | + | - | + | + | - | + | - | - | + | + | + | - |
| 78 | Tianlonggeng6 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | - | + | + | - | - | + | - | + | + |
| 79 | Linggugeng6 | *Japonica* | Central Jiangsu | 3 | + | + | - | - | + | + | - | + | + | - | + | + | + | - |
| 80 | Linggunuo1 | *Japonica* | Southern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | + | - |
| 81 | Lindao16 | *Japonica* | Northern Jiangsu | 7 | + | + | - | + | - | + | - | + | - | - | + | - | + | - |
| 82 | Ridao1 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | + | - | + | + | + | - |
| 83 | Kendao88 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | + | + | - | - | + | - | + | + | + | - |
| 84 | Yidao0618 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | - | + | - | + | - | - | + | - | - | - |
| 85 | Shengxiang66 | *Japonica* | Northern Jiangsu | 3 | + | + | + | - | + | + | - | + | - | - | + | + | + | - |
| 86 | Jindao565 | *Japonica* | Northern Jiangsu | 5 | + | + | + | + | + | + | - | + | - | - | + | - | - | - |
| 87 | Shenliangyou862 | *Indica* | Northern Jiangsu | 5 | + | + | - | - | + | - | - | + | - | - | + | + | - | - |
| 88 | Huiiangyou996 | *Indica* | Northern Jiangsu | 3 | + | + | + | - | - | - | - | - | - | - | - | + | - | - |
| 89 | Xiangliangyou900 | *Indica* | Northern Jiangsu | 3 | + | + | - | + | - | - | - | - | - | - | - | + | - | - |
| 90 | Xiangliangyou143 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | - | - | - | - | - | - | - |
| 91 | Qingliangyou225 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | - | - | - | - | - | - | - | + | - | - |
| 92 | Chuangliangyou276 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | - | + | - | - | + | - | + | + | - | - |
| 93 | Y Liangyou143 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | - | - | - | + | - | - | - |
| 94 | Y Liangyou302 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | - | - | - | + | - | - | - |
| 95 | Qianfengyou877 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | + | + | - | + | + | - | - |
| 96 | Quan9you063 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | - | + | - | + | + | - | - | + | - | - |
| 97 | Quanyou822 | *Indica* | Northern Jiangsu | 3 | + | + | + | - | - | - | - | - | - | - | + | + | - | + |
| 98 | Longliangyou899 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | + | - | - | - | + | - | + |
| 99 | Longliangyou1307 | *Indica* | Northern Jiangsu | 1 | + | + | - | - | + | + | - | + | + | - | - | + | - | + |
| 100 | Yuanliangyou1000 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | + | - | - | + | + | - | - |
| 101 | Shenliangyou9310 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | + | + | - | - | + | - | - | - |
| 102 | Wangliangyou1133 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | + | - | + | - | + | - | - | - |
| 103 | Wangliangyou909 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | - | + | - | - | + | - | - |
| 104 | Heliangyou332 | *Indica* | Northern Jiangsu | 1 | + | + | - | - | + | - | - | - | - | - | + | - | - | + |
| 105 | Huiliangyou882 | *Indica* | Northern Jiangsu | 1 | + | + | + | - | - | - | - | - | + | - | - | + | - | + |
| 106 | Taiyou647 | *Indica* | Northern Jiangsu | 3 | + | + | + | - | - | - | - | - | - | - | - | + | - | - |
| 107 | Keliangyou17 | *Indica* | Northern Jiangsu | 3 | + | + | - | - | + | - | - | + | - | - | + | + | + | - |
| 108 | Liangyou6326 | *Indica* | Northern Jiangsu | 3 | + | + | + | + | - | - | - | - | - | - | - | + | - | - |
| 109 | Liangyou688 | *Indica* | Northern Jiangsu | 1 | + | + | - | - | + | - | - | + | - | - | + | - | - | + |
| 110 | Wuyungeng24 | *Japonica* | Central Jiangsu | 7 | + | + | + | + | - | - | - | - | - | - | + | - | - | - |
| 111 | Yangeng13 | *Japonica* | Central Jiangsu | 5 | + | + | + | + | + | - | - | + | - | - | + | - | - | - |
| 112 | Mingnuo1332 | *Japonica* | Southern Jiangsu | 3 | + | + | + | - | + | - | - | + | - | - | - | - | - | - |
| 113 | Ninggeng7 | *Japonica* | Central Jiangsu | 5 | + | + | + | - | - | - | + | - | - | - | + | - | - | + |
| 114 | Changnonggeng8 | *Japonica* | Southern Jiangsu | 5 | + | + | + | + | + | - | - | + | - | - | + | - | - | - |
| 115 | Qingxiangruangeng | *Japonica* | Southern Jiangsu | 5 | + | + | + | - | - | + | - | + | - | - | + | - | - | - |
| 116 | Huxianggeng151 | *Japonica* | Southern Jiangsu | 5 | + | + | + | + | - | - | - | + | - | - | + | - | - | - |
| 117 | HuLPR18 | *Japonica* | Southern Jiangsu | 1 | + | + | - | - | + | - | + | - | + | - | + | - | - | + |
| 118 | Zhendao15 | *Japonica* | Southern Jiangsu | 3 | + | + | + | - | + | + | - | + | - | - | + | - | + | - |
| 119 | Zhendao18 | *Japonica* | Southern Jiangsu | 3 | + | + | + | + | + | + | - | + | - | - | + | - | + | - |

Note: “+” indicates present; “-” indicates absent.