MNHU Museum für Naturkunde, Berlin, Germany
NHMB Naturhistorisches Museum, Basel, Switzerland
NMK National Museum of Kenya, Nairobi, Kenya
RMCA Royal Museum for Central Africa, Tervuren B

RMCA Royal Museum for Central Africa, Tervuren, Belgium SAMC Iziko South African Museum, Cape Town, South Africa

USNM United States National Museum of Natural History, Washington, D.C., U.S.A.

ZFMK Zoological Research Museum Koenig, Bonn, Germany

Material and methods

It has to be mentioned that the queen caste is known only from few specimens from less than a quarter of the species, whilst the situation for the male caste is even worse. In addition, for most of the species newly described in this study the queen is either unknown or not confidently assignable to the worker caste. Because of this all diagnostic results presented here are based on the examination of the worker caste.

During this study it was possible to examine more than 2500 worker specimens. Most of this material is located in the Hymenoptera collections of BMNH, CASC, and ZFMK. In total 550 workers were measured with an Olympus SZX 12 stereomicroscope equipped with a dual-axis optical micrometer at a magnification of 90×. Measurements and indices are presented as minimum and maximum values with arithmetic means in parentheses. Additionally, all measurements are expressed in mm and presented with three decimal places. The following measurements and indices, in parts adapted from Bolton (1980) and Güsten *et al.* (2006), were used:

Head length (HL): maximum distance from the mid-point of the anterior clypeal margin to the mid-point of the posterior margin of head, measured in full-face view (Fig. 1C).

Head width (HW): width of head directly behind the eyes measured in full-face view (Fig. 1C).

Scape length (SL): maximum scape length excluding basal condyle and neck (Fig. 1C).

Eye length (EL): maximum diameter of compound eye measured in oblique lateral view (Fig. 1A).

Pronotal width (PW): maximum width of pronotum measured in dorsal view (Fig. 1B).

Weber's length (WL): diagonal length of mesosoma in lateral view from the postero-ventral margin of propodeal lobe to the anterior-most point of pronotal slope, excluding the neck (Fig. 1A).

Propodeal spine length (PSL): in dorsocaudad view, the tip of the measured spine, its base, and the centre of the propodeal concavity between the spines must all be in focus. Using a dual-axis micrometer the spine length is measured from the tip of the spine to a virtual point at its base where the spine axis meets orthogonally with a line leading to the median point of the concavity (Fig. 1D).

Petiolar node length (PTL): maximum length of the dorsal face of petiolar node measured in dorsal view, excluding the peduncle (Fig. 1B).

Petiolar node height (PTH): maximum height of petiolar node measured in lateral view from the highest (median) point of the node to the ventral outline. The measuring line is placed in an orthogonal angle to the ventral outline of the node (Fig. 1A).

Petiolar node width (PTW): maximum width of dorsal face of petiolar node measured in dorsal view (Fig. 1B).

Postpetiole length (PPL): maximum length of postpetiole measured in dorsal view (Fig. 1B).

Postpetiole height (PPH): maximum height of the postpetiole measured in lateral view from the highest (median) point of the node to the ventral outline. The measuring line is placed in an orthogonal angle to the ventral outline of the node (Fig. 1A).

Postpetiole width (PPW): maximum width of postpetiole measured in dorsal view (Fig. 1B).