

*Polyrhachis*, but in 1903 treated the whole of Mayr's 'Turma' *abrupta* as constituents of genus *Hemioptica*. Forel (1879, 1916) accepted *Hemioptica* as a subgenus of *Polyrhachis*, describing *P. (Hemioptica) pubescens* var. *alatisquamis* in 1893 and, despite some apparent reservations, *P. (Hemioptica) bugnioni* in 1908. In 1908 he also described *P. aculeata* var. *gibbosa*, without indication of its subgeneric classification. In 1915 Forel again listed *Hemioptica* as a subgenus of *Polyrhachis*, containing only *P. bugnioni* and *P. scissa*. Wheeler (1911a, 1911b, 1919, 1922) treated *Hemioptica* as a subgenus of *Polyrhachis*, and described *P. aculeata* ssp. *cybele* in 1919. He recognised the subgenus in the sensu lato version of Mayr's 'Turma' *abrupta*. Emery (1925) accepted *Hemioptica* as a genus but followed Forel (1915) in recognising only *bugnioni* and *scissa* as bona fide constituent species. He transferred *abrupta*, *aculeata* and *pubescens* to the subgenus *Myrma* of *Polyrhachis*. Chapman & Capco (1951) on the other hand accepted all species of Mayr's 'Turma' *abrupta* as members of the genus *Hemioptica*. In recent studies (Brown, 1973; Hölldobler & Wilson, 1990) *Hemioptica* is listed simply as a synonym of *Polyrhachis*, while Bolton (1994) accepts its subgeneric rank.

The conflicting views outlined above, arose from different considerations regarding the two main characters defining *Hemioptica*. In 1862, the year of its description, Mayr pointed out that *Hemioptica* and *Polyrhachis* 'share the habits and most characters' but considered the truncate eyes, not the form of the mesosoma, to justify treatment of *Hemioptica* as a separate genus. Emery (1893) on the other hand considered the truncate eyes of less taxonomic importance than the unusual characteristics of the mesosoma. The opinion that presence of ocular blinkers does not justify separate generic status of *Hemioptica* is supported by the fact that the closely related species, *P. bugnioni* Forel, has the eyes more or less entire, while the other species of Mayr's 'Turma' *abrupta* (*P. abrupta*, *P. aculeata* and *P. pubescens*) undoubtedly belong to *Polyrhachis (Myrma)* despite having truncate eyes. The Indian species *Polyrhachis (Myrma) hemiopticoides* Mukerjee, 1930 has truncate eyes and similar structures have evolved also in the African species *P. (Myrma) concava* André, 1889 (Bolton, 1973). Forel (1908) pointed out the presence of blinkers also in *Leptogenys* species (subfamily Ponerinae). Hung (1962) reported truncate eyes in *P. latona* Wheeler, 1909 and considered that the formation of the mesosoma (where the mesothorax 'is oppressed by the metathorax') was the main character distinguishing *Hemioptica*. The furrows between the thoracic segments also vary within *Polyrhachis*. For example the African *P. (Myrma) monista* Santschi, 1910, has a deeply impressed promesonotal suture and a deep metanotal groove, while other species of the same subgenus lack both (Bolton, 1973). Forel (1908) pointed out the similarities in mesosomal structure between *Hemioptica*, *Echinopla* and *Polyrhachis (Cyrtomyrma) rastellata* (Latreille, 1802), which he attributed to convergence.

Despite these considerations, we believe that *Hemioptica* is clearly enough delimited to retain its status as a subgenus of *Polyrhachis*. We follow Forel (1908, 1915) and Emery (1925) by including only *P. bugnioni* and *P. scissa*, along with the new species *P. boltoni*, as its constituents. *Polyrhachis abrupta*, *aculeata* and *pubescens*, which have been formerly included by authors in *Hemioptica*, are considered to be members of *Polyrhachis* subgenus *Myrma*.

The illustrations were prepared with a Hitachi S-530 Scanning Electron Microscope at low voltage using uncoated specimens.