

## Two new species of *Evaniodes* Szépligeti (Hymenoptera: Braconidae: Doryctinae) from French Guiana

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### Abstract

Two new species belonging to the enigmatic doryctine genus *Evaniodes* Szépligeti, 1901 (Hymenoptera: Braconidae), *E. palikuri* Braet, Ceccarelli & Zaldívar-Riverón **sp. nov.** and *E. wayampisi* Braet, Ceccarelli & Zaldívar-Riverón **sp. nov.**, are described from French Guiana. Two of the three previously described species of *Evaniodes*, *E. areolatus* Szépligeti, 1901 and *E. spathiiformis* Szépligeti, 1901, are recorded for the first time for French Guiana. A key to the five described species of the genus is provided.

### Résumé

Deux nouvelles espèces du genre *Evaniodes* Szépligeti, 1901 (Hymenoptera, Braconidae), *E. palikuri* Braet, Ceccarelli & Zaldívar-Riverón **sp. nov.** et *E. wayampisi* Braet, Ceccarelli & Zaldívar-Riverón **sp. nov.** sont décrites de Guyane française. Parmi les trois autres espèces d'*Evaniodes* connues à ce jour, *E. areolatus* Szépligeti, 1901 et *E. spathiiformis* Szépligeti, 1901 sont également signalées pour la première fois de cette région. Une clé d'identification des 5 espèces est fournie.

**Keywords:** *Evaniodes*, Doryctinae, French Guiana, Braconidae, DNA barcoding

### Introduction

The Doryctinae represents one of the largest subfamilies of braconid parasitoid wasps (Yu et al., 2005; Jones et al., 2009), being more diverse in the tropical regions but especially in the Neotropics. The definition and extent of several supraspecific doryctine taxa is still problematic due to their lack of clear morphological synapomorphies (Belokobylskij et al., 2004). Species of the Evaniodini Fischer, however, are clearly distinguishable from members of other doryctine tribes by sharing a unique morphological feature in the subfamily, the elevation of the metasoma above the hind coxa (Belokobylskij, 1992). The Evaniodini was considered by Fischer (1981) to be composed of two genera, *Pariodes* Fisher and *Evaniodes* Szépligeti. Later, Barbalho & Penteado-Dias (1998) proposed *Pariodes* to be a junior synonym of *Evaniodes*, though the validity of the two genera was maintained in subsequent studies (Belokobylskij, 1992, Belokobylskij et al., 2004). Based on the original descriptions of the above two genera and on our examined material, we agree with the synonymy of Barbalho & Penteado-Dias (1998). Three species of *Evaniodes* are therefore currently recognised: *E. areolatus* Szépligeti, *E. marshi* Barbalho & Penteado-Dias and *E. spathiiformis* Szépligeti. Species of this genus are rarely collected and appear to be restricted to Central and South America, being to date only recorded for Brazil and Costa Rica (Marsh, 2002; Yu et al., 2005).

Two recent entomological surveys carried out in French Guiana, one made by I. B. during 1999-2000 to the “Montagne de Kaw” and a second by the “Société Entomologique Antilles Guyane (S.E.A.G.)” during 2010 to the “Montagne des chevaux”, resulted in the discovery of two new species of *Evaniodes*. Here we describe these new