

Material and methods

In total, we investigated six specimens in the six pieces of amber, three of which are assigned to *Eocenomyrma rugosostriata* and the others—three newly described species. This material is preserved in the MZ (Baltic Amber), ZMUC (Scandinavian Amber), ZMHU (Saxonian Amber), GPMHU (Baltic Amber), and in the personal collections of Manfred Kutscher, Sassnitz, Rugen, Germany (Saxonian Amber).

The figures are based on original drawings of the specimens and photographs made using an Olympus Camedia C-3030 digital camera fitted to an Olympus SZX9 microscope in conjunction with the computer program CorelDraw 8.

Morphometrics.—The specimens were measured (accurate to 0.01 mm), and the measurements were used to calculate the various indices defined below. Since not all features were easily visible and measurable on the specimens examined, we measured as many as possible of them on each specimen.

Measurements.—AH, height of mesosoma, measured from upper level of mesonotum perpendicularly to the level of lower margin of mesopleuron; AL, diagonal length of the mesosoma seen in profile, from the neck shield to the posterior margin of propodeal lobes; ESD, distance between tips of propodeal spine from above; ESL, maximum length of propodeal spine in profile, measured along the spine from its tip to the deepest point of the propodeal constriction at the base of

spines; FLW, maximum width between external borders of the frontal lobes; FW, minimum width of frons between frontal carinae; HL, length of head in full face view, measured in a straight line from the anterior point of median clypeal margin to mid-point of the posterior margin; HTL, length of tibia of hind leg; HW, maximum width of head in dorsal view behind the eyes; PH, maximum height of petiole in profile; PL, maximum length of petiole from above; PNW, maximum width of pronotum from above; PPH, maximum height of postpetiole in profile; PPL, maximum length of postpetiole from above; PPW, maximum width of postpetiole from above; PW, maximum width of petiole from above; SL, maximum straight-line length of antennal scape seen in profile.

Indices.—AI = AL/AH; CI = HL/HW; ESDI = ESD/ESL; ESLI = ESL/HW; FI = FW/HW; FLI = FLW/FW; PI = PL/PH; PPI = PPL/PPH; SI₁ = SL/HL; SI₂ = SL/HW.

Systematic palaeontology

Family Formicidae Latreille, 1809

Subfamily Myrmicinae Lepeletier, 1835

Genus *Eocenomyrma* nov.

Type species: *Eocenomyrma orthospina* sp. nov.

Derivation of the name: After the Eocene, time when it existed, and Greek *myrmex*—ant.

Table 1. Measurement (in mm) of the *Eocenomyrma* species.

Specimens examined	HL	HW	FW	FLW	SL	AL	AH	PNW	HTL
<i>Eocenomyrma orthospina</i> , holotype	0.64	0.53	0.22	0.28	0.41	0.87	0.36		0.32
<i>Eocenomyrma electrina</i> , holotype	0.81	0.76	0.29	0.36	0.57	0.88	0.49		
<i>Eocenomyrma elegantula</i> , holotype	0.92					1.26	0.52		0.53
<i>Eocenomyrma rugosostriata</i> , neotype	1.02	0.84	0.43	0.48	0.60	1.20	0.50	0.45	0.50
<i>Eocenomyrma rugosostriata</i> , F-170						1.16	0.48		0.49
<i>Eocenomyrma rugosostriata</i> , MZ 20234	1.02	0.84	0.41	0.46		1.19		0.46	

	PL	PH	PW	PPL	PPH	PPW	ESL	ESD
<i>Eocenomyrma orthospina</i> , holotype	0.32	0.17					0.24	
<i>Eocenomyrma electrina</i> , holotype	0.27	0.21		0.25	0.25		0.27	
<i>Eocenomyrma elegantula</i> , holotype	0.52	0.28		0.31	0.25		0.22	
<i>Eocenomyrma rugosostriata</i> , neotype	0.46	0.29	0.18	0.28	0.28	0.36	0.27	0.25
<i>Eocenomyrma rugosostriata</i> , F-170	0.46	0.28		0.28	0.29			
<i>Eocenomyrma rugosostriata</i> , MZ 20234				0.28		0.36		

Table 2. Morphometric indices of the *Eocenomyrma* species.

Specimens examined	CI	FI	FLI	SI ₁	SI ₂	PI	PPI	ESLI	ESDI	AI
<i>Eocenomyrma orthospina</i> , holotype	1.21	0.42	1.25	0.63	0.76	1.92		0.44		2.38
<i>Eocenomyrma electrina</i> , holotype	1.07	0.39	1.24	0.71	0.76	1.27	1.00	0.35		1.80
<i>Eocenomyrma elegantula</i> , holotype						1.85	1.22			2.43
<i>Eocenomyrma rugosostriata</i> , neotype	1.22	0.52	1.10	0.59	0.72	1.57	1.00	0.32	0.94	2.39
<i>Eocenomyrma rugosostriata</i> , F-170						1.65	0.95			2.44
<i>Eocenomyrma rugosostriata</i> , MZ 20234	1.22	0.48	1.14							