



Fig. 1. Distribution of *Epimyrma adlerzi* sp. n. (●) and *E. ravouxi* (André) (▲) in Greece. 1 = Bassai, S Andritsena; 2 = Blue Lake, W Loutraki; 3 = Kaza, S Thivae; 4 = Klidion, S Florina; and 5 = Drosopigi, S Florina.

(*M.*) *exilis* colonies were found containing this undescribed *Epimyrma* species.

## MATERIALS AND METHODS

All colonies of *Leptothorax (M.) exilis* with *Epimyrma* were collected and 7 of them brought alive to the laboratory for biological studies. These colonies and a total of 19 successfully founded in the laboratory were kept under artificial conditions as described by Buschinger (1974) and Buschinger et al. (1986). Since we are lacking exact climatic data from the localities where we found *E. adlerzi*, we chose a temperature regime which had proved suitable already for several Mediterranean *Epimyrma* and *Chalepoxenus* species. Thus for hibernation the colonies were kept in nearly constant 10°C for 3–5 months, then placed in a 12:12 hours rhythm of 10°C, dark/20°C, light for 2 weeks, and in a rhythm of 15°C (10h, dark) to 25°C (14h, light) for another 2 weeks, finally in 17°C (10h, dark) to 28°C (14h, light) for about 2 months or until pupation of brood decreased. Through the 15/25°C and the 10/20°C rhythms, as in "spring", the colonies then were brought into a second hibernation. Honey diluted with water, and insect pieces (cockroaches, *Tenebrio* pupae)

were supplied ad libitum three times a week.

The karyotype of *E. adlerzi* was determined using the method of Imai et al. (1977). We analyzed the testes of 4 ♂-pupae from colonies of Bassai, Blue Lake and Klidion. From each pupa 20 metaphase plates were checked for chromosome number and shape. The morphological study was based on field collected material from 3 colonies from Blue Lake (N in Fig. 4 and Table 1) and laboratory bred individuals from 5 colonies. For comparison we examined also material of the other *Epimyrma* species occurring in the Mediterranean area, i.e. *algeriana*, *bernardi*, *corsica*, *krausseii*, and *ravouxi* (Fig. 4).

Alitrunk length was measured from the vertical slope of pronotum to the posteriormost tip of propodeum. All measurements (in mm unless otherwise stated) given in the description (mean ± 1 standard deviation) are based on the field collected material, since we suspect size to be influenced by laboratory conditions. For the morphology of the genus *Epimyrma*, see Kutter (1973).

## TAXONOMY

### *Epimyrma adlerzi* sp. n.

(Figs. 2–5)

*Type locality*: Greece, Korinthos, Blue Lake W Loutraki.

*Type material*: **Holotype** ♀, **Greece**: Blue Lake W Loutraki, 17.x.1984, P. Douwes. — **Paratypes**: **Greece**: 9 ♀ ♀ 1 ♂, same data as for holotype; 1 ♀ 1 ♂, same locality as for holotype, 24.ix.1978, P. Douwes; 3 ♂ ♂, same locality as for holotype, 4.x.1985, Buschinger-Douwes-Heinze-Jessen-Winter, Laboratory stock S Nr Je 24d; 7 ♀ ♀ 1 ♂, same locality as for holotype, 4.x.1985, Buschinger-Douwes-Heinze-Jessen-Winter, Laboratory stock S Nr Je 24f; 5 ♀ ♀ 1 ♂, S Andritsena, Bassai, 6.x.1985, Buschinger-Douwes-Heinze-Jessen-Winter, Laboratory stock S Nr 12296; 5 ♀ ♀ 2 ♂ ♂, Thivae, Kaza, 8.x.1985, Buschinger-Douwes-Heinze-Jessen-Winter, Laboratory stock S Nr 12326; 3 ♀ ♀ 7 ♂ ♂, Florina, Klidion, 9.x.1985, Buschinger-Douwes-Heinze-Jessen-Winter, Laboratory stock S Nr 12347.

The holotype and 12 paratypes are in Museum of Zoology, Univ. of Lund, Sweden; 15 paratypes in Zoologische Staatssammlung, Munich, FRG; 6 paratypes in Naturhistorisches Museum, Basel, Switzerland; 7 paratypes in British Museum (Nat. Hist.), London, UK; and 7 paratypes in Museum of Comparative Zoology, Harvard University, Cambridge, Mass., USA.

*Etymology*: Named in honour of the Swedish myrmecologist Gottfrid Adlerz.