论著

不同地区微小按蚊rDNA-ITS2序列差异

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目的 比较我国云南、海南省、广西壮族自治区及泰国等不同地区微小按蚊核糖体 DNA第 2内转录间隔区 ITS2)序列差异。 方法 取单只雌蚊蚊腿消化提取 DNA,PCR特异扩增 r DNA- ITS2片段,并对其扩增产物纯化、测序及分析。 结果 发现 2种不同的 ITS2序列 Gen Bank登录号:AF4 16 783,AF4 16 784),分别与微小按蚊 A和 C同源,ITS2序列长度及 GC含量分别为 4 81bp,5 4 .0 4 %和 4 83bp,5 4 .2 3%,两者无显著性差异;但 2 2个固定位点存在碱基置换和插入/缺失,序列差异为 5 .8%。 结论 研究区内微小按蚊存在 A和 C两个不同的亲缘种

关键词 微小按蚊 核糖体DNA 第2内转录间隔区 序列

分类号

Sequence Difference of Ribosomal DNA Second Internal Transcribed Spacer in Anopheles minimus in Different Localities

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Abstract

Objective To compare the sequence difference of the ribosomal DNA second internal transcribed spacer ITS2) in Anopheles minimus from Yunnan, Hainan, Guangxi of China and from Thailand. Methods Single mosquito's legs were digested to extract DNA; the rDNA-ITS2 region was amplified by specific primers and the PCR products were purified, sequenced and analysed. Results Two different kinds of ITS2 sequences, temporarily named as An.minimus A and An.minimus C, were found in this study. The length and GC contents of ITS2 region in species A and species C are 481 bp, 54.04% and 483 bp, 54.23%, respectively. Two species differed by 5.8% in the ITS2 sequences owing to 22 fixed nucleotide substitutions and indels. Conclusion Two cryptic species, An.minimus A and An.minimus C, were found in the research localities.

Key words <u>Anopheles minimus complex</u> <u>ribosomal DNA</u> <u>ITS2</u> <u>sequence</u>

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页

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