

SSR Marker Analysis on indica-japonica Differentiation of Natural Population of *Oryza rufipogon* in Yuanjiang, Yunnan Province [PDF]

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摘要: By using 19 pairs of primers that could identify two subspecies (indica and japonica) of cultivated rice (*Oryza sativa* L.), the indica-japonica differentiation of 56 individuals from the natural population of common wild rice (*Oryza rufipogon* Griff.) in Yuanjiang was analyzed by SSR (microsatellite DNAs, or simple sequence repeat). Of the 19 pairs of primers, 17 pairs (89.47%) could amplify only one kind of band type among all of the individuals, but primers RM251 and RM18 could amplify polymorphic band types. The bands amplified by 16 pairs of primers (84.21%) were identical to the indica-japonica diagnostic bands of relevant locus in cultivated rice, including 11 japonica-like loci and 4 indica-like loci. The bands amplified by the other three pairs of primers (RM18, RM202, RM205) were different from indica or japonica diagnostic bands of cultivated rice. The results showed that according to 19 loci analyzed, 84.21% of SSR loci in genomic DNA of common wild rice in Yuanjiang displayed indica-japonica differentiation and 13.79% of the loci still kept primitive, and most of the detected loci were homogenetic in the natural population.

关键词: *Oryza rufipogon*; indica-japonica differentiation; simple sequence repeat; population

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