



Triassic records of dasyleptids in Europe:

- 1** – Vosges: ‘Grès à Voltzia’ Fm, } Upper Buntsandstein
- 2** – Franconia: uppermost Röt Fm } early Anisian
- 3** – Monte San Giorgio: Meride Limestone, late Ladinian

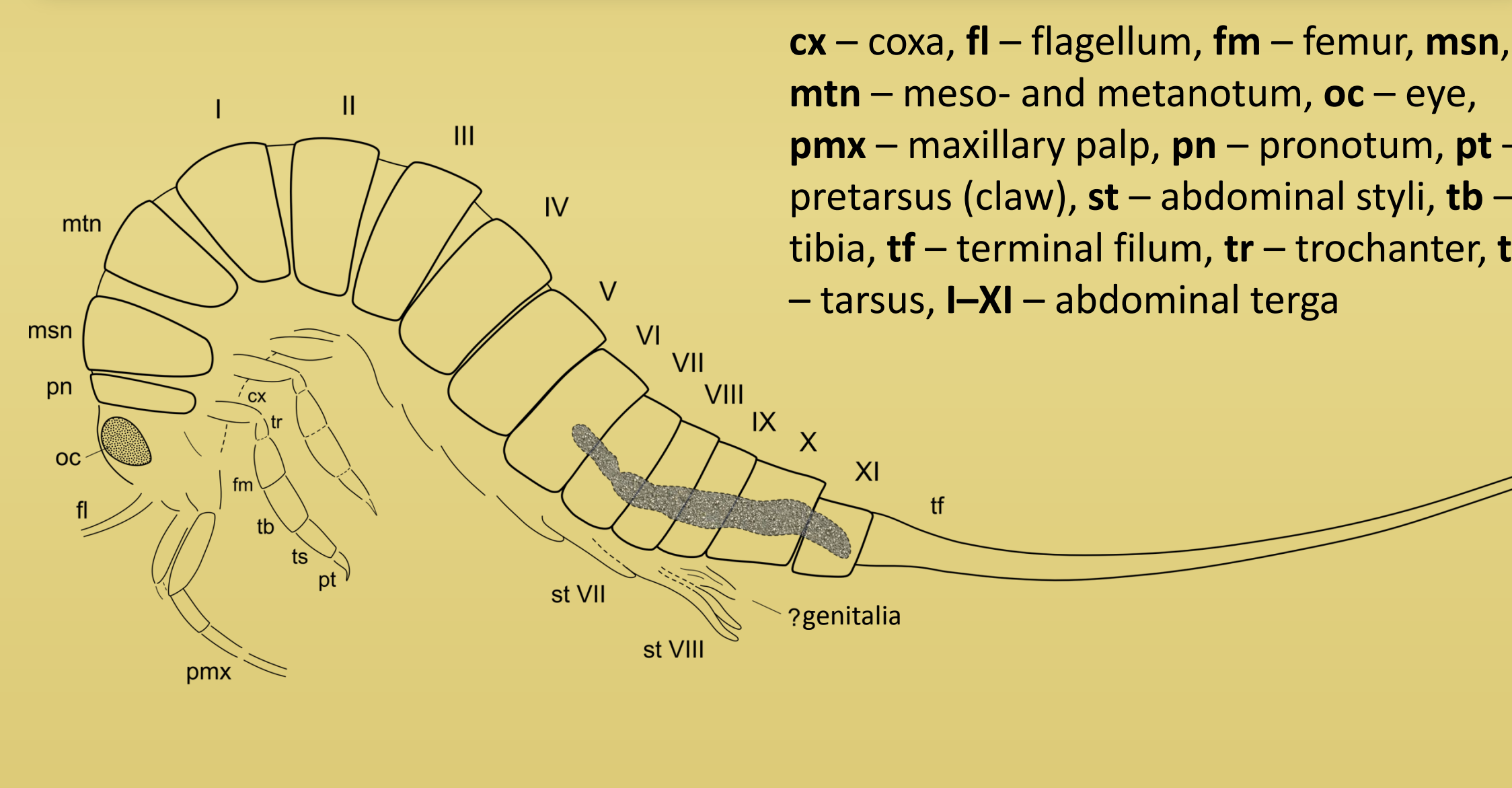


Dasyleptidae, or monurans, an extinct group of apterygote bristletail-like insects, were previously only known from the Upper Carboniferous and Lower to Middle Permian, when they were a typical faunal element of the Palaeozoic sea shores and swamps.

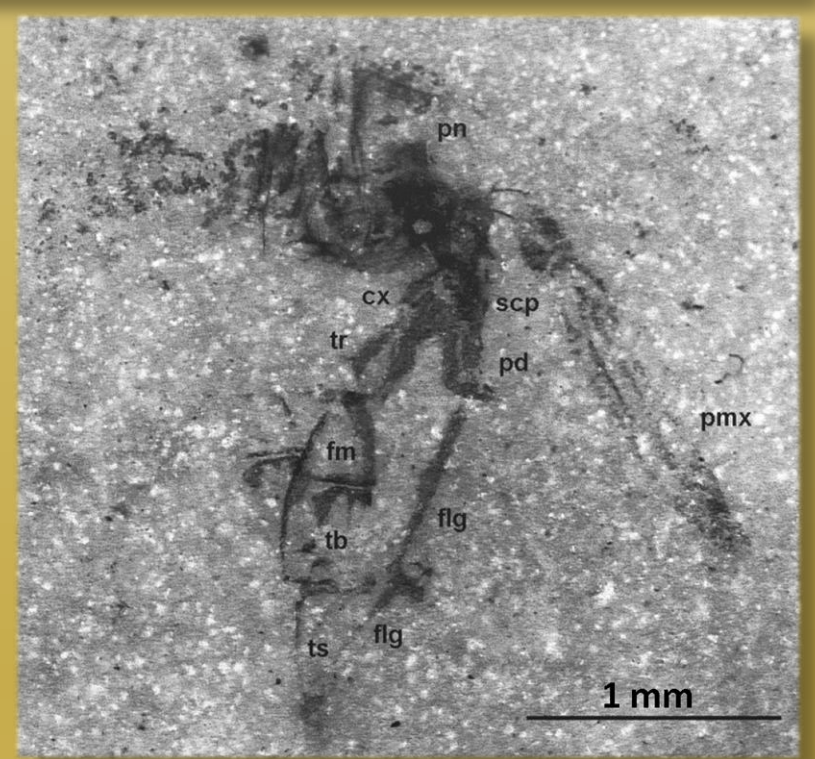
Recently, Bechly & Stockar (2011) described *Dasyleptus triassicus* from the Ladinian (Middle Triassic) Meride Limestone of Monte San Giorgio in Switzerland (3). It was the first Mesozoic record of the group, but not the sole one known so far.

Numerous dasyleptid remains, were also found in the Upper Buntsandstein deposits of Lower Franconia (Bashkuev et al., 2012) (2) and Vosges Mountains (1). They share many characters, as far as their preservation allows to tell, and belong probably to the same species.

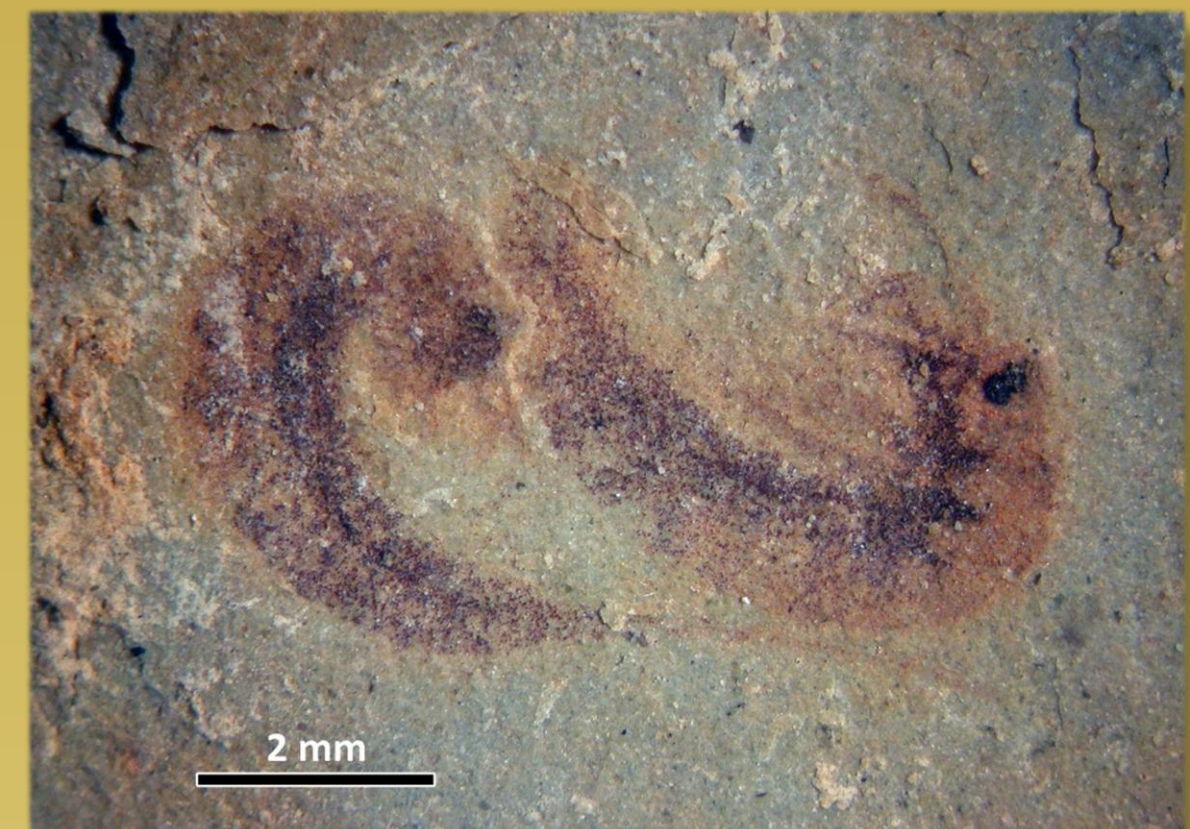
About 40 specimens were collected mainly by the second author during the last several years in the worked-out quarry at Hammelburg, Lower Franconia, in the *oberen Dendritenschichten* (Myophoria beds, Röt Formation), about 2 m below the Buntsandstein/Muschelkalk boundary. This horizon is one of the richest in fossils in Buntsandstein of Franconia: diverse insects occurred here along with conchostracans, decapods, triopsids, lingulids, bivalves, fish (particularly *Saurichthys*) and tetrapod remains.



cx – coxa, fl – flagellum, fm – femur, msn, mtn – meso- and metanotum, oc – eye, pmx – maxillary palp, pn – pronotum, pt – pretarsus (claw), st – abdominal styli, tb – tibial spines, tr – trochanter, ts – tarsus, I–XI – abdominal terga



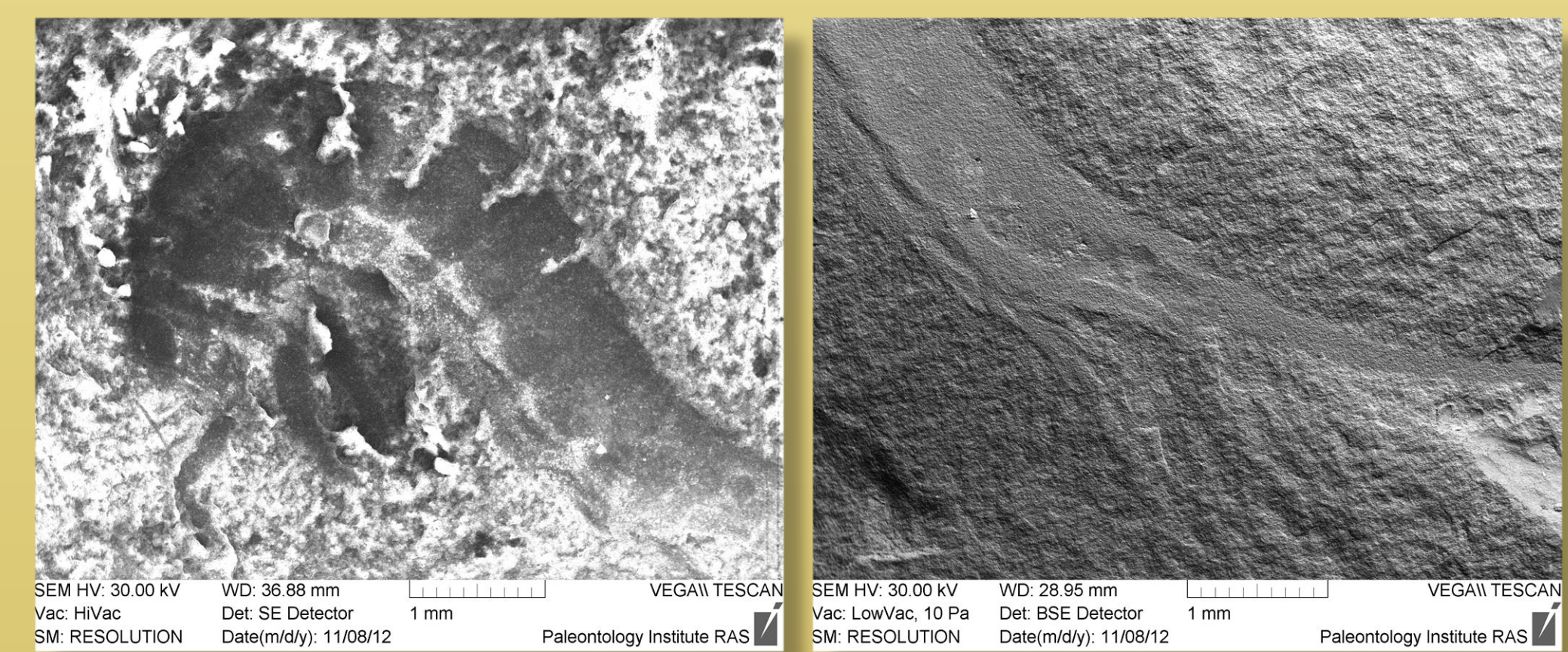
Dasyleptus triassicus Bechly et Stockar, holotype



A pair of undescribed dasyleptids in the private collection of Dr. L. Grauvogel-Stamm. ‘Grès à Voltzia’ Fm of Vosges. Photo by D. Shcherbakov, 2008

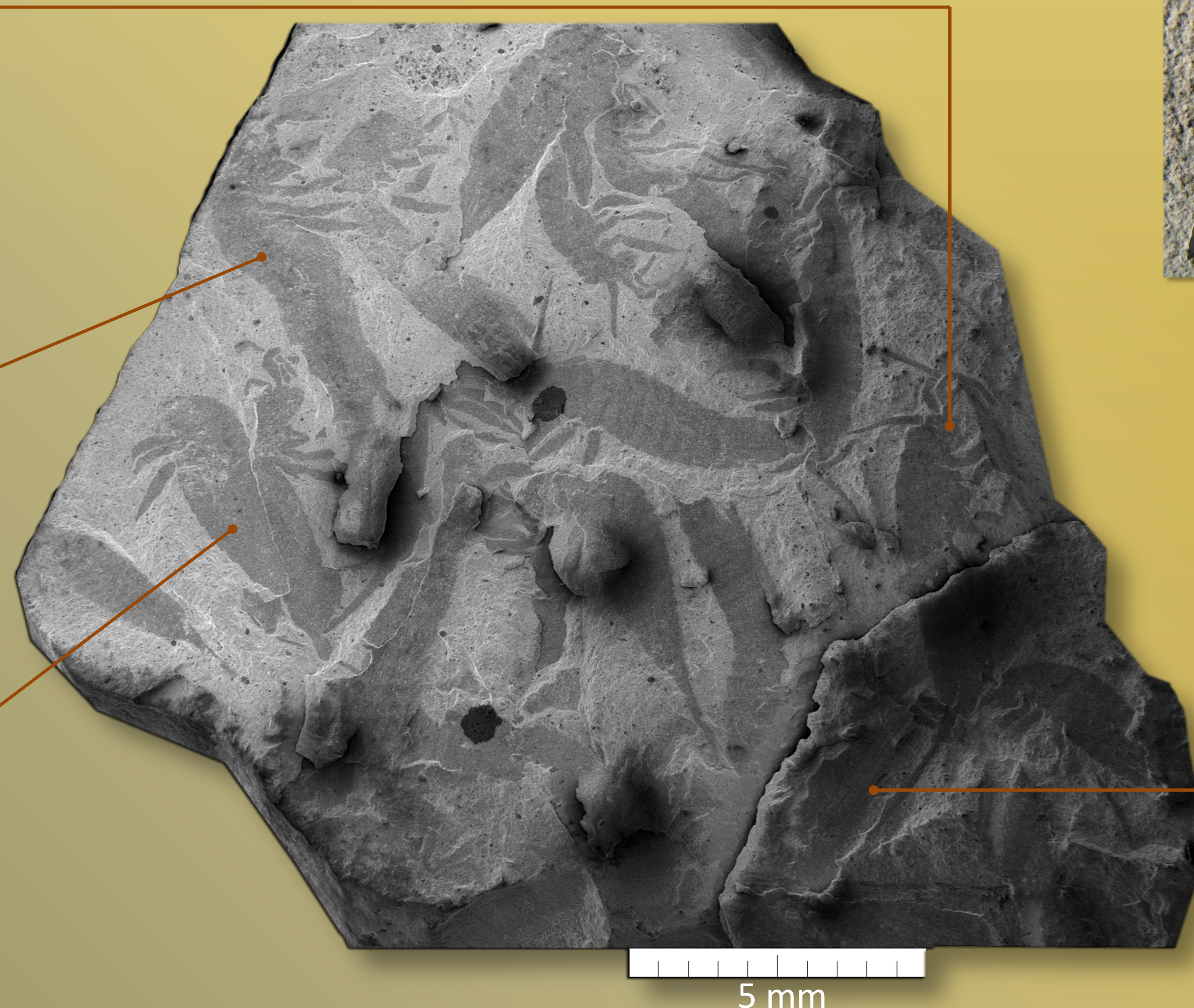
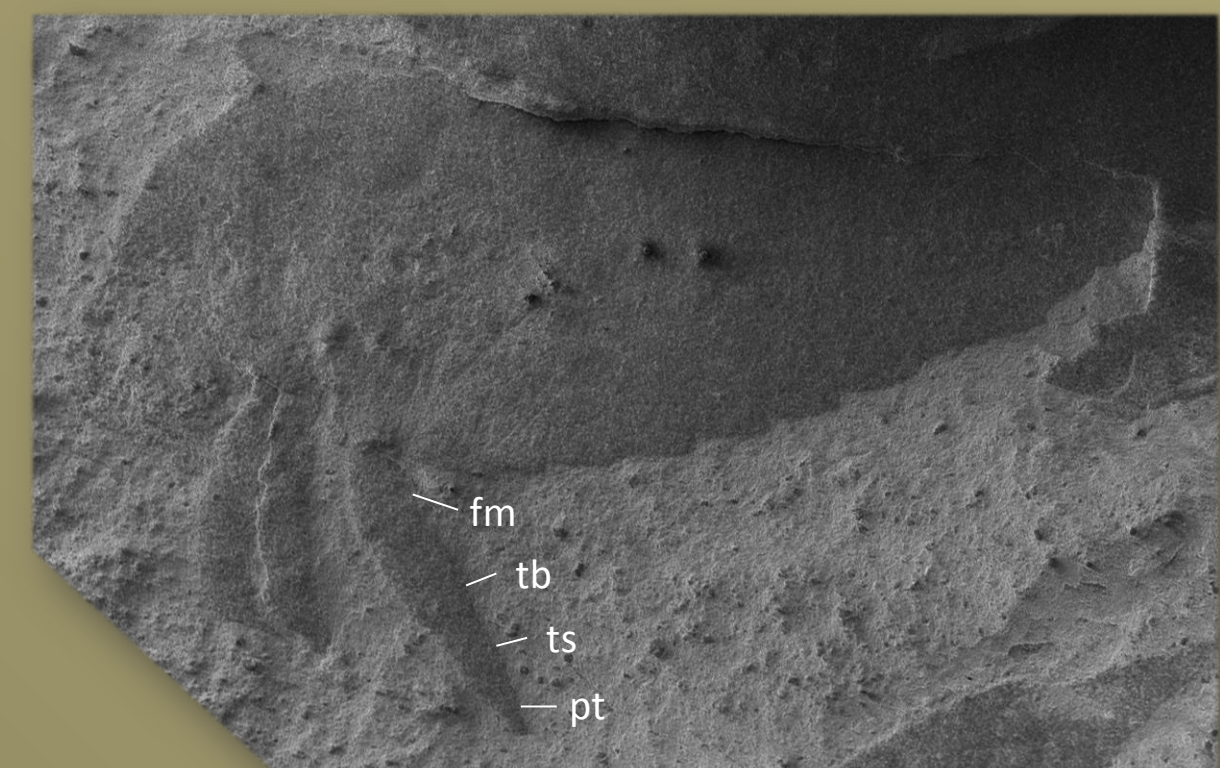
The new species is most similar to the *Dasyleptus triassicus*, and slightly differs from it in the shorter terminal filament, which is in all specimens examined not longer than abdomen, as well as in body and leg segments proportions.

Legs distinctly broadened (flattened?), but there is no such a contrast between this and the Palaeozoic species, as indicated by *D. triassicus*. These and other characters are in need of further analysis.



SMTE 5825/2–593, SEM images

A mass grave, comprising about 20 specimens of *Dasyleptus* sp. SMTE 5825/2–584; Obere Dendritenschichten of Hammelburg



Various specimens of *Dasyleptus* sp. nov. from Hammelburg

- A) SMTE 5825/2–663
- B) SMTE 5825/2–664
- C) SMTE 5825/2–436
- D) SMTE 5825/2–364



A wing referred to the Palaeozoic protorthopterous family Psoropteridae (D.S. Aristov, pers. comm.)