表1已克隆的水稻叶形基因

Table 1 The blade profile that have been cloning in rice

基因 Gene	染色体 Chromosome	表型 Phenotype	作用 Function	参考文献 Reference
SLL 1 (叶片卷曲控制基因) *SHALLOT-LIKE1*	9	*Sll 1* 突变体叶片变窄，叶片极度内卷，叶色深绿 *sll 1* mutant plants had narrow, extremely rolled and dark-green leaves	*SLL1* 突变会破坏远轴面叶肉细胞程序性死亡并且抑制叶片远轴特征化的形成，导致叶绿素含量的增加和光合作用能力增强 *SLL1* deficiency leads to defective programmed cell death of abaxial mesophyll cells and suppresses the development of abaxial features	Zhang et al., 2009 a
AGO 7 (水稻卷叶基因) Rice argonaute gene	3	叶片向上卷曲，保持直立表型 Upward curling of the leaf blade, keep erect	延长直立的时间，保持较高的直立指数 Prolong time of erect, keep higher leaf erection indices	Shi et al., 2007
LC 2 (水稻叶倾角) *Rice leaf inclination 2*	2	Lc 2 突变体的叶角变大 *lc2* mutants have enlarged leaf angles	*LC2* 能够减小水稻的叶角，能够改善植株的受光状态，提高光合效率 *LC2* improve light and photosynthetic efficiency by decrease leaf angles	Zhao et al., 2010
ILI1 (HLH 转录因子基因) *HLH transcription factor*	4	*ILI 1* 突变体的叶角变大 ILI1 mutant have enlarge leaf angles	过表达 *ILI1* 能增加叶片角度, RNA 干涉抑制叶片的角度的增大，因此 *ILI1* 基因能改善植株的株型，提高水稻产量 Overexpression *ILI1* could increase leaf angles,but RNA interference suppress, *ILI1* could perfect plant architecture and enhance rice yield	Zhang et al., 2009b
nal-7 (窄叶基因) *Narrow leaf 7*	3	*nal-7* 突变体叶片变窄 *nal-7* mutant leaf decrease the width of leaf blade.	*nal-7* 控制叶片的大小，影响水稻的叶面积指数进而影响水稻的光合效率 *nal-7* influence LAI and photosynthetic efficiency via control leaf size	Fujino et al., 2008
nal-1 (窄叶基因) *Narrow leaf 1*	4	*nal-1* 突变体叶片变窄 Nal-1 mutant leaf width decrease	*nal-1* 与 *nal-7* 的作用相似，也是通过改变水稻的叶面积指数来影响水稻的光合效率 *nal-1* function is similar to *nal-7*, influence photosynthetic efficiency get through change rice LAI	Qi et al., 2008
ACL 1 (卷叶基因) *Abaxially Curled Leaf 1*	4	*ACL 1* 突变体叶片外卷 ACL1 mutant exhibited an abaxial leaf curling	*ACL1* 引起叶片向远轴面的卷曲，影响水稻的光合效率 *ACL1* cause leave abaxially curled so as to influence rice photosynthetic efficiency	Li et al., 2010 a