



Fig. 4. Myrmicine ant *Eocenomyrma rugosostriata* (Mayr, 1868), the neotype worker, ZMHU F-191, from the Saxonian Amber, late Eocene. A. Photograph in dorso-lateral view. B, C. Explanatory drawings, based on the original photographs; in dorso-lateral view (B), and mesosoma, waist, and gaster in lateral view (C). [See online edition of the Journal for a color version of this figure.]

(now a synonym of *Temnothorax* Mayr, 1861; see Bolton 2003). Later Wheeler (1915) transferred *M. rugosostriata* into his newly described genus, *Nothomyrmica*. He studied the queen and 10 workers (including one Mayr's syntype), preserved in Königsberg's (Germany at that time, nowadays Kaliningrad in Russia) collection, described the queen and provided drawing of the worker (not of the Mayr's syntype). At present the types of *E. rugosostriata* are absent in the Mayr's collection in Naturhistorisches Museum Wien (Ponomarenko and Schultz 1988). The most part of the Königsberg's collection was apparently lost during the World War II, but a small part of it is preserved nowadays in the collec-

tion of the Institut und Museum für Geologie und Paläontologie der Universität Göttingen (Germany). Based on the database of the fossils of Göttingen's Museum no specimens of *E. rugosostriata* can be found there (Eugeniy Perkovsky, personal communication 2004). Moreover, all our efforts to discover anything on the fate of the Künow's personal collection were unsuccessful.

Therefore, we believe that both Mayr's types and Wheeler's material, belonging to this species, are lost, and we formally redescribe *E. rugosostriata* and designate the neotype (worker) of this species (see above). The neotype specimen wholly corresponds with the Mayr's and Wheeler's descriptions and drawing. Two other specimens investigated by us, are in much poorer condition, but certainly belong to this species.

Stratigraphic and geographic range.—Saxonian and Baltic ambers, late Eocene.

A Key for the identification of *Eocenomyrma* species:

- 1 Mesosoma with longitudinal, slightly sinuous rugosity (Fig. 4) *E. rugosostriata* (Mayr, 1868)
- Mesosoma at least partly with reticulation (Figs. 1–3) 2
- 2(1) Whole head dorsum and mesosoma with fine reticulation; petiolar node long, with distinctly flattened dorsum (Fig. 3) *E. elegantula* sp. nov.
- Lower and central parts of frons with longitudinal, slightly sinuous rugae, remainder part of head and mesosoma with coarse reticulation; petiolar node short, with rounded dorsum (Figs. 1, 2) 3
- 3(2) Propodeal spines thin, not widened at the base, straight, directed backward and upward; petiole with very long peduncle (PI 1.92) (Fig. 1) *E. orthospina* sp. nov.
- Propodeal spines massive, widened at the base, slightly curved downward apically, directed mainly backward; petiole with much shorter peduncle (PI 1.27) (Fig. 2) *E. electrina* sp. nov.

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