

动物科学

德宏水牛和摩拉水牛及杂交后代的遗传差异分析*

霍金龙¹, 李大林², 伍革民¹, 霍海龙¹, 苗永旺^{1, 3**}, 创向辉⁴, 汤守锟⁵, 何朝阳⁶

- (1. 云南农业大学动物科学技术学院, 云南 昆明 650201;
- 2. 云南省家畜改良工作站, 云南 昆明 650021;
- 3. 云南大学生物资源保护与利用国家重点实验室, 云南 昆明 650091;
- 4. 云南省德宏州动物疾病控制中心, 云南 潞西 678400;
- 5. 云南省德宏州潞西市畜牧站, 云南 潞西 678400;
- 6. 云南省德宏州畜牧局, 云南 潞西 678400)

收稿日期 2007-7-6 修回日期 2007-7-16

摘要 为了解德宏水牛、摩拉水牛及二者杂交后代之间的遗传差异, 本研究采用随机扩增多态性DNA标记技术, 从70个随机引物中筛选出11个多态性丰富的引物对德宏水牛、摩拉水牛及二者杂交后代共80个个体进行了遗传变异检测, 结果11条引物共产生89种扩增片段, 多态片段73条, 多态率82.02%。两亲本群体相对遗传距离为 0.220 3, 杂交后代群体与德宏水牛、摩拉水牛群体的相对遗传距离分别为 0.101 7 和 0.135 3, 表明杂交后代群体与两亲本群体间的遗传差异小于两亲本群体间的遗传差异, 杂交后代群体与德宏水牛群体遗传关系更接近。

关键词 [德宏水牛; 摩拉水牛; 杂交水牛; 随机扩增多态DNA; 遗传差异](#)

分类号 [S 823.83.32](#)

Genetic Difference among Dehong Buffalo, Murrah Buffalo and Their Hybrid Offspring

HUO Jin-long¹, LI Da-lin², WU Ge-min¹, HUO Hai-long¹, MIAO Yong-wang^{1, 3}, CHUANG Xiang-hui⁴, TANG Shou-kun⁵, HE Chao-yang⁶

- (1. Faculty of Animal Sciences and Technology, Yunnan Agricultural University, Kunming 650201, China;
- 2. Domestic Animal Breeding and Crossbreed-improvement Station of Yunnan Province, Kunming 650021, China;
- 3. Laboratory for Conservation and Utilization of Bio-resources, Yunnan University, Kunming 650091, China;
- 4. Animal Disease Control Center of Dehong Area, Yunnan Province, Luxi 678400, China;
- 5. Animal Husbandry and Veterinary Station of Luxi city, Dehong Area, Yunnan Province, Luxi 678400, China;
- 6. Bureau of Husbandry and Veterinary of Dehong Area, Yunnan Province, Luxi 678400, China)

Abstract

In order to obtain the information about genetic differences and genetic relationships among Dehong buffalo, Murrah buffalo and their hybrid offspring at DNA level, the genetic variation of 80 individuals sampled from Dehong buffalo, Murrah buffalo and their hybrid offspring were assayed by RAPD with 11 primers selected from 70 random primers. A total of 89 loci were identified and 73 loci were polymorphic, the percentage of polymorphic loci was 82.02%. The genetic distance between Dehong buffalo and Murrah buffalo

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(443KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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](#)
- ▶ [“德宏水牛; 摩拉水牛; 杂交水牛; 随机扩增多态DNA; 遗传差异” 的相关文章](#)
- ▶ [本文作者相关文章](#)

- [霍金龙](#)
- [李大林](#)
- [伍革民](#)
- [霍海龙](#)
- [苗永旺](#)
- [创向辉](#)
- [汤守锟](#)
- [何朝阳](#)

was 0.220 3 and those between the hybrid offspring and its parents were 0.101 7 and 0.135 3, respectively. The results revealed that the genetic differences between hybrid offspring and its parents were smaller than that between parent populations, but the hybrid offspring was closer to Dehong buffalo than to burrah Buffalo in genetic relationship.

Key words [Dehong buffalo](#) [Murrah buffalo](#) [hybridization buffalo](#) [random amplified polymorphic DNA\(RAPD\)](#); [genetic difference](#)

DOI:

通讯作者 苗永旺