

研究论文

# 皱大球蚧 (*Eulecanium kuwanai*) 和瘤坚大球蚧 (*Eulecanium gigantean*) 地理种群的RAPD遗传分化

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**摘要** 采用RAPD技术测定分析了河北省皱大球蚧和瘤坚大球蚧8个地理种群的遗传结构。结果表明: 5种引物在8个种群中共产生了65条RAPD标记, 各地理种群之间没有产生各自的特征标记; 不同种群间的遗传相似程度与其地理间距呈反比; 种群内的遗传相似程度比种间高。Shannon信息指数表明, 皱大球蚧的平均遗传多样性高于瘤坚大球蚧, 分别为0.3456和0.3225, 说明物种不同, 其变异程度也不同。

**关键词** [皱大球蚧](#); [瘤坚大球蚧](#); [地理种群](#); [RAPD分析](#); [遗传分化](#)

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## RAPD analysis of genetic divergence among populations in *Eulecanium kuwanai* Kanda and *Eulecanium gigantean* Shinji

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**Abstract** Eight geographic populations of the scale insects, *Eulecanium kuwanai* Kanda and *Eulecanium gigantean* Shinji, in Hebei Province were investigated by RAPD-PCR techniques for the determination of their genetic structures. Samples with 10 adults were examined for each population. Sixty five RAPD makers were found by using five selected primers. No specific band was observed for any population. The distance analysis shows that the similarity within an intraspecific population is higher than that of interspecies; the genetic similarity among different populations is inversely proportional to their geographic distances. Shannon's index showed that the average genetic diversity within populations in *Eulecanium kuwanai* Kanda was higher than that in *Eulecanium gigantean* Shinji, with a value of 0.3456 and 0.3225, respectively, demonstrating that the degree of genetic variation was diverse among different species.

**Key words** [Eulecanium kuwanai](#) [Kanda](#); [Eulecanium gigantean](#) [Shinji](#); [geographic population](#); [RAPD](#); [genetic divergence](#)

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