



A new species of *Eulimnadia* (Crustacea; Branchiopoda; Diplostraca; Spinicaudata) from North America

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Abstract

Eulimnadia graniticola n. sp. from Stone Mountain, Georgia, and the Florida Keys, USA, is defined primarily on molecular characters and egg morphology. Ecological, reproductive and life history data are provided. This species is the second species of branchiopod crustacean reported from Stone Mountain more closely related to the South American fauna than to its North American congeners.

Key words: Clam shrimp, eggs, vernal pools, rock outcrop pools, Georgia, Florida

Introduction

During a study of the higher taxonomy of the world Spinicaudata, we encountered a previously undescribed species of limnadiidan clam shrimp of the genus *Eulimnadia*. This new species is known from the depressional pools on Stone Mountain, in the state of Georgia and from seasonal wetlands in the Florida Keys, USA. The Stone Mountain site is particularly interesting in that it is the largest granitic pluton in North America. The depressional pool is also the type locality for the anostracan *Dendrocephalinus lithaca* (Creaser, 1940) (Rogers 2006).

Material and methods

Eggs from the Georgia locality were cultured to adult stage at the University of Akron, in Akron, Ohio, USA.

Morphological Analyses

The material was examined using a Wild M8 dissection stereomicroscope, and was sketched freehand. The specimens were compared with congeners:

Eulimnadia africana Brauer, 1877 KENYA: Kalif District: Malindi, Mombasa Road, 3 km south of Watamu Junction, 1 km west on dirt road in flooded sand quarry, 27 August 1987, R. C. Drewes, CAS 165159, Det. D. C. Rogers, DCR-535.

Eulimnadia agassizi Packard, 1874 USA: FLORIDA: Munsen Sand Hills, south of Tallahassee, 4 October 2000, T. Spears, Det. D.C. Rogers, DCR-405.

Eulimnadia brasiliensis Sars, 1902 BRAZIL: MINAS GERAIS: CODEVASF fish ponds at Tres Marias, 1998, A. Ferreira, Det. D.C. Rogers, DCR-365.

Eulimnadia colombiensis Roessler, 1990 BRAZIL: MINAS GERAIS: Nova Lima, temporary pool at Capão Xavier, 8 September 2001, reared from soil, D.C. Rogers, DCR-406.

Eulimnadia cylindrova Belk, 1989 USA: LOUISIANA: Jefferson County: Grand Isle, 10 July 1940, G. H.