

基于ISSR标记的红花檵木品种亲缘关系分析

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Genetic Relatives Analysis of 41 *Loropetalum chinense* var. *rubrum* Cultivars by ISSR Markers

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摘要 采用ISSR分子标记技术对红花檵木41个品种的遗传多样性进行了分析。从60条ISSR引物中筛选出14条引物分别对供试材料基因组DNA进行扩增，共获得203条清晰可辨谱带，其中多态性带148条，多态位点百分率为72.9%。应用NTSYS-pc (version 2.10e) 软件计算得到各品种间的Jaccard相似系数介于0.626 ~ 0.926之间。用UPGMA法将41个品种分成5个类群，支持叶色作为最高分类等级，其次应重视花瓣形状の利用，这两个性状最为稳定且能反映品种间系统演化；同时由于品种起源和选育的原因，品种分类还应适当考虑育种过程及其亲本性状；花色、叶形、分枝性等变化没有明显规律，不宜作为太高的分类等级。

关键词：红花檵木 ISSR 遗传多样性 亲缘关系

Abstract: ISSR-PCR was used to detect the genetic diversity and relationship of 41 varieties of *Loropetalum chinense* var. *rubrum*. ISSR fingerprinting amplified by 14 ISSR primers revealed a total number of 203 unambiguous bands, of which 148 ones were polymorphic and the polymorphism frequency was 72.9%. As analyzed by NTSYS-pc (version 2.10e), the similarity coefficient between varieties ranged from 0.626 to 0.926. These 41 varieties of *L. chinense* var. *rubrum* were divided into five groups by UPGMA based on Jaccard coefficient. Leaf color could be the highest classification trait following with petal shape which reflected the phylogenetic evolution among different cultivars. Additionally, due to the origin and breeding of cultivars, the breeding procedure and the characteristics of parents should be considered in cultivar classification. The inheritance of flower color, leaf shape and habit of branching was not stable, so these traits were not suitable as higher classification standard.

Keywords: *Loropetalum chinense* var. *rubrum*, ISSR, genetic diversity, genetic relatives

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