

Fig. 4: Microsculpture and pubescence on dorsal plane of first gaster tergite in *Formica paralugubris*. Scale bar = 100 μ m.

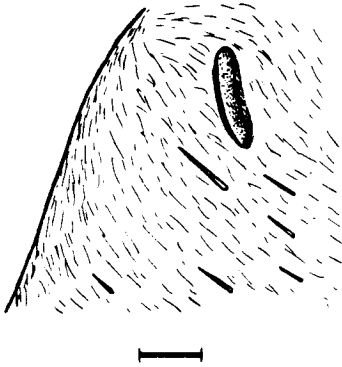


Fig. 5: Typical pilosity condition on the ventrolateral propodeum in the queen of *Formica paralugubris* showing short, straight and thick setae. Scale bar = 100 μ m.

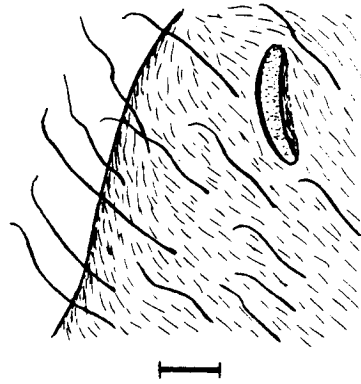


Fig. 6: Typical pilosity condition on the ventrolateral propodeum in the queen of *Formica lugubris* with very long, curved and fine hairs. Scale bar = 100 μ m.

3.3. Description of *Formica paralugubris* nov. spec.

Type material:

A type series was selected from the nest No. G5 near the Chalet a Roch field station, 5 km SSW Le Brassus in the Swiss Jura mountains. It contains a holotype (a queen) and 10 paratypes (4 queens and 6 workers). The workers were collected on 5 May 1993 and the queens in June 1994. The labelling is "CH: Jura, 5. 5. 1993, Chalet a Roch, nest G5" in the workers and "CH: Jura, 6. 1994, Chalet a Roch, nest G5" in case of queens. Another 24 worker paratypes originate from the nests G1–G4, which belong to the same polycaelic nest system as the holotype nest and were collected on 5 May 1993.

Description:

– Queen (Tab. 3, Figs. 4–5): Occipital margin of head with 20–75 erect setae, which are normally 40–80 μ m long. Dorsal plane of scape frequently with a number of shorter, semierect setae. Eyes with numerous erect hairs of 22–45 μ m length. Standing setae on pronotum, mesonotum, scutellum, lateral mesopleuron, ventrolateral propodeum (Fig. 5), lateral metapleuron, hind tibia, and frontal face of gaster definitely shorter than in *lugubris*. In contrast to this situation, the standing setae on the whole surface of all gaster sternites are very long (250–350 μ m). Clypeus more shining than dorsum of head and genae. Mesonotum and scutellum mildly shining, but less than in *rufa*. Dorsum of gaster shining. Dorsum of first gaster tergite with very fine transversal microsculpture and closely set microfoveae of 9–13 μ m diameter and 15–30 μ m midpoint distance. The microfoveae are the