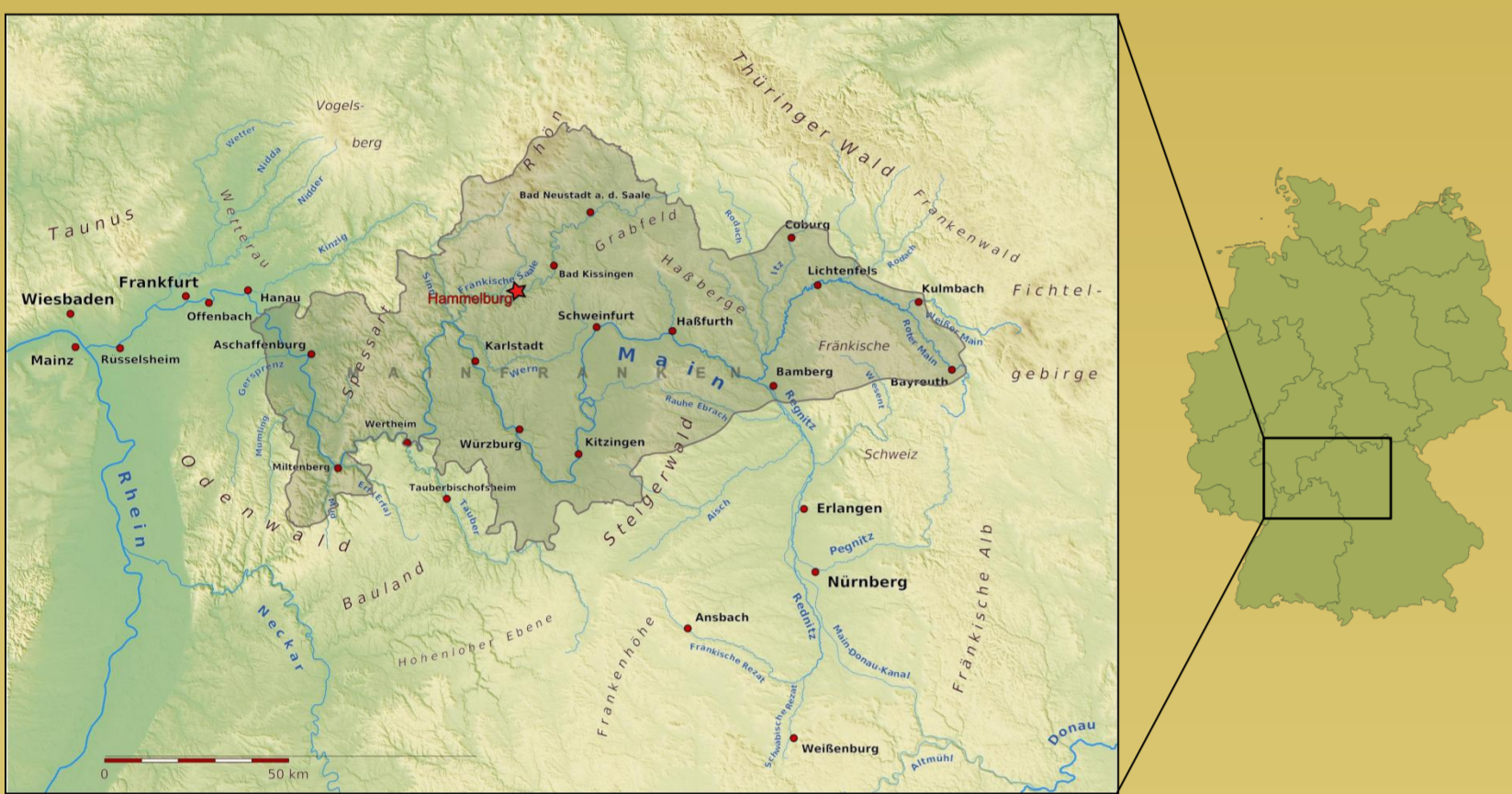




Triassic records of dasyleptids in Europe:

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

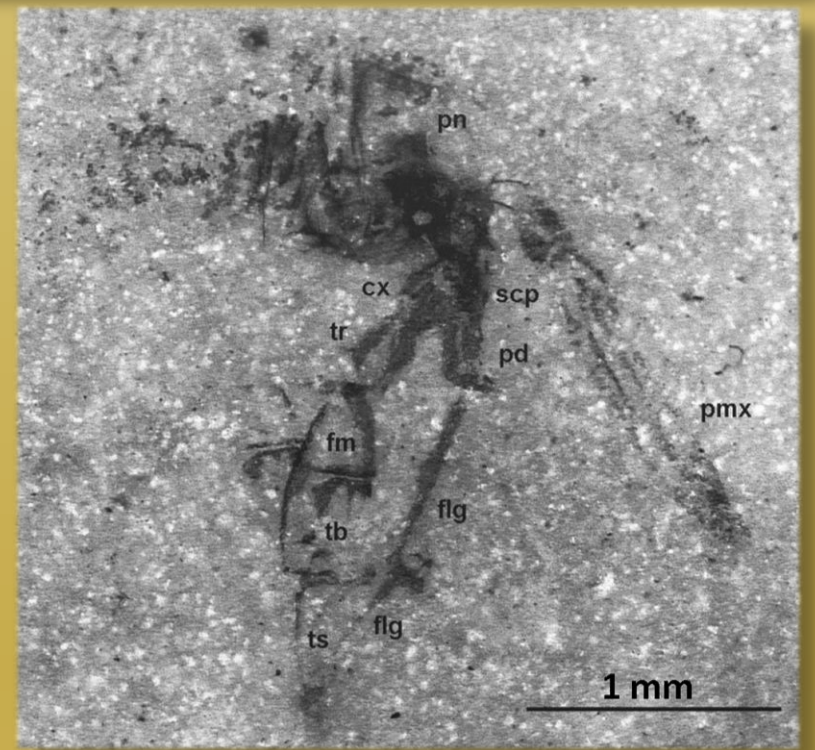
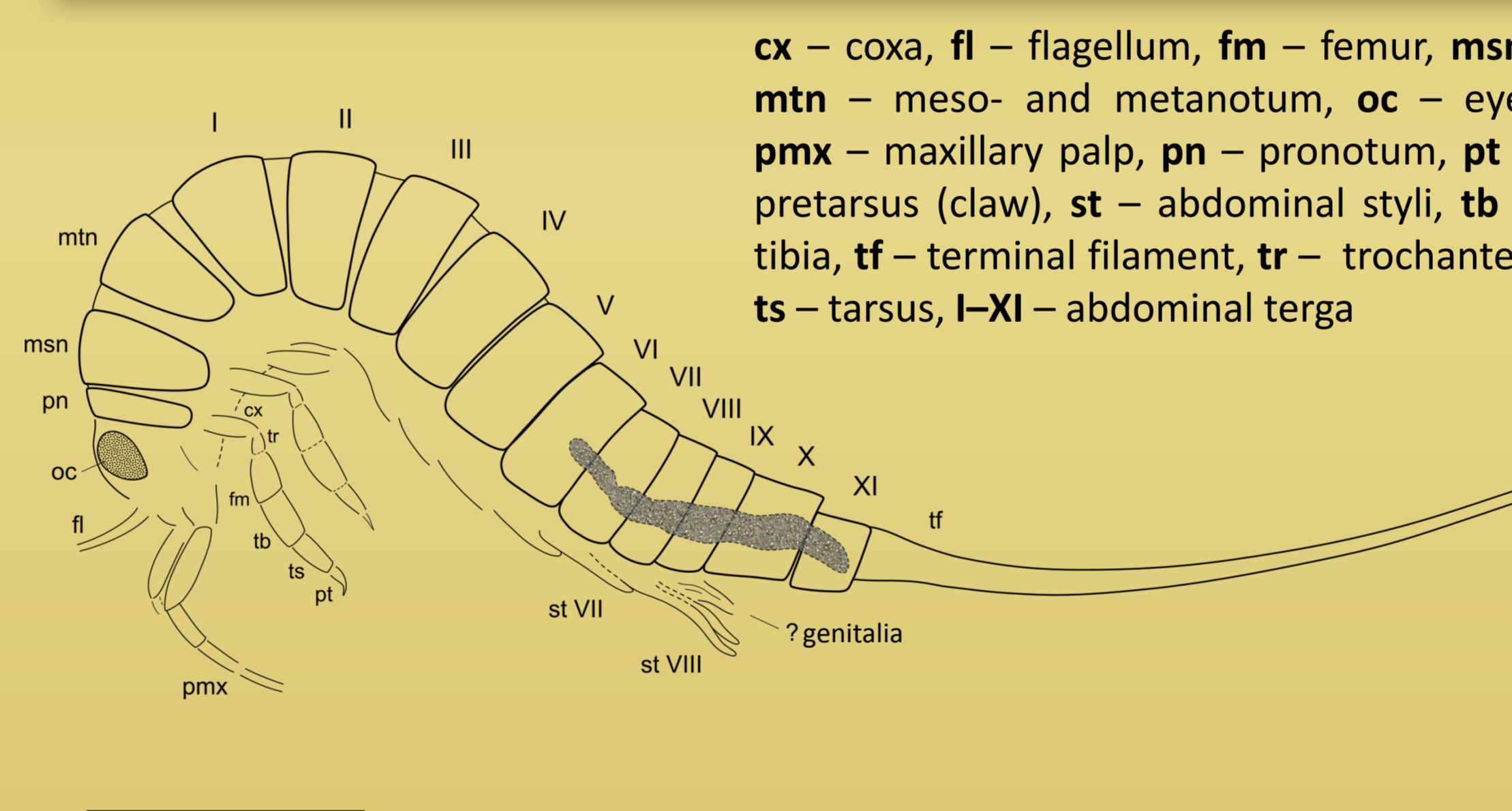
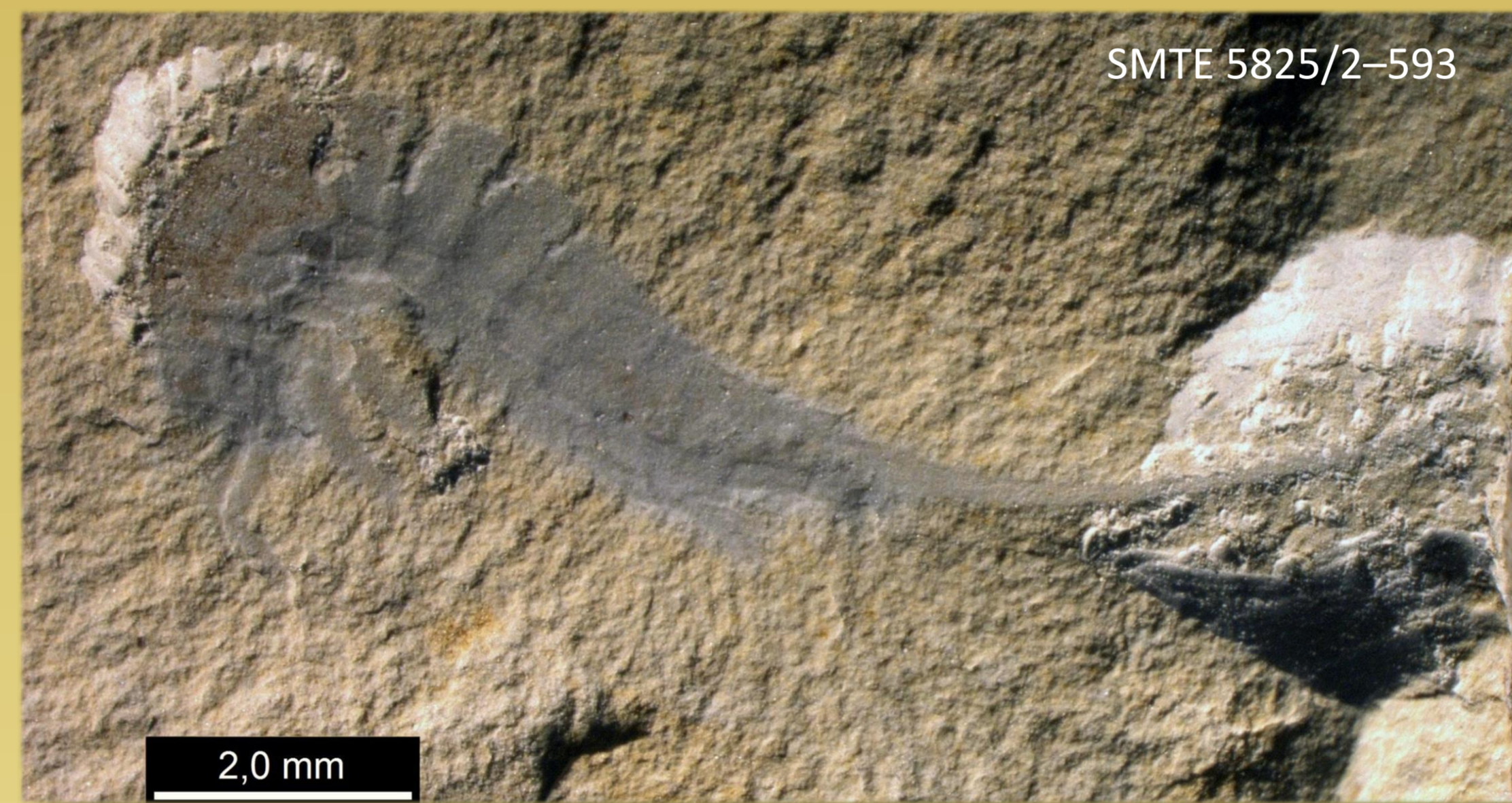


Dasyleptidae, or monurans, an extinct group of apterygote bristletail-like insects, were a typical faunal element of the Carboniferous and Permian sea shores and swamps.

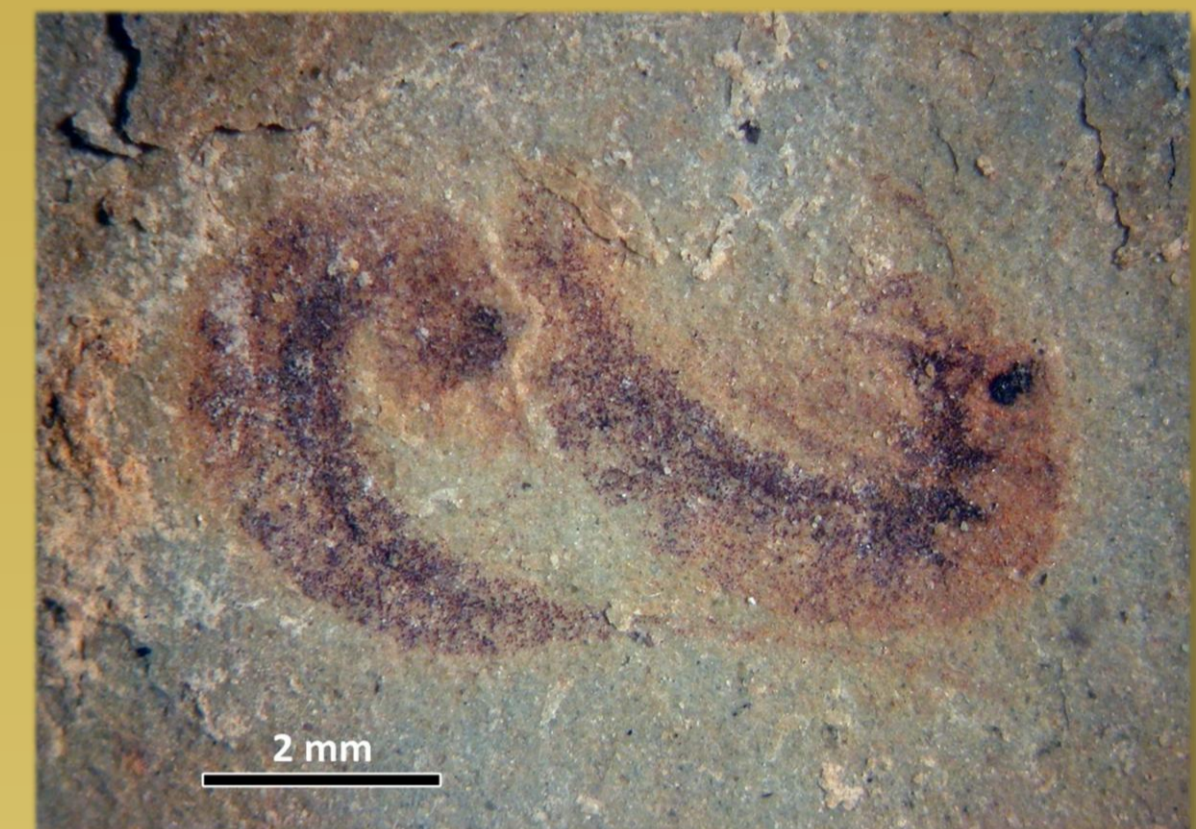
Recently, Bechly & Stockar [1] described *Dasyleptus triassicus* from the Ladinian (Middle Triassic) Meride Limestone of Monte San Giorgio in Switzerland. It was the first described Mesozoic record of the group, but not the sole one known so far.

Monura were first reported from the Triassic ('Gres a Voltzia', Vosges) by Marshal-Papier [2], but this record based on a single incomplete specimen was not mentioned in subsequent publications. Later, several complete specimens were found in the Louis Grauvogel collection, housed in Université Louis Pasteur, Strasbourg (D. Shcherbakov, pers. comm.), but they remain unstudied.

In the past few years, about 40 dasyleptid specimens were collected by the second author 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 [3]. This horizon is one of the richest in fossils in the Buntsandstein of Franconia: diverse insects occurred here along with conchostracans, decapods, triopsids, lingulids, bivalves, fish (particularly *Saurichthys*) and tetrapod remains.

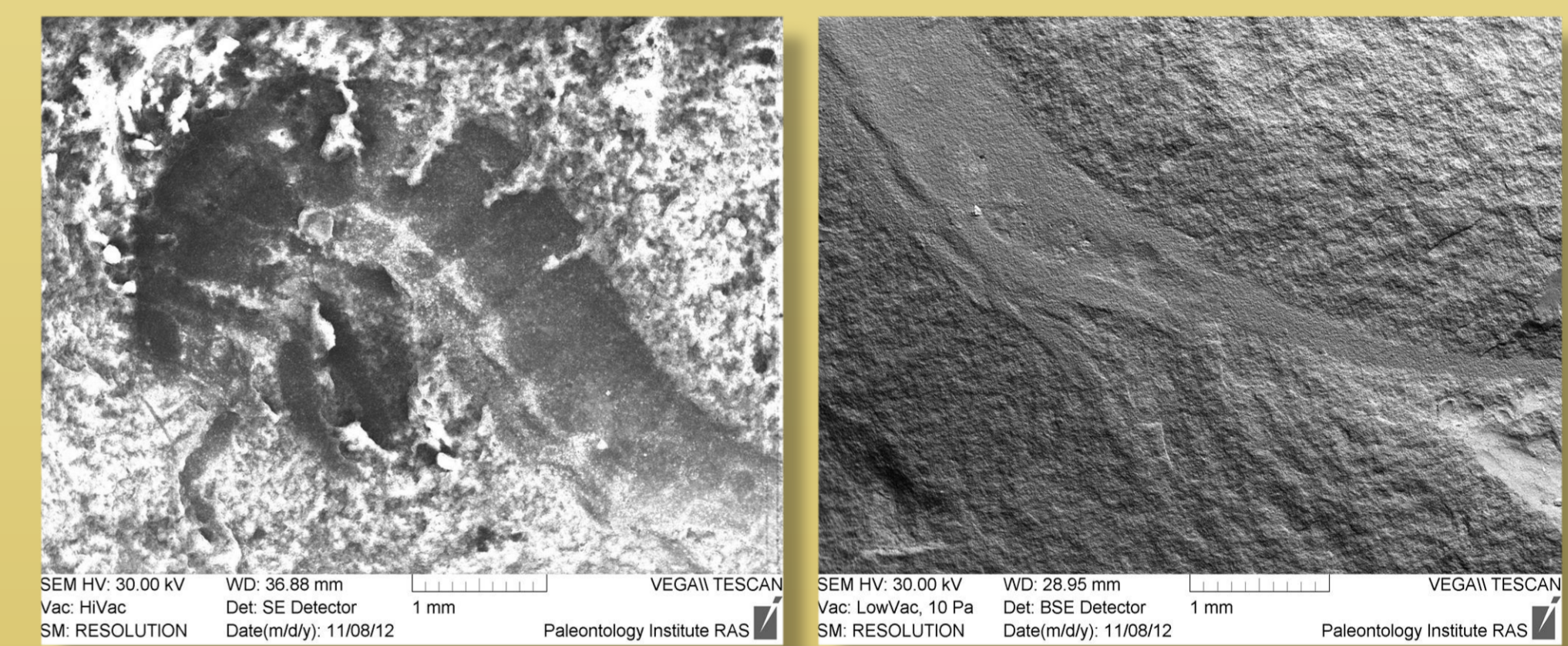


Dasyleptus triassicus Bechly et Stockar, 2011, holotype

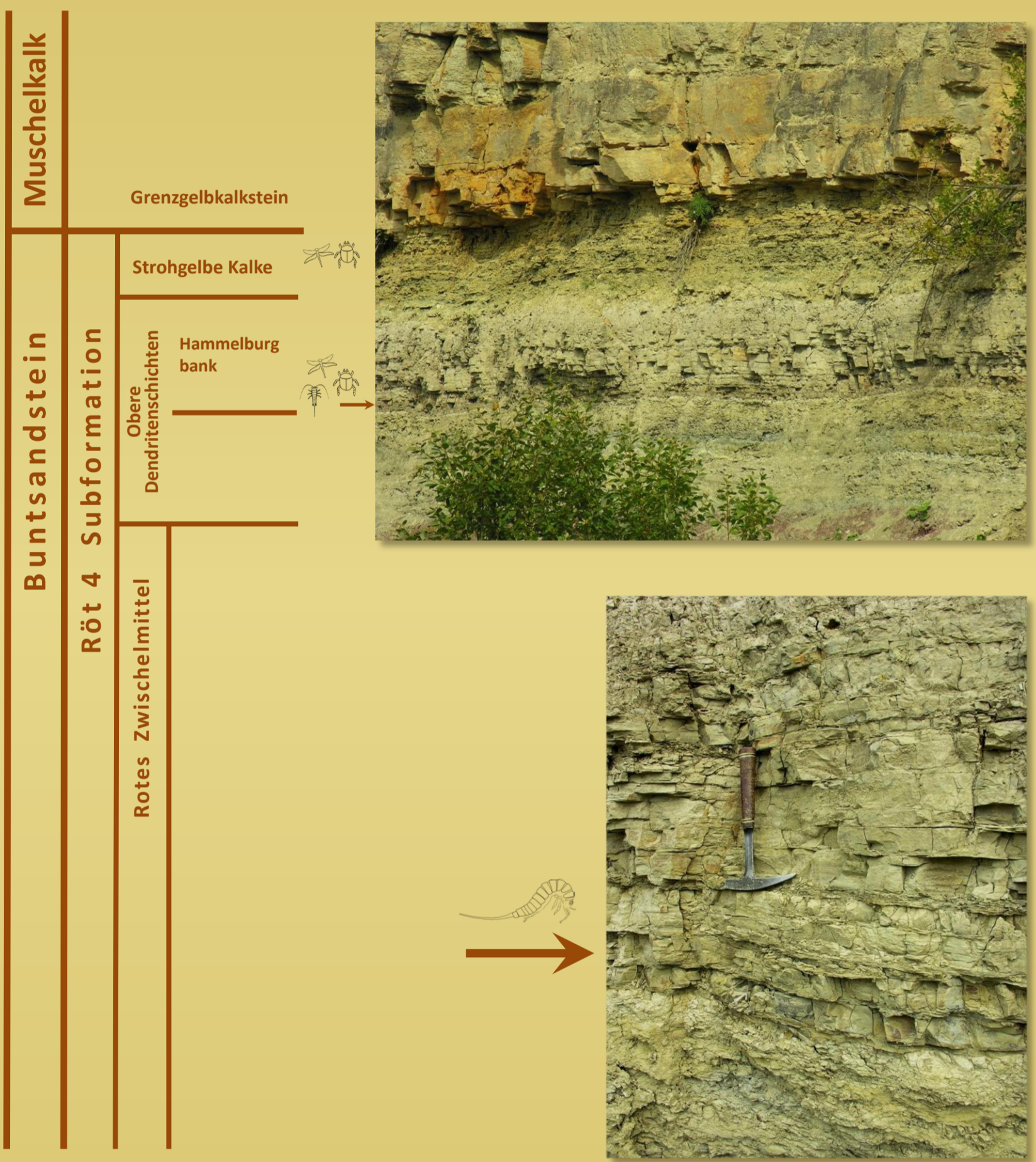


A pair of undescrbed dasyleptids in the Louis Grauvogel collection. ‘Grès à Voltzia’ Fm of Vosges Mountains. Photo by D. Shcherbakov, 2008

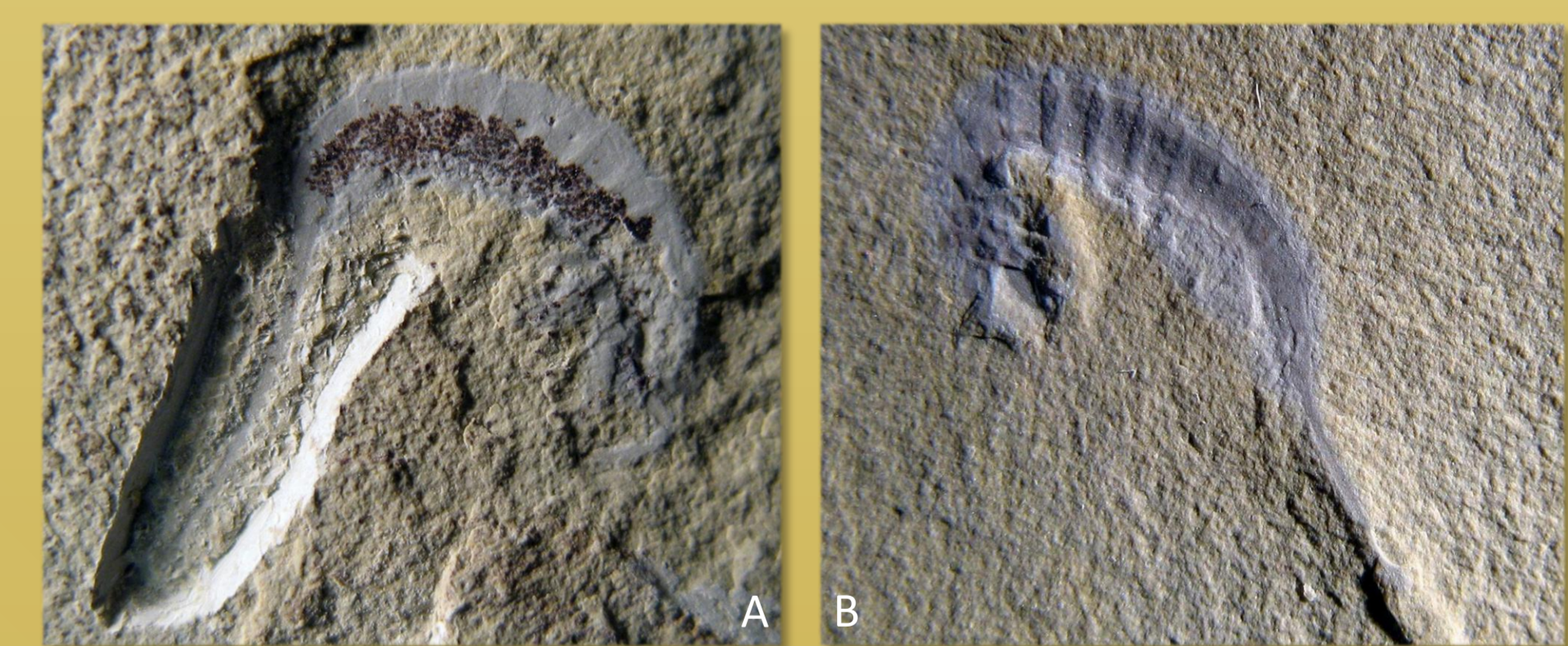
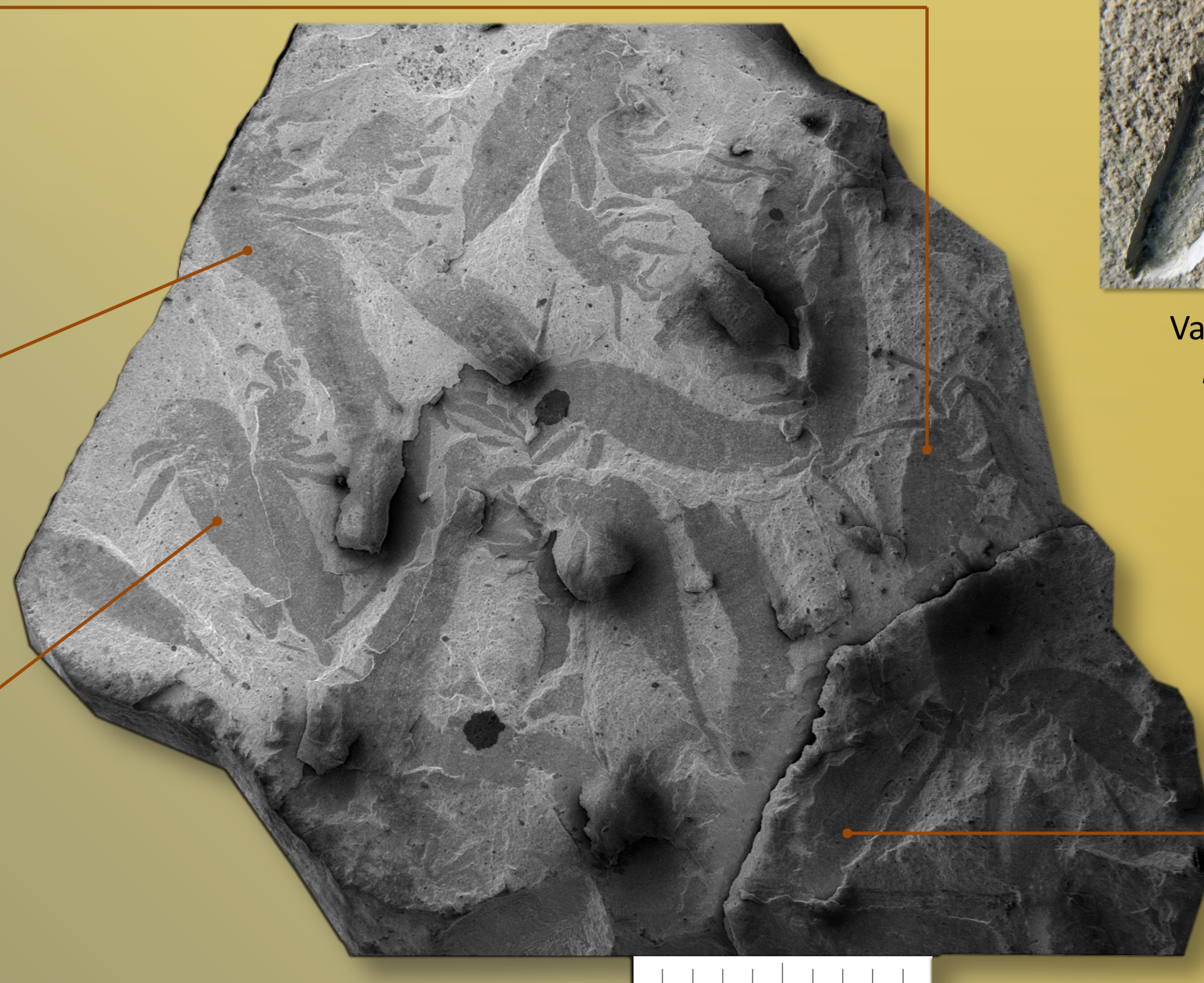
These dasyleptids belong to a new species, which is most similar to the *Dasyleptus triassicus* and differs from it in the shorter terminal filament (not longer than abdomen), as well as in body and leg segments proportions. Legs distinctly broadened (flattened?), but less so than in *D. triassicus* (not broadened in the Palaeozoic species). These and other characters are in need of further analysis.



SMTE 5825/2-593, SEM images (without coating)

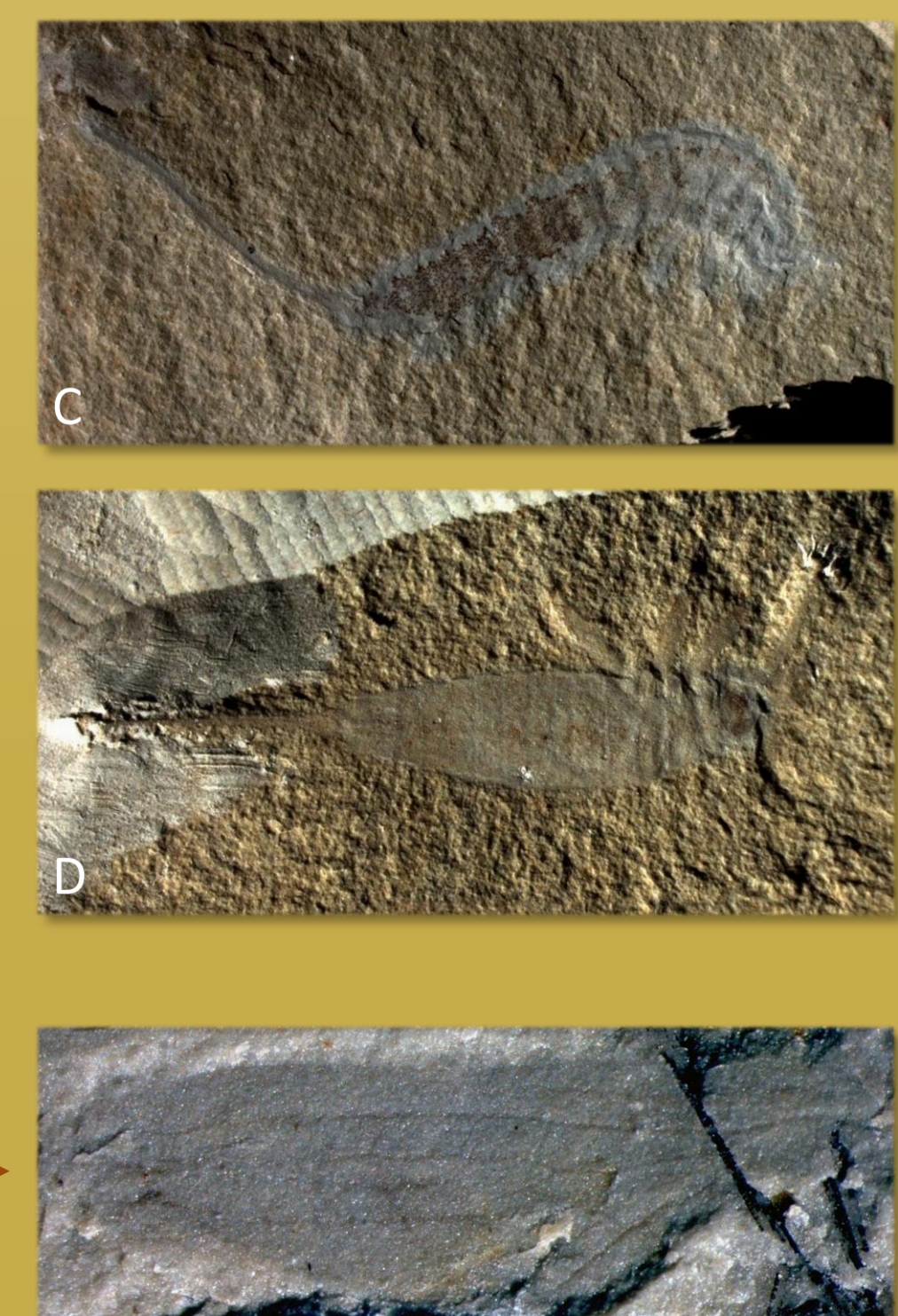


A mass burial, comprising about 20 specimens of *Dasyleptus* SMTE 5825/2-584; Obere Dendritenschichten of Hammelburg



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.)