Conclusion

The evidence gathered here indicates most strongly that the cerapachyines constitute a holophyletic lineage among the poneroid ants. When viewed across the whole Formicidae the characteristics isolating the cerapachyines are of the same magnitude as those which define taxa at the subfamily level. I therefore propose that the subfamily name Cerapachyinae be reinstated, to include the taxa listed below. The possible relationship of Cerapachyinae with the subfamilies Dorylinae and Ecitoninae remains to be investigated in detail. A real possibility exists that these subfamilies together may form a closely related group. However, the Cerapachyinae alone, or grouped with Dorylinae and Ecitoninae, stand apart from the Ponerinae.

why?

Diagnosis of subfamily

Subfamily CERAPACHYINAE subfam. rev.

Cerapachysii Forel, 1893: 162. (Ponerinae, tribu Cerapachysii.) Type-genus: Cerapachys Smith, 1857: 74.

Cerapachyinae: Wheeler, 1902: 185. (As a group within Ponerinae.)

Prodorylinae Emery, 1909: 355. (Ponerinae, Hauptgruppe Prodorylinae.) Unavailable name, not based on a genus-level taxon (see Wheeler, 1920: 51).

Cerapachyinae: Wheeler, 1920: 51. (Raised to subfamily status.)

Eusphinctinae Clark, 1951: 15 (diagnosis in key). Type-genus: Eusphinctus Emery, 1893: cclxxv (= Sphinctomyrmex Mayr, 1866: 895; synonymy by Brown, 1975: 31). Syn. n.

Cerapachyinae: Brown, 1975; 14. (As synonym of Ponerinae.)

Diagnosis of workers and females

Heavily sclerotized elongate, parallel-sided and roughly cylindrical poneroid ants which are termitophagous or myrmecophagous. With the following combination of characters.

- 1 Clypeus short and narrow; antennae inserted close together and close to anterior margin of head
- 2 Antennae short and thick, projecting anteriorly in life; frontal lobes frequently much reduced.
- 3 Mandibles short and thick, subtriangular, closing tightly against the clypeus.
- 4 Alitrunk in worker generally fusiform and box-like, without promesonotal suture except in 1-2 Cerapachys species and in Leptanilloides.
- 5 Metacoxal cavities closed; metapleural lobes present.
- 6 Propodeal spiracle low on side in profile, small, circular, at or behind the midlength; not associated with an endophragmal pit.
- 7 Waist generally of a single separated sessile segment (the petiole, (=abdominal segment 2), usually also with a deep constriction between abdominal segments 3 and 4. Rarely abdominal segment 4 reduced to a small postpetiole.
- 8 Depressed proprioceptor zone present anteroventrally on petiolar sternite.
- 9 Posterior margin of petiolar sternite simple and rounded in ventral view.
- 10 Sternite of helcium large and convex, visible in profile; helcium located at about midheight of abdominal segment 3, or higher, when viewed in profile.
- 11 Tergosternal fusion of abdominal segment 3 complete; segments 4-7 with tergites and sternites unfused.
- 12 Abdominal segment 4 strongly tubulate anteriorly.
- 13 All spiracles visible on abdominal segments.
- 14 Pygidium large, with dorsum flattened; lateral margins of flattened area armed with denticles, small teeth or peg-like spines; or pygidium reduced and overhung posteriorly by sixth tergite (in which case strong girdling constrictions occur between segments 4 and 5, and 5 and 6).
- 15 Sting large and strongly developed.