



## ***Umbothynnus*, a newly recognised genus for the *Rhagigaster alexius* Guérin group of species (Hymenoptera: Tiphidae: Thynninae: Rhagigasterini) from northern Australia**

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### **Abstract**

*Umbothynnus* **gen. nov.**, is erected for *Rhagigaster alexius* (Guérin) and seven new species, *U. bertholetiensis*, *U. borroolooliensis*, *U. infuscatus*, *U. katherinensis*, *U. subcornutus*, *U. subspinosus* and *U. webbiensis*, described from Northern Australia. A key to the males of *Umbothynnus* is provided. The genus *Rhytidogaster* Turner, 1907 is resurrected, but this name is preoccupied by *Rhytidogaster* Agassiz, 1846. *Rhytidothynnus* **nom. nov.** is proposed as a replacement name for *Rhytidogaster* Turner.

**Key words:** *Umbothynnus*, Rhagigasterini, Australia, Tiphidae, Thynninae, Aculeata

### **Introduction**

The Rhagigasterini has been poorly studied in comparison to the other thynnine tribes, and is inadequately defined (Salter 1963, Given, 1959; Kimsey, 1996) due to an apparent lack of definitive diagnostic characters. There are no recent species revisions, except for *Aelurus* Westwood (Kimsey, 1991), and there are a large number of undescribed species. This is compounded by extreme sexual dimorphism found in the subfamily whereby males are typical wasps but the females are apterous and somewhat ant-like in appearance.

The tribe (as Rhagigasterinae) was erected by Ashmead (1903) but it was poorly defined and included ten genera that were not necessarily closely related. It was subsequently redefined by Turner (1910) to include only four genera: *Eirone* Westwood, *Rhagigaster* Guérin and *Dimorphothynnus* Turner from Australia and adjacent islands; and *Aelurus*, from South America. Although there are some problems with the higher classification (Given, 1959; Kimsey, 1996), Turner's interpretation is still followed.

Most genera, with the exception of *Aelurus*, have not been revised for a century. Species were last revised by Turner (1907) and genera three years later (Turner, 1910). Turner (1907) split the two largest and most diverse genera, *Rhagigaster* and *Eirone* by erecting *Rhytidogaster* and *Lepteirone* respectively, but his diagnostic characters did not clearly separate all species and he later (1910) reversed his decision and returned these genera as synonyms. These two genera contain many undescribed species that were not known to Turner, and therefore need to be re-examined. It has also now become apparent (Kimsey, 1996; Brown, 2001, 2005) that the examination of the genitalia is essential to detect cryptic genera and species, which Turner did not do.

Such an examination of all available species of *Rhagigaster* (Brown, unpubl.) shows the existence of several groups that may warrant generic rank. This includes the new genus described here and is based on the structure of the genitalia, antennal prominence and epipygium of the male. These characters are sufficiently distinct within the tribe to warrant generic rank. It includes *Rhytidogaster alexius* Turner and seven new species, all from northern Australia.