

Diagnosis.—Clypeus short and broad, with two lateral longitudinal carinae and distinctly marked anterolateral corners, its median portion faintly concave transversally, anterior margin broad and shallowly concave; pairs of long setae situate on the anterolateral clypeal corners, central part of the anterior clypeal margin without setae (the latter features are not visible in all described species); clypeus posteriorly broadly inserted between frontal lobes; frontal lobes broad, anteriorly reaching or even surpassing anterior clypeal margin; maxillary palps with 4, labial palps with 3 segments (this feature is visible only in *Eocenomyrma rugosostriata*); antennae 12-segmented, with the remarkable 3-segmented apical club, which is clearly separated from the rest of funiculus; middle and hind tibiae are lacking spurs; body (except the gaster) distinctly sculptured (rugose and/or reticulate), not smooth; mesosoma with distinct metanotal groove; propodeum is with quite long spines; eyes well developed, big.

Eocenomyrma is superficially similar to some ant genera, both extinct and extant, particularly to the *Myrmica* and *Temnothorax* Mayr, 1861 (see also Bolton 2003), but clearly differs from them in the peculiar shape of the clypeus: in *Myrmica* and *Temnothorax* the median portion of clypeus is convex or somewhat flattened, but never concave transversally, without lateral longitudinal carinae and marked anterolateral corners; anterior clypeal margin is rounded or somewhat prominent, occasionally shallowly notched medially. In addition, the majority of the extinct and extant *Myrmica* and *Temnothorax* species have a well-developed spur on the middle and hind tibiae, absent from the new genus.

Eocenomyrma has palp formula 4, 3 versus 6, 4 in *Myrmica*, what precludes their close relationship.

Remarks.—Based on the tribal characters of the subfamily Myrmicinae proposed by Bolton (2003), we suggest to include *Eocenomyrma* in the tribe Formicoxenini. As mentioned above, *Eocenomyrma* most likely is related to *Temnothorax*, and its peculiar clypeal structure may be considered as the apomorphy; lack of tibial spurs also can be regarded as apomorphy, however apomorphies by reduction are much less significant evolutionary. On the other hand, *Eocenomyrma* has some plesiomorphic (regarding to *Temnothorax*) features, particularly *Myrmica*-like structure of head and frontal lobes, general shape and sculpture of the body, etc. We suggest that *Eocenomyrma* most probably did not arise from any extant Formicoxenini genera, but has common ancestor with them, including *Temnothorax*.

Eocenomyrma orthospina sp. nov.

Fig. 1; Tables 1, 2.

Derivation of the name: After Greek *orthos*—straight, and Latin *spina*—a spine, in relation to the shape of propodeal spines of this species.

Holotype: MZ 13434, worker, complete specimen.

Locality and horizon: Baltic Amber, late Eocene.

Diagnosis.—Total length ca. 3–3.5 mm. The new species is characterised by the following apomorphies: frontal carinae are short, quite strongly curved and merge with the rugae,

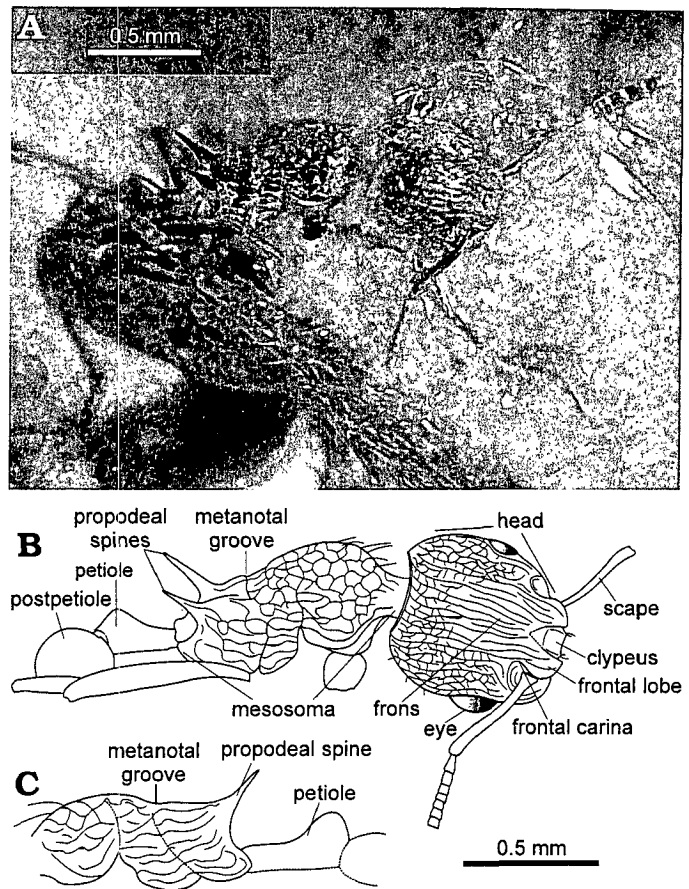


Fig. 1. Myrmicine ant *Eocenomyrma orthospina* sp. nov., the holotype worker, MZ 13434, from the Baltic Amber, late Eocene. A. Photograph in dorso-lateral view. B, C. Explanatory drawings, based on the original photographs; head, mesosoma and waist in dorso-lateral view (B), and mesosoma and petiole in lateral view (C). [See online edition of the Journal for a color version of this figure.]

which surround antennal sockets; frons quite wide, frontal lobes rather big and extended laterally; mesosoma of moderate length, not robust, not constricted behind so that propodeum not much narrower than promesonotum, metanotal groove, distinct but shallow (seen in profile), promesonotal suture invisible (seen from above); propodeal spines quite long, not widened at the base, slender, more or less straight, pointed at the tips, directed backward and upward at an angle about 45°, and feebly divergent (seen from above); petiole much longer than high, with very long peduncle, petiolar node with rounded dorsum, without dorsal plate; frons with not coarse longitudinal, slightly sinuous rugae, lateral parts of head dorsum and occiput with reticulation; mesosoma with quite coarse reticulation (the sculpture of petiole is invisible).

By the complex of these features *Eocenomyrma orthospina* differs from the all known species of the genus *Eocenomyrma*, particularly from *E. elegantula*, which has a finely reticulated, not rugose body. It clearly differs from *E. rugosostriata* by the coarsely reticulated mesosoma, by the straight, not curved down propodeal spines, by the longer petiole, and by the strongly curved frontal carinae and distinctly narrower