

### 5. *Spr5* (t), a spreading panicle gene from *Oryza glaberrima*

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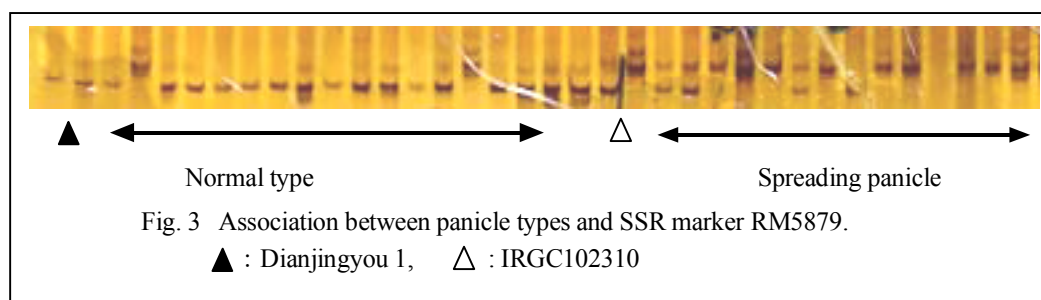
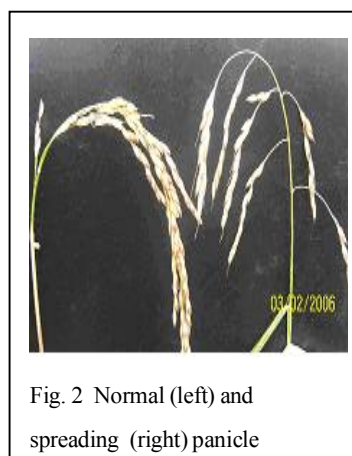
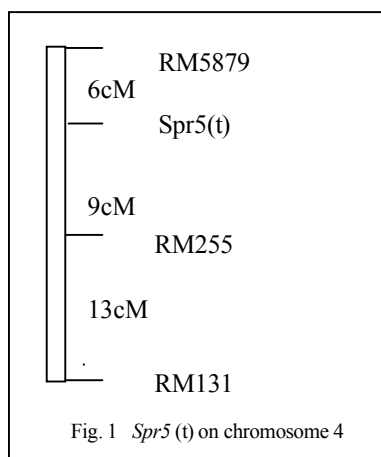
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Spreading panicle, which is popular in wild rice but infrequent in *Oryza sativa*, is regarded as a domestication trait and an important evidence for species evolution in rice. Accessions with spreading panicle type were supposed as less domesticated. And so far, four spreading panicle genes have been reported. The recessive gene *spr1* (Kinoshita and Takamure, 1986) was mapped between 100cM to 154cM on chromosome 4 (Gramene, 2000), the dominant gene *Spr2* (Mitra and Ganguli, 1932), and in 1990 Eiguchi and Sano reported the third gene *Spr3* and Sanchez and Khush reported *Spr4* in 1997. But there isn't any report regarding spreading panicle gene mapping in *Oryza glaberrima*.

IRGC102310, one *O. glaberrima* accession, introduced from the International Rice Research Institute, as maternal parent, was mated with Danjingyou 1 (a *japonica* cultivar from Yunnan), and an interspecific cross was obtained in 2001. BC<sub>3</sub>F<sub>5</sub> advanced backcross inbred lines were planted in Chuxiong, Yunnan province, The People's Republic of China in 2005. 20 spreading and 20 normal panicle type progenies were phenotyped and genotyped using 250 SSR markers. The result showed that three markers, RM5879, RM255, and RM131 were linked to the target trait. Software Map manager QTXb20 (Manly *et al.*, 2001) was used for mapping analysis subsequently, and the target trait was located between RM5879 and RM255 on chromosome 4, coincided the region of the *spr1*. Since there is no report regarding spreading panicle gene from *O. glaberrima*, and this is a dominance gene, *Spr5* (t) was named tentatively.



### Acknowledgement

This research was funded partially by grants from Ministry of Science and Technology (2006CB708207), 948 project from Ministry of Agriculture, and Yunnan Department of Science and Technology (2006C0063M, 2006PG09), the People's Republic of China

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