

resemble each other and are clearly distinct from the other members of the group (Seifert 1992, for *L. turcicus*, at that time including *L. neglectus*; Seifert 2000, for *L. neglectus* and *L. turcicus*). The differential diagnosis of workers of *L. neglectus* and *L. turcicus* is mainly based on absolute size differences (Seifert 2000). *Lasius austriacus* is distinguished from *L. neglectus* and *L. turcicus* by the smaller eye and the larger postocular distance (Table 1). An even clearer separation emerges from the discriminant function:

$$D = 6.2 * SL / CS (900) - 28 * P_{ooc} / CL (900) + 6.1 * EYE (900) + 0.31 * dCLAN (900) + 0.5$$

For values of D see Table 1.

The differential diagnosis of gynes based on extensive morphometry is postponed to a revision of *Lasius* s.str. (Seifert in prep.). Here we describe differences without having tested their reliability over the whole range of distribution: The overall body size of the *L. austriacus* gyne is bigger and the mesosoma is longer and higher than that of the two other species (Seifert 2000). The shortest distance from the posterior clypeal suture to the inner margin of the antennal sockets is much shorter in *L. austriacus* ($dCLAN / CS = 2.705 \pm 0.105$ [2.18, 3.02], $n = 10$) than in *L. neglectus* ($dCLAN / CS = 4.252 \pm 0.147$ [3.75, 4.84], $n = 10$). Compared with *L. neglectus* (*partim* in Seifert 1992), the petiolar scale of *L. austriacus* is broader, the sides are converging instead of diverging to the basis, the mean number of mandibular dents is higher, the surface structure of the mandible is coarser, and the pubescence of the scutellum is denser. The microsculpture of the median epiproct is reticulate in both *L. austriacus* and *L. neglectus*. In *L. neglectus*, however, the diameter of the meshes decreases substantially in frontal direction from the caudal margin of the epiproct (Fig. 6), their maximum diameter being longer than in the uniformly reticulated *L. austriacus*. Fore- and hindwings of *L. neglectus* are smaller. In contrast to *L. austriacus*, the distance "a" is frequently the same size or longer than distance "b", only exceptionally about 3 % shorter (*L. austriacus*: $a / b = 0.755 \pm 0.105$ [0.57, 0.89], $n = 10$); *L. neglectus*: $a / b = 1.163 \pm 0.147$ [0.97, 1.39], $n = 10$; Fig. 5). The maximum width of the medium cell of the hindwing is smaller in *L. neglectus*.

As data on males of *Lasius* s.str. are scarce, their determination is frequently most difficult (Seifert 1992). A coherent differential diagnosis is not possible at present.

The populations of *L. austriacus* at Feldberg and Braunsberg were inspected at different times of the day from May to October 2002 (Feldberg: 13 occasions, Braunsberg: 5 occasions; the third Austrian population at Retz, about 10 km from Feldberg, was discovered in