

表1 已鉴定的褐飞虱抗性基因

Table 1 Known BPH-resistant genes

基因位点 Gene locus & Allels	所抗生物型 Planthopper biotype	供体品种 Donors	染色体 Chromosome	连锁标记\距离 Linked marker & Distance	参考文献 References
<i>Bph1</i>	1, 3	Mudgo	12	em5814N, em2802N(AFLP); BpE18-3 (STS)	Sharma et al., 2002; Kim and Sohn, 2005
<i>bph2</i>	1, 2	ASD 7	12	KAM4 (STS), RM7102 (7.6 cM), RM463 (7.2 cM)	Murai et al., 2001; Sun et al., 2006
<i>Bph3</i>	1, 2, 3, 4	Rathu heenati	6	RM589 (0.9 cM), RM588 (1.4 cM)	Jairin et al., 2007
<i>bph4</i>	1, 2, 3, 4	Babawee	6	可能与 <i>Bph3</i> 等位	Jairin et al., 2010
<i>bph5</i>	4	ARC10550	—	—	Khush, et al., 1985
<i>Bph6</i>	4	Swarnalata	4	Y19, Y9(STS, 25kb)	Qiu et al., 2010
<i>bph7</i>	4	T12	—	—	Kabir et al., 1988
<i>bph8</i>	1, 2, 3	Chin saba	—	—	Nemoto et al., 1989
<i>Bph9</i>	1, 2, 3	Kaharamana	12	RM463 (6.8 cM), RM5341(9.7 cM)	苏昌潮等, 2006 Su et al., 2006
<i>Bph10</i>	1, 2, 3	<i>O. australiensis</i>	12	RM484, RM496 (1.4 Mb)	Nguyen and Bui, 2003
<i>bph11</i>	1, 2	<i>O. officinalis</i>	3	G1318 (12.4 cM)	Hirabayashi et al., 1998
<i>bph12</i>	1, 2	<i>O. officinalis</i>	4	G271 (2.4 cM), R93 (4.0 cM)	Hirabayashi and Ogawa, 1999
<i>Bph12(t)</i>	1, 2, 3	<i>O. latifolia</i>	4	C946 (11.6 cM), RM261 (1.8 cM)	Yang et al., 2002
<i>Bph13(t)</i>	4	<i>O. officinalis</i>	3	AJ09b (1.3 cM)	Renganayaki et al., 2002
<i>Bph13(t)</i>	1、2	<i>O. eichingeri</i>	2	RM240 (6.1 cM), RM250 (5.5 cM)	刘国庆等, 2001, 科学通报, 46(9): 738-742 Liu et al., 2011, Chin. Sci. Bull., 46(9): 738-742
<i>Bph14#</i>	1, 2, 3	<i>O. officinalis</i>	3	SM1, G1318 (34 kb)	Huang et al., 2001
<i>Bph15</i>	1, 2, 3	<i>O. officinalis</i>	4	C820, S11182 (47 kb)	Yang et al., 2004
<i>Bph17</i>	1, 2	<i>Rathu heenati</i>	4	RM8213 (3.6 cM), RM5953 (3.2 cM)	Sun et al., 2005
<i>Bph18(t)#</i>	1, 2	<i>O. australiensis</i>	12	RM463, S15552 (26 kb)	Jena et al., 2006
<i>bph18(t)</i>	2, 九龙江型 2, Cuulong	<i>O. rufipogon</i>	4	RM6506 (11.0 cM), RM273 (6.0 cM)	李容柏等, 2006 Li et al., 2006
<i>bph19(t)</i>	2	AS20-1	3	RM6308, RM1022 (60 kb)	Chen et al., 2006
<i>bph19(t)</i>	2, 九龙江型 2, Cuulong	<i>O. rufipogon</i>	12	RM17 (16.7 cM)	李容柏等, 2006 Li et al., 2006
<i>Bph20(t)</i>	1	<i>O. minuta</i>	4	MS10, RM5953 (193.4 kb)	Rahman et al., 2009
<i>Bph21(t)</i>	1	<i>O. minuta</i>	12	RM3726, RM5479 (194.0 kb)	Rahman et al., 2009
<i>Bph22(t)</i>	—	<i>O. glaberrima</i>	—	—	Ram et al., 2010
<i>bph22(t)</i>	—	<i>O. rufipogon</i>	4	RM8212 (8.2cM), RM261 (11.32 cM)	侯丽媛等, 2010 Hou et al., 2010
<i>Bph23(t)</i>	—	<i>O. minuta</i>	—	—	Ram et al., 2010
<i>bph23(t)</i>	—	<i>O. rufipogon</i>	8	RM2655 (24.8 cM), RM3572 (21.7 cM)	侯丽媛等, 2010 Hou et al., 2010
<i>bph24(t)</i>	—	<i>O. rufipogon</i>	—	—	Deen et al., 2010
<i>Bph25(t)</i>	—	ADR52	6	S00310, RM225	Myint et al., 2005; Yara et al., 2010
<i>Bph26(t)</i>	—	ADR52	12	RM309, RM6306	Myint et al., 2005; Yara et al., 2010

注: 基因位点后显示#: 已克隆; —: 未知信息

Note: #: Cloned; —: Unknown