

研究报告

野生扬子鳄栖息地水环境重金属元素含量及pH值的初步研究

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摘要

为了研究野生扬子鳄种群数量急剧下降的原因,于2002~2003年在安徽省南部对野生扬子鳄栖息地现状进行了调查,采集了21个样地的水样,测定了重金属元素(Cu、Zn、Cd、Pb)含量及pH值.结果表明,野生扬子鳄栖息地水环境中的pH值为 7.84 ± 0.62 ,2组样地(有鳄分布、无鳄分布)pH值差异不显著($F=3.26, P>0.05$),而3种类型栖息地的pH值差异显著($F=7.32, P<0.01$).2组样地水环境中Cu、Zn、Cd元素差异不显著,野生扬子鳄栖息地重金属Pb含量为 $0.0233 \pm 0.0164 \text{ mg} \cdot \text{L}^{-1}$,Pb元素差异显著($F=5.477, P<0.05$).最后分析了野生扬子鳄栖息地内重金属Pb的污染源.

关键词 [扬子鳄,水环境,重金属含量,pH](#)

分类号

Heavy metals content and pH value in water environment of wild Chinese alligator (*Alligator sinensis*) habitat:A preliminary study

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Abstract

In order to reveal the reasons of the dramatic decline of wild Chinese alligator population, an investigation on its habitat status was made across the National Natural Conservation Regions of Chinese alligator in south Anhui Province from 2002 to 2003. Water samples from 21 sites were collected, and their heavy metals (Cu, Zn, Cd and Pb) content and pH value were measured. The results showed that the pH value was 7.84 ± 0.62 , with no significant difference between the waters with and without Chinese alligator, but with significant difference ($P<0.01$) among 3 Chinese alligator habitats. In the waters with and without Chinese alligator, no significant difference was observed in the contents of test metals except Pb. The possible pollution source of Pb in wild Chinese alligator habitat was analyzed, which could provide reference for Chinese alligator conservation.

Key words

扩展功能

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