

表 1 克隆定位的野生稻优异基因

Table 1 cloned or mapped genes from wild rices

| 基因或 QTLs<br>gene or QTLs | 来源<br>or Origin                   | 染色体组<br>Genome | 特性<br>character                         | 参考文献<br>Reference   |
|--------------------------|-----------------------------------|----------------|---|---|
| Xa21 *                   | 长雄野生稻<br><i>O. longistaminata</i> | AA             | 抗白叶枯病<br>Resistance to bacterial blight | Ronald and Tanksley, 1991; Song et al., 1995                  |
| Xa23 *                   | 普通野生稻<br><i>O. rufipogon</i>      | AA             | 抗白叶枯病<br>Resistance to bacterial blight | 章琦, 2005<br>Zhang et al., 2005                                |
| Xa27 *                   | 小粒野生稻<br><i>O. minuta</i>         | BBCC           | 抗白叶枯病<br>Resistance to bacterial blight | Amante et al., 1992; Gu et al., 2004; Gu et al., 2005         |
| Xa29(t)                  | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗白叶枯病<br>Resistance to bacterial blight | 谭光轩等, 2004<br>Tan et al., 2004                                |
| Xa30(t)                  | 普通野生稻<br><i>O. rufipogon</i>      | AA             | 抗白叶枯病<br>Resistance to bacterial blight | 王春连等, 2004; 金旭炜等, 2007<br>Wang et al., 2004; Jin et al., 2007 |
| xa32(t)                  | 疣粒野生稻<br><i>O. meyeriana</i>      | GG             | 抗白叶枯病<br>Resistance to bacterial blight | Ruan et al., 2008   |
| Xa32(t)                  | 澳洲野生稻<br><i>O. australiensis</i>  | EE             | 抗白叶枯病<br>Resistance to bacterial blight | 郑崇珂等, 2009<br>Zheng et al., 2009                              |
| GSV                      | 一年生野生稻<br><i>O. nivara</i>        | AA             | 抗矮缩病<br>Resistance to grassy stunt      | 钟代彬等, 2000<br>Zhong et al., 2000                              |
| Pi9 *                    | 小粒野生稻<br><i>O. minuta</i>         | BBCC           | 抗稻瘟病<br>Resistance to rice blast        | Liu et al., 2002; Qu et al., 2006                             |
| Pi40(t)                  | 澳洲野生稻<br><i>O. australiensis</i>  | EE             | 抗稻瘟病<br>Resistance to rice blast        | Jeung et al., 2007  |
| Bph10                    | 澳洲野生稻<br><i>O. australiensis</i>  | EE             | 抗褐飞虱<br>Resistance to brown planthopper | Ishii et al., 1994  |
| bph11                    | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Hirabayashi and Angeles, 1998; Hirabayashi, 1999              |
| bph12                    | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Hirabayashi and Angeles, 1998; Hirabayashi, 1999              |
| Bph12(t)                 | 阔叶野生稻<br><i>O. latifolia</i>      | CCDD           | 抗褐飞虱<br>Resistance to brown planthopper | Yang et al., 2002   |
| Bph13(t)                 | 紧穗野生稻<br><i>O. eichingeri</i>     | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Liu et al., 2001; Renganayaki et al., 2002                    |
| Bph13(t)                 | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Renganayaki et al., 2002                                      |
| Bph14 *                  | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Huang et al., 2001; Wand et al., 2001; Du et al., 2009        |
| Bph15                    | 药用野生稻<br><i>O. officinalis</i>    | CC             | 抗褐飞虱<br>Resistance to brown planthopper | Huang et al., 2001; Wand et al., 2001                         |
| bph18(t)                 | 普通野生稻<br><i>O. rufipogon</i>      | AA             | 抗褐飞虱<br>Resistance to brown planthopper | 李容柏等, 2006<br>Li et al., 2006                                 |
| Bph18(t)                 | 澳洲野生稻<br><i>O. australiensis</i>  | EE             | 抗褐飞虱<br>Resistance to brown planthopper | Jena et al., 2006   |
| bph19(t)                 | 普通野生稻<br><i>O. rufipogon</i>      | AA             | 抗褐飞虱<br>Resistance to brown planthopper | 李容柏等, 2006<br>Li et al., 2006                                 |

|             |  |    |   |   |
|-------------|--|----|---|---|
| <i>QTLs</i> | 普通野生稻<br><i>O. rufipogon</i><br>一年生野生稻<br><i>O. nivara</i> | AA | 抗寒、抗旱, 产量、株高、<br>生育期、落粒性和品质<br>QTLs Controlling drought<br>tolerance, cold tolerance,<br>high-yield, stem height,<br>growth stages, seed<br>shattering, quality | Liu et al., 2003; Xiong et al., 1999; 李晨等, 2001;<br>周少霞, 2005; 袁玲等, 2002; Xiao et al., 1996,<br>1998; Moncada et al., 2001; Li et al., 2002; 陈大洲<br>等, 2002; Reddy et al., 2007; Marri et al., 2005;<br>Swamy and Sarla, 2008; Xie et al., 2006, 2008; Tan<br>et al., 2008; 金亮等, 2009<br>Liu et al., 2003; Xiong et al., 1999; Li et al., 2001;<br>Zhou et al., 2005; Yuan et al., 2002; Xiao et al.,<br>1996, 1998; Moncada et al., 2001; Li et al., 2002;<br>Chen et al., 2002; Reddy et al., 2007; Marri et al.,<br>2005; Swamy and Sarla, 2008; Xie et al., 2006,<br>2008; Tan et al., 2008; Jin et al., 2009 |
|-------------|--|----|---|---|

注: \*: 已克隆的基因

Note: \*: The genes was cloned