

MATERIAL AND METHODS

Lasius austriacus sp.n. was studied based on individuals from > 50 nests of three populations (Feldberg & Braunsberg in Austria, Hnanice in the Czech Republic): > 200 workers (32 specimens from 11 nests measured biometrically), > 50 gynes and > 100 males.

Dry-mounted specimens were fixed on a pin-holding goniometer that permitted rotations around three axes. A Wild M10 dissection microscope with a 1.6 x planapochromatic lens and a cross-scaled ocular micrometer was used at magnifications of 50 - 320 x. The highest magnification that kept a structure within the range of the ocular micrometer was used. To avoid rounding errors, all measurements were recorded in μm , even for characters for which a precision of $\pm 1 \mu\text{m}$ is impossible. In order to reduce reflections of the cuticular surfaces and to improve visualization of the microsculpture, a plastic diffuser was positioned as close as possible to the specimen. Setae were distinguished from pubescence hairs by their distinctly larger basal diameter. Seta counts (nSC, nHT, nOCC, nGU, nGEN, nST) apply to erect setae projecting > 20 μm from the silhouette of the cuticular surface as observed under transmitted light.

Morphometric characters:

a - Shortest distance between the junction anterior cubital vein/cubito-anal crossvein and the proximal end of discoidal cell. On gyne forewing.

b - Shortest distance along anterior cubital vein from proximal to distal end of first discoidal cell. On gyne forewing.

CL - Maximum cephalic length along the median line (the head must be carefully tilted to the position with the true maximum). Excavations of occiput and/or clypeus reduce CL.

CS - Arithmetic mean of CL and CW as a less variable indicator of body size.

CW - Maximum cephalic width (across, behind, or in front of the eyes).

dCLAN - Shortest distance from posterior clypeal suture (PCS) to inner margin of antennal sockets. If no surface structure indicates the position of PCS, the centre of the dark line is taken as one measuring point.

EYE - Eye-size index $\text{EYE} = (\text{EL} + \text{EW}) / (\text{CL} + \text{CW})$. The arithmetic mean of the large (EL) and small diameter (EW) of the elliptic compound eye is divided by CS.

GUHL - Maximum length of setae on underside of head (gula).

MaDe - Number of dents on masticatory border of mandible. Mean value of the two mandibles.