

研究报告

## 拟环纹豹蛛种群遗传多样性与其生境的关系

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**摘要** 对分布于我国中南、西南和海南岛8个不同生境的拟环纹豹蛛种群进行RAPD分析. 筛选出10对引物扩增出清晰稳定的200~2 500 bp片段84条, 其中多态性片段62条(占73.8%). 表明种群存在明显多态现象. Shannon指数、相似系数和遗传距离测定以及聚类分析的结果表明: 拟环纹豹蛛种群总的遗传多样性指数为0.5177, 而且种群内遗传变异(64.24%)大于种群间(35.76%); 8个狼蛛种群平均遗传距离为0.2426, 变异范围为0.0753~0.3725, 表明8个种群由于所处生境条件不同而产生了一定的适应性变异. 多元回归统计结果表明, 制约拟环纹豹蛛成为稻田优势种的主要因子是年平均气温和农药的长期施用.

**关键词** [拟环纹豹蛛](#) [RAPD](#) [遗传多样性](#) [环境因子](#)

分类号

## Genetic diversity of *Pardosa pseudoannulata* populations and its relationships with habitats.

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### Abstract

A random amplified polymorphic DNA (RAPD) analysis was made on the *Pardosa pseudoannulata* populations collected from eight habitats in Central-south China, Southwest China, and Hainan Island. 10 from 50 primers were selected, and 84 bands of 200-2 500 bp fragments were amplified, among which, 62 bands (73.8%) were polymorphic, suggesting an obvious polymorphism of the populations. As estimated by Shannon index, genetic similarity index and genetic distance, the total genetic diversity index of the spider was 0.5177, with the genetic variation being 64.24% within the *P. pseudoannulata* populations and 35.76% among the populations. The genetic distance among the eight populations ranged from 0.0753 to 0.3725, with an average of 0.2426, indicating that the eight populations engendered adaptive variations with different habitats. Multiple regression analysis showed that annual mean air temperature and pesticide application were the main factors restricting *P. pseudoannulata* to be a dominant insect species in rice field.

**Key words** [Pardosa pseudoannulata](#) [random amplified polymorphic DNA \(RAPD\)](#) [genetic diversity](#) [environmental factor](#)

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