

The thoracic sclerites of *Belostoma* Latreille (Hemiptera: Belostomatidae) and their usefulness for species identification

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ABSTRACT

Some thoracic sclerites, including the mesepimeron, postalar projection, wing knob, metanotum pubescence, and wing groove widening, are described and analyzed as worthy taxonomic characters for the identification of adult species of the genus *Belostoma* Latreille 1807. We tested the diagnostic value of these structures on specimens of *B. dentatum* (Mayr, 1863), *B. elegans* (Mayr, 1871), *B. micantulum* (Stål, 1860), and *B. oxyurum* (Dufour, 1863).

Key words: Belostomatidae, *Belostoma* spp, thoracic sclerites, species identification

Introduction

Currently, the taxonomy of belostomatid adults relies on a very few diagnostic characters. In *Belostoma* Latreille 1807 the male genitalia are the most trustworthy structures for species identification. However, additional characters, such as the ratio of anteclypeus-lorum to anteclypeus-maxillary plate sutures, combined with abdominal pilosity, seem to facilitate species recognition among *Belostoma* species (Estévez & Polhemus, 2001).

The thorax of Heteroptera is highly modified. The prothorax is relatively simple and enlarged dorsally, but the meso- and metathorax show a variable degree of fusion among the thoracic sclerites themselves and with those of the abdomen. The ventral sclerites are pushed up and backwards, the metathorax is but little developed, and the mesothoracic muscles are the main ones developed for flight. In aquatic Heteroptera the modifications are even more dramatic, due to adaptations to the environment, to the need to accommo-