

研究报告

用EST-SSR标记对茶树种质资源的研究

金基强¹, 崔海瑞¹, 龚晓春¹, 陈文岳², 忻雅²

1. 浙江大学原子核农业科学研究所, 杭州 310029;
2. 杭州市农业科学院, 杭州 310024

收稿日期 2006-1-10 修回日期 2006-3-22 网络版发布日期 2006-12-4 接受日期

摘要

采用16对EST-SSR引物对42份茶树品种资源进行了分析。在这些引物中, 有13对可扩增出清晰条带, 其中10对引物具有多态性, 占76.9%。各多态性引物的PIC值变化范围为0.522~0.866, 平均PIC值为0.730。10对多态性引物共检测到84种等位基因型和74个等位变异, 每对引物可检测到基因型和等位基因数分别为4~12和3~10种。42份供试材料间遗传距离为0.074~0.667, 平均遗传距离为0.363, 说明本实验所测试的材料具有较广的遗传变异。在相似系数为0.55的水平可将这些材料聚为3类, 多数材料包含在第一类中。本研究表明, 利用EST-SSR标记进行茶树资源评价是有效的。

关键词 [茶树](#) [EST-SSR标记](#) [种质资源分析](#)
分类号

Studies on tea plants (*Camellia sinensis*) germplasms using EST-SSR marker

JIN Ji-Qiang¹, CUI Hai-Rui¹, GONG Xiao-Chun¹, CHEN Wen-Yue², XIN Ya²

1. *Institute of Nuclear and Agricultural Sciences, Zhejiang University, Hangzhou 310029, China;*
2. *Hangzhou Academy of Agricultural Sciences, Hangzhou 310024, China*

Abstract

<P>Forty two tea varieties were analyzed by using 16 SSR primer sets derived from tea ESTs in this study, and 13 of the primer sets produced clear bands and 10 of them showed polymorphism, accounting for 76.9%. The PIC (polymorphism information content) for each polymorphic primer set varied from 0.522 to 0.866, with a average about 0.73. Totally 84 Genotypes and 74 alleles were detected in all materials by 10 polymorphic markers, with the range from 4 to 12 and from 3 to 10 for each polymorphic primer set, respectively. The genetic distance among 42 tea varieties varied from 0.074 to 0.667, averagely 0.363, suggesting that the materials used in the experiment possess a broad genetic variation. Based on the similarity coefficient about 0.55, all the tea varieties tested could be classified into 3 groups and most of them were in first group. The results of this study proved that the EST-SSR marker is very effective in evaluation of tea germplasms.</P>

Key words [Tea plants](#) [EST-SSR marker](#) [germplasms evaluation](#)

DOI: 10.1360/yc-007-0103

通讯作者 崔海瑞 hrcui@zju.edu.cn

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(0KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“茶树”的 相关文章](#)
- ▶ 本文作者相关文章

- [金基强](#)
- [崔海瑞](#)
- [龚晓春](#)
- [陈文岳](#)
- [忻雅](#)