

A new species of *Leucochrysa* and a redescription of *Leucochrysa (Nodita) clepsydra* Banks (Neuroptera: Chrysopidae)

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ABSTRACT

A new species, *Leucochrysa (Nodita) digitiformis*, is described from an agricultural area in the coastal region of south-eastern Brazil. In accordance with the most recent key to some agriculturally-associated lacewings in Brazil (Freitas and Penny 2001), this species would have been identified as *Leucochrysa (Nodita) clepsydra* Banks, which was described from the Andean region of Colombia (1,000–1,340 m). However, a comparison of our Brazilian specimens with Banks's syntypes of *L. (N.) clepsydra* showed that Freitas and Penny's redescription of *L. (N.) clepsydra* differs markedly from Banks's types in body size, wing shape, and male genitalia. To facilitate reliable identification of natural enemies in South American agroecosystems, we redescribe *L. (N.) clepsydra* (male and female) from the type specimens, describe a similar species from Brazil, and modify the existing key.

Key words: Leucochrysini, South America, agriculturally important predators

Resumo—Uma nova espécie, *Leucochrysa (Nodita) digitiformis*, encontrada em área agrícola na região costeira do sudeste do Brasil, é descrita. De acordo com a chave mais recente para crisopídeos associados com agroecossistemas do Brasil (Freitas e Penny 2001), esta espécie seria identificada como *Leucochrysa (Nodita) clepsydra* Banks, originalmente descrita com base em espécimes coletados na região andina da Colômbia (1000–1340 metros de altitude). Entretanto, comparando os espécimes brasileiros aqui estudados com os síntipos de *L. (N.) clepsydra* de Banks, observa-se que a redescricão desta espécie realizada por Freitas e Penny difere significativamente dos tipos de Banks quanto ao tamanho do corpo, forma das asas e genitália do macho. Para facilitar a identificação segura dos inimigos naturais de agroecossistemas sul-americanos, macho e fêmea de *L. (N.) clepsydra* são redescritos a partir dos espécimes tipos, uma espécie semelhante do Brasil é descrita e a chave existente é modificada.

INTRODUCTION

The New World genus *Leucochrysa* (Neuroptera: Chrysopidae: Chrysopinae: Leucochrysini) includes many species that are associated with agricultural crops, especially in the Neotropical region (Núñez 1988; Freitas and Penny 2001, Freitas 2007). These species are potentially useful as natural enemies of plant pests, but identifying them is difficult; in fact, misidentifications commonly occur in the literature and also on specimen labels.

The systematic problems with *Leucochrysa* arise from several causes. First, the genus is relatively large (~ 190 species in two subgenera, *Leucochrysa* and *Nodita*), and the external differences between species are often subtle. Second, the genus has received little modern systematic attention. For example, the systematically important adult genital structures were not included in descriptions until the late 1960s (males) and late 1970s (females) (Alayo 1968, Adams 1977); since then, only a very small fraction of *Leucochrysa* species has