

***Triplectides* larvae in empty cases of *Nectopsyche*  
(Trichoptera, Leptoceridae) at Parque Estadual Intervales,  
São Paulo State, Brazil**

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**RESUMO.** Larvas de *Triplectides* em casas vazias de *Nectopsyche* (Trichoptera, Leptoceridae), no Parque Estadual Intervales, Estado de São Paulo, Brasil. A frequente ocorrência de larvas de *Triplectides* sp. em casas de *Nectopsyche* no Ribeirão Bocaina (Parque Estadual Intervales, São Paulo, Brasil) foi registrada. Acúmulos de folhas foram coletados de novembro de 1999 a junho de 2000 em corredeiras e remansos. Larvas de *Triplectides* sp. em casas de *Nectopsyche* foram encontradas principalmente em remansos.

**PALAVRAS-CHAVE.** Abrigos larvais; *Nectopsyche*; Parque Estadual Intervales; Trichoptera; *Triplectides*.

**ABSTRACT.** The frequent occurrence of *Triplectides* sp. larvae in cases of *Nectopsyche* Müller in Ribeirão Bocaina, Parque Estadual Intervales, São Paulo, Brazil is recorded. Leaf packs were collected from November 1999 to June 2000 in riffles and pools. *Triplectides* sp. larvae in cases of *Nectopsyche* were found mostly in pools.

**KEYWORDS.** Larval cases; *Nectopsyche*; Parque Estadual Intervales; Trichoptera; *Triplectides*.

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Trichoptera larvae produce silk with their labial glands. The silk is used to build retreats, nets for food uptake, and cases (WIGGINS 1996; ANGRISANO & KOROB 2001). Cases are built by the majority of Trichoptera families, a wide diversity of materials is used in case construction and the shapes are variable. The type of the case may be used to identify taxa to genus, but convergences occur and empty cases may be occupied by opportunistic larvae.

Larvae of the leptocerid genera *Triplectides* Kolenati, 1859 and *Nectopsyche* Müller, 1879 are easily recognized. In the first one, the metanotum has four sclerites and the tibiae of the hind legs are divided; in the second, the metanotum is membranous and the lateral tubercle of the first abdominal segment has a sclerotized bar and a circular roughened area (ANGRISANO & KOROB 2001). Figures of the genera are found in HOLZENTHAL (1988, 1995) and WIGGINS (1996). Here the occupation of cases of *Nectopsyche* by larvae of *Triplectides* sp. is recorded.

The study site was Parque Estadual Intervales, São Paulo, Brazil. The park is located in the Serra de Paranapiacaba, inside the protection area of the Serra do Mar, and includes parts of the municipalities of Ribeirão Grande, Eldorado, Guapiara, Iporanga and Sete Barras. Situated between 24°12' and 24°32'S, and 48°03' and 48°32'W, it has an area of 417 km<sup>2</sup> (CAMPOS 2001). Collectings were done in Ribeirão Bocaina, a second order stream, at 24°16'21"S and 48°27'16"W. Leaf packs in pools and riffles (10 sampling units each) were collected with

a D-net from November 1999 through June 2000. Voucher material is deposited in the Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil (MZSP).

Two hundred and two *Triplectides* sp. and 954 *Nectopsyche* sp. larvae were collected. In pools, the numbers were 195 *Triplectides* sp. and 16 *Nectopsyche* sp. larvae; in riffles, seven *Triplectides* sp. and 938 *Nectopsyche* sp. A high frequency of *Triplectides* sp. larvae were found in *Nectopsyche* larval cases: in pools, 173 (89%) and in riffles, four (57%).

*Triplectides* larvae do not build elaborate cases, generally occupying small hollowed out twig fragments or discarded cases of other caddisflies (FLINT *et al.* 1999). HOLZENTHAL (1988) mentions Flint's observation of the occurrence of *Triplectides* larvae in cases of *Parasericostoma* Schmid, 1957 in Chile and *Grumicha* Müller, 1879 (Trichoptera, Sericostomatidae) in Brazil. We also found three *Triplectides* sp. larvae in *Grumicha* cases.

We observed that *Triplectides* sp. larvae occur primarily in pools while those of *Nectopsyche* sp. are riffle-dwelling. The high frequency of *Triplectides* sp. larvae in cases of *Nectopsyche* was observed in leaf accumulations in pools, indicating that the discarded cases of *Nectopsyche* larvae in riffles are carried to pools, where they are utilized by the resident *Triplectides* sp. larvae. Corroborating FLINT (*apud* HOLZENTHAL 1988), our results indicate that *Triplectides* larvae are opportunists, occupying empty cases of other caddisflies, in addition to hollow twigs.

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