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**DESCRIPTIONS OF *ANACRONEURIA* SPP.  
(PLECOPTERA: PERLIDAE)  
FROM THE UPPER RIO AMAZONAS DRAINAGE,  
COLOMBIA AND PERU**

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**Abstract** – *Anacroneuria loreto*, sp. n., is described from a distinctive female specimen collected upstream of Iquitos, Peru, in the Rio Amazonas drainage, and new records are given for *A. montera* Stark and Sivec from the Rio Amazonas near Leticia, Colombia.

**KEY WORDS:** Plecoptera, Perlidae, *Anacroneuria*, new species.

**Izvleček** – OPISI VRST IZ RODU *ANACRONEURIA* (PLECOPTERA: PERLIDAE) IZ ZGORNJEDELA POREČJA AMAZONKE V KOLUMBIJI IN PERUJU

Na podlagi svojevrstnega primerka samice je opisana *Anacroneuria loreto*, sp. n., najdena ob reki navzgor nad Iquitosom v Peruju, v porečju Amazonke. Podani so novi podatki za vrsto *A. montera* Stark and Sivec iz Amazonke pri kraju Leticia v Kolumbiji.

**KLJUČNE BESEDE:** Plecoptera, Perlidae, *Anacroneuria*, nova vrsta.

## Introduction

Despite the speciose nature of the genus *Anacroneuria* in the neotropics, few records are known for the lowlands along the upper Rio Amazonas in the states of Loreto (Peru), Napo (Ecuador) and Amazonas (Colombia). Stark and Sivec (1998) proposed *Anacroneuria montera* from specimens collected around Iquitos, and Stark et al. (1999) gave an informal designation for a similar female collected at Leticia, Colombia. These are the only records for stoneflies for the upper Rio Amazonas in the Leticia to Iquitos region but several species are reported for Rio Napo and its tributaries at higher elevations in the area of Lago Agrio and Tena, Ecuador (Stark, 2001). Recently we acquired a few specimens of distinctively pigmented *Anacroneuria* from this region and they form the basis of this report. Specimens are deposited in the United States National Museum of Natural History, Washington (USNM), the Museo de Entomología de la Universidad del Valle, Cali, Colombia (MEUV) and in the collection of the senior author (BPS).

### *Anacroneuria loreto* Stark and Zúñiga, sp. n.

**Holotype:** ♀ from Peru, Loreto, near Nauta, 22. 3. 2001, W. Reeves. Holotype deposited in the United States National Museum of Natural History.

**Male:** unknown.

**Female:** Forewing length 9 mm. Dark brown band across occiput and frons, with a median pale V-shaped notch on anterior margin; anterior third of frons pale (Fig. 1). Antennal bases pale but segments 3-20 dark, segments 21-33 pale and apical ca. 25 segments dark brown. Pronotum dark on posterior half but becoming paler toward anterior margins (Fig. 1). Wing membrane mostly dark but with pale areas along costa extending across  $Rs$  at midlength, and a narrow pale band extending across wing beyond cord; wing apex dark (Fig. 3). Legs banded; femora dark in distal half; tibiae dark at base and in distal third, pale mesally. Subgenital plate bilobed; notch narrow, deep and with a short keel extending forward from base of notch; subgenital plate lobes narrow towards tip and rounded (Fig. 2).

**Nymph:** Unknown.

**Etymology:** The species name, based on the type locality, is used as a noun in apposition.

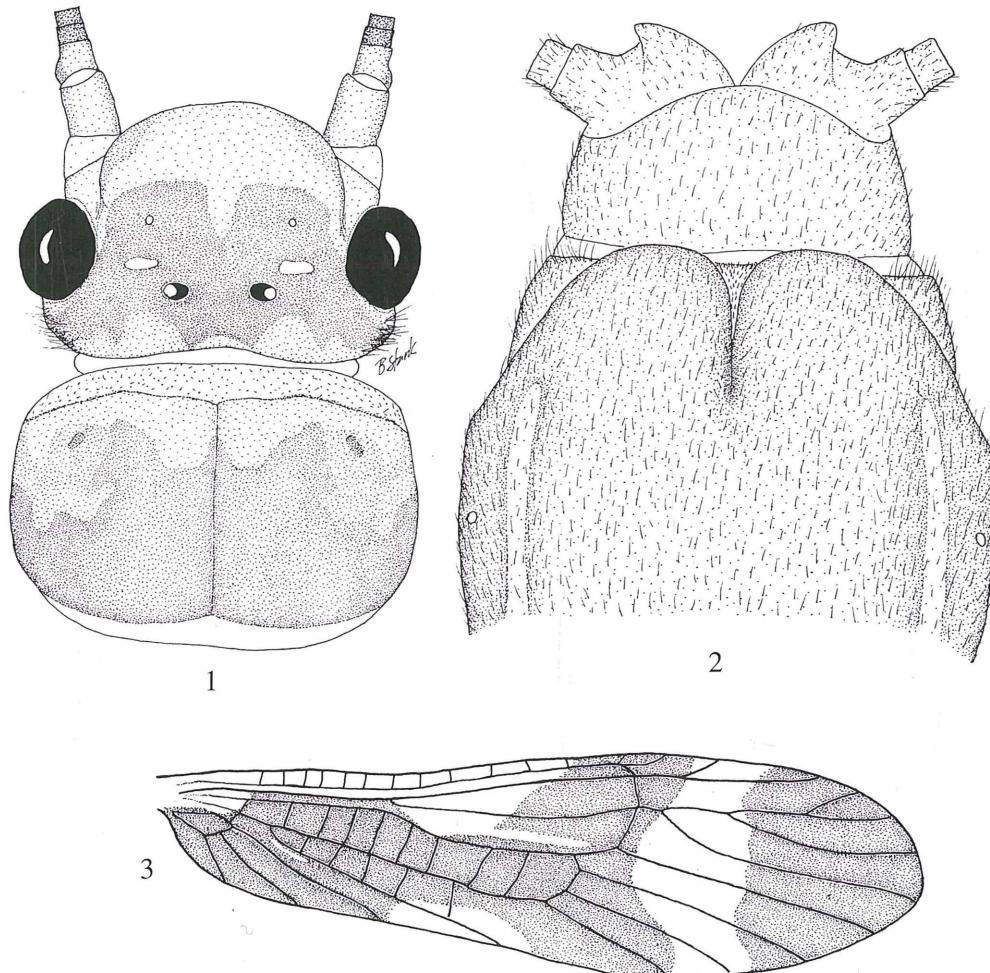
**Diagnosis:** Few *Anacroneuria* are as distinctive as the female holotype of this species. The wings are patterned like those of *A. bifasciata* (Pictet) (Stark, 1995) and *A. paria* Stark (Stark, 1999) but the dark pigment in the basal half of the wing is more extensive than for either of these species. The dark head pattern is similar to that of *A. montera* Stark and Sivec (Stark and Sivec, 1998) but in that species the pale areas lateral to the ocelli are in contact with the ocelli and the pronotum has a narrow pale mesal stripe. The subgenital plate differs markedly from known South American species in having a small keel anterior to the mesal notch. The only other species in which this is known to occur is *A. magnirufa* Jewett (Stark, 1998) and this species is profoundly different from *A. loreto* in other respects. Therefore, despite intriguing

similarities to various species, and in particular to *A. bifasciata* in general appearance, it is not at all clear whether this species is closely related to any of them.

### *Anacroneuria montera* Stark and Sivec

*Anacroneuria montera* Stark and Sivec, 1998: 41. Holotype ♂, Iquitos, Loreto, Peru.  
*Anacroneuria* CO-1 Stark, Zúñiga, Rojas and Baena, 1999: 42. New association.

**Material:** Colombia: Amazonas, Leticia, 9. 9. 1969, D.H. Messersmith, 1 ♀ (USNM, "CO-1" specimen). Amazonas, Municipio de Leticia, Isla de Mocagua, Rio



**Fig. 1-3:** *Anacroneuria* *loreto* sp. n. structures. 1. Head and pronotum. 2. Female terminalia. 3. Forewing.

Amazonas, 2. 2. 1999, Trampa de Luz, M.C. Zúñiga, E. Dominguez, C. Molineri, 1 ♂, 1 ♀ (MEUV). Amazonas, Municipio de Leticia, Parque Nacional Natural Amacayacu, Rio Amazonas, 2. 2. 1999, Trampa de Luz, M.C. Zúñiga, E. Dominguez, C. Molineri, 1 ♂ (MEUV). Peru: Loreto, near Nauta, 22. 3. 2001, W. Reeves, 1 ♀ (BPS).

**Discussion:** The female described by Stark et al. (1999) under the informal designation *Anacroneuria* CO-1 differs from the holotype and female paratype of *A. montera* only slightly in head and pronotal pigmentation and the subgenital plates and 9<sup>th</sup> sternum are scarcely distinguishable. *Anacroneuria* CO-1 is known from the single female specimen captured in Leticia, Amazonas, Colombia, a site downstream on the Rio Amazonas from the type locality of *A. montera*. The new material from the Leticia area and from Loreto is entirely consistent with type material of *A. montera* and supports the position that *Anacroneuria* CO-1 should be placed in this species.

**Diagnosis:** *Anacroneuria montera* occurs in the same general region as *A. loreto* and the two species are quite similar in head pattern, however the pale spots near the ocelli are in contact with the ocelli in *A. montera* (separate in *A. loreto*) and the wings of *A. montera* are rather uniformly dark (banded in *A. loreto*).

### Acknowledgment

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