



A note on *Szelenioproia pampeana* (Loiácono) n. comb., parasitoid wasps (Hymenoptera: Diapriidae) attacking the fungus growing ant, *Acromyrmex lobicornis* Emery (Hymenoptera: Formicidae: Attini) in La Pampa, Argentina

MARTA S. LOIÁCONO¹ & CECILIA B. MARGARÍA²

División Entomología, Museo de La Plata, Argentina. E-mails: ¹loiacono@fcnym.unlp.edu.ar, ²cmargaria@fcnym.unlp.edu.ar

Diapriids are predominately known as parasitoids of fly pupae. According to Huggert and Masner (1983), representatives of three subfamilies of ants (Myrmicinae, Formicinae and Dorylinae) are the known hosts of myrmecophilic diapriine wasps (Diapriidae: Diapriinae); within the Myrmicinae, the genera known to be associated with diapriines are *Solenopsis* Westwood, *Tetramorium* Mayr and possibly *Myrmica* Latreille. *Acromyrmex ambiguus* (Emery) (Myrmicinae), is known as larval host of *Szelenioproia lucens* (Loiácono) (Loiácono 1987). Masner and García (2002) noted that this is the first member of the tribe Diapriini in the New World to be positively reared from ants. *Gymnoproia pampeana* Loiácono was reared from *A. lobicornis* Emery in Argentina (Loiácono *et al.* 2000). Fernández Marin *et al.* (2006) provided details of the biology of the diapriine wasps *Acanthoproia* spp. and *Mimopriella* sp., both of which attack larvae of *Cyphomyrmex* fungus-growing ants.

These minute diapriid wasps are almost exclusively tropical, with the greatest diversity in lowland rainforests of Central and South America (Masner & García 2002), but little is known about their biology. The main objective of the present paper is to expand our knowledge about this diapriids reared from *A. lobicornis* nests collected in La Pampa province, Argentina.

Materials and methods

Dr. Estela Quirán, a myrmecologist from Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa, Argentina, sent us 33 parasitized ant larvae of *Acromyrmex lobicornis* from one ant nest taken from La Reforma (20-X-1999), and 32 larvae from one nest taken from Santa Rosa (27-X-1999), both in La Pampa province. To obtain the formicid larvae, the ant nest is excavated from the outside inwards until the principal fungus cavity is reached. The ants' immature stages are found in internal chambers. The excavated nest structure is placed in 20L plastic containers and covered with a fine metallic mesh (Loiácono *et al.* 2000).

Samples were stored in 70 % EtOH. They consisted of larvae of late instars with signs of parasitism, (dark coloration from the developing wasp visible through the cuticle) (Figs. 1 a, b, d), diapriid adults (Figs. 1 c, e) and some workers of *Acromyrmex lobicornis* (Fig. 1 e). The diapriid larvae were transferred from vials to Petri dishes and dissected in the laboratory under a Leica S8 Apo stereomicroscope. Voucher specimens were deposited at Division Entomología of Museo de La Plata, Argentina.

Results and discussion

Szelenioproia pampeana (Loiácono) n. comb.

Gymnoproia pampeana Loiácono in Loiácono *et al.* 2000: 10.

Remarks: Masner and García (2002) considered *Gymnoproia* Loiácono as junior synonym of *Szelenioproia* Fabricius by comparison with material type-species. Here, *S. pampeana* is considered as a new combination. *Szelenioproia pampeana* (Loiácono) is similar to *S. lucens* (Loiácono) but differs by the coriaceous sculpture of head and mesosoma; scarcely pilosity of cheeks and anterior margin of prothorax; and wider first segment of antennal club.