

**Diagnosis:** *E. adlerzi* is in colour and sculpture almost identical with *ravouxi*. Despite the fact that the petiolus form is highly variable in *Epimyрма* species, as pointed out by Kutter (1973) and confirmed in this study, the ventral lobe in profile and the angle between the anterior and posterior faces of the node offer the best discrimination between *adlerzi* and *ravouxi* females (Figs. 3, 4). There are also slight differences in the petiolus height/alitrunk length, postpetiolus height/alitrunk length, and head length/alitrunk length ratios (Fig. 4). Size varies considerably in *ravouxi*, southern populations having more or less the same alitrunk length as *adlerzi*. It should be remembered, however, that all but one sample of *adlerzi* consist of laboratory bred individuals which seem to be larger than normal (cf. the two samples from Blue Lake, Fig. 4). The four species *adlerzi*, *algeriana*, *bernardi*, and *ravouxi* show great similarities in the male genitalia with cuspis reaching and usually overlapping digitus (Fig. 5), and in the sculpture of the female which is punctuated rather than longitudinally striate. The sculpture is very poorly developed in *bernardi*, however, which appears smooth and shining all over the body. This species is also characterized by the large postpetiolus width/length ratio in the female (Fig. 4). *E. algeriana* differs from *adlerzi* mainly in sculpture (most of ep1 and lateral parts of pronotum are smooth) and the more pointed petiolus angle in the female (Fig. 4). In morphology *E. adlerzi* shows least similarity to *corsica* which is also workerless and which has the same host species. *E. corsica* is on average smaller and darker, has a flatter alitrunk, and is smoother and more shining due to less pronounced punctuation. The characteristic ventral petiolus projection in the *corsica* male is totally absent in *adlerzi*. Male genitalia differ too, the digitus being relatively thicker in *corsica*. *E. kraussei* has about the same weak sculpture as *corsica* and, furthermore, *kraussei* males have a ventral projection on petiolus, though less pronounced than in *corsica*. In the male genitalia of *kraussei* cuspis does not reach digitus. Although there seems to be little differentiation in pilosity between the species, *kraussei* is distinctly more hairy than *adlerzi* and probably all other *Epimyрма* species, cf. Kutter (1973).

### Description

#### Female (Figs. 2–4)

**Head.** Brown, frons, vertex and antennal club dark brown. Punctuated with faint (strong on occiput) more or less longitudinal ridges. Clypeus and mandibles smooth. Clypeus with median and lateral ridges, median one not reaching posterior margin. Hairs (max. length 0.1) erect all over except adpressed on the antennae. Length =  $0.59 \pm 0.02$ . Width (incl. eyes) =  $0.55 \pm 0.02$ .

**Alitrunk** (= thorax + propodeum). Pale brown usually with irregular darker markings laterally and characteristic dark markings along anterior margin of mesonotum and a longitudinal spot on each side. Scutellum at least partly dark brown.

Sometimes whole alitrunk dark brown with indistinct markings. Punctuated except on median part of scutellum, lower part of ep1, and whole of ep2 which are smooth (Fig. 2). Longitudinal ridges on mesonotum, lateral parts of scutellum, posterior part of ep2, and lateral parts of propodeum. Transverse ridges on posterior face of propodeum. Erect hairs (max. length 0.1) especially on pro- and mesonotum. Adpressed hairs on legs except erect on coxae and trochanters. Length =  $0.87 \pm 0.03$ . Width =  $0.49 \pm 0.02$ .

**Pedicel.** Pale brown. Petiolus and postpetiolus nodes faintly punctuated, the ventral parts smooth. Angle between anterior and posterior faces of petiolus is  $48 \pm 4^\circ$  (Fig. 3). In side view, posteroventral part of petiolus forms a convex or sometimes partly straight (but never concave) line (Fig. 3). Erect hairs on petiolus and postpetiolus nodes (max. length 0.16 on postpetiolus). Petiolus height =  $0.36 \pm 0.01$ , width =  $0.17 \pm 0.01$ . Postpetiolus height =  $0.28 \pm 0.02$ , width =  $0.25 \pm 0.01$ .

**Gaster.** Smooth and dark brown, first tergite usually pale brown at base. Abundant erect hairs.

#### Male (Figs. 2, 5, Table 1)

**Head.** Black, antennae pale, greyish brown, mandibles pale yellowish brown. Punctuated, longitudinal ridges on occiput. Mandibles, median part of clypeus, and median stripe of frons smooth. Clypeus with median and lateral ridges, median one not reaching posterior margin. Erect hairs (max. length 0.1) all over, the antennae with dense erect pilosity. Length =  $0.50 \pm 0.01$ . Width (incl. eyes) =  $0.52 \pm 0.01$ .

**Alitrunk.** Black, sometimes partly very dark brown. Punctuated except on median part of scutellum and ep2 (Fig. 2). Faint transverse ridges on posterior face of propodeum. Erect hairs (max. length 0.1) especially dorsally. Legs pale greyish brown with adpressed hairs (erect on coxae and trochanters). Length =  $0.94 \pm 0.01$ . Width =  $0.48 \pm 0.01$ .

**Pedicel.** Black, faintly punctuated. Erect hairs, longest on postpetiolus (max. length 0.14). Petiolus height =  $0.24 \pm 0.01$ , width =  $0.15 \pm 0.00$ . Postpetiolus height =  $0.24 \pm 0.00$ , width =  $0.24 \pm 0.01$ .

**Gaster.** Black and smooth. Abundant erect hairs. Cuspis overlaps digitus.