

江西省主要地方鸡种的RAPD分析及其群体遗传关系的研究 Study on Population Genetic Relationships among Jiangxi Native Chicken Breeds by RAPD Analysis

任军1, 高军1, 黄路生1, 吾豪华2, 黄峰岩2, 艾华水1, 周利华1, 钟新福2, 舒希凡2, 林树茂1, 李琳1, 罗明1 REN Jun1, GAO Jun1, HUANG Lu-sheng1, WU Hao-hua2, HUANG Feng-yan2, AI Hua-shui1, ZHOU Li-hua1, ZHONG Xin-fu2, SHU Xi-fan2, LIN Shu-mao1, LI Lin1, LUO Ming1

1.江西农业大学江西省动物生物技术重点开放实验室,南昌 330045; 2.江西省农业厅畜牧兽医局,南昌 330046; 1.Jiangxi Provincial Key Laboratory for Animal Biotechnology,JA U,Nanchang 330045,China; 2.Animal Husbandry and Veterinary Bureau of Jiangxi Office of Agriculture,Nanchang 330045,China

收稿日期 修回日期 网络版发布日期 接受日期

摘要 采用RAPD技术分析了南城黑鸡、余干五黑鸡、泰和乌骨鸡、东乡绿壳蛋鸡、崇仁麻鸡、宁都三黄鸡、广丰白耳黄鸡和万载康乐黄鸡等8个江西地方鸡种、1个培育鸡种--景德黄鸡以及1个外来鸡种--以色列隐性白羽鸡基因组池DNA的多态性,经OPERONA, B, C, D, G5组100种随机引物扩增筛选,14种引物获得了33个多态标记.各品种间的遗传距离指数的计算结果和UPGMA聚类关系图表明:在10个鸡种间,南城黑鸡和余干五黑鸡的遗传距离最近,两者有着极密切的亲缘关系.据此认为这两个鸡群可视为同一品种的两个地方系.此外,广丰白耳黄鸡和景德黄鸡也表现出较密切的亲缘关系,这与景德黄鸡在培育过程中曾掺有白耳黄鸡血缘的选育历史相吻合。

Abstract: Random amplified polymorphic DNAs (RAPD) analysis was explored to investigate genetic polymorphisms of pooled genomic DNA from 8 native and 1 cultivated chicken breeds in Jiangxi province as well as 1 exotic chicken breed, which include Guangfeng baier huang, Jingde huang, Yugan wuhei, Nancheng hei, Congren ma, Taihe Silky Fowl, Ningdu san huang, Dongxiang green-shell, Wanzai kangle huang and Israel Recessive White Feather Fowl. of 100 OPERON random primers screened, 14 primers produced 34 polymorphic RAPD markers. The genetic distance index and UPGMA dendrogram indicated that Nancheng hei and Yugan wuhei chickens had very closely genetic relationship, the genetic distance between the two populations was closer than any other pair of breeds. Therefore, the two chicken populations were suggested to be classified into one breed. In addition, Guangfeng baier huang and Jingde huang shown intimately relationship, it was consistent with the cultivation history of Jingde huang chicken breed, in which Guangfeng baier huang was introduced as one of parental breed.

关键词 [鸡](#) [RAPD](#) [群体遗传](#) [亲缘关系](#) **Key words** [chicken](#) [RAPD](#) [population genetics](#) [genetic relationships](#)

分类号

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“鸡”的 相关文章](#)

▶ 本文作者相关文章

- [任军](#)
- [高军](#)
- [黄路生](#)
- [吾豪华](#)
- [黄峰岩](#)
- [艾华水](#)
- [周利华](#)
- [钟新福](#)
- [舒希凡](#)
- [林树茂](#)

Abstract

Key words

DOI:

通讯作者