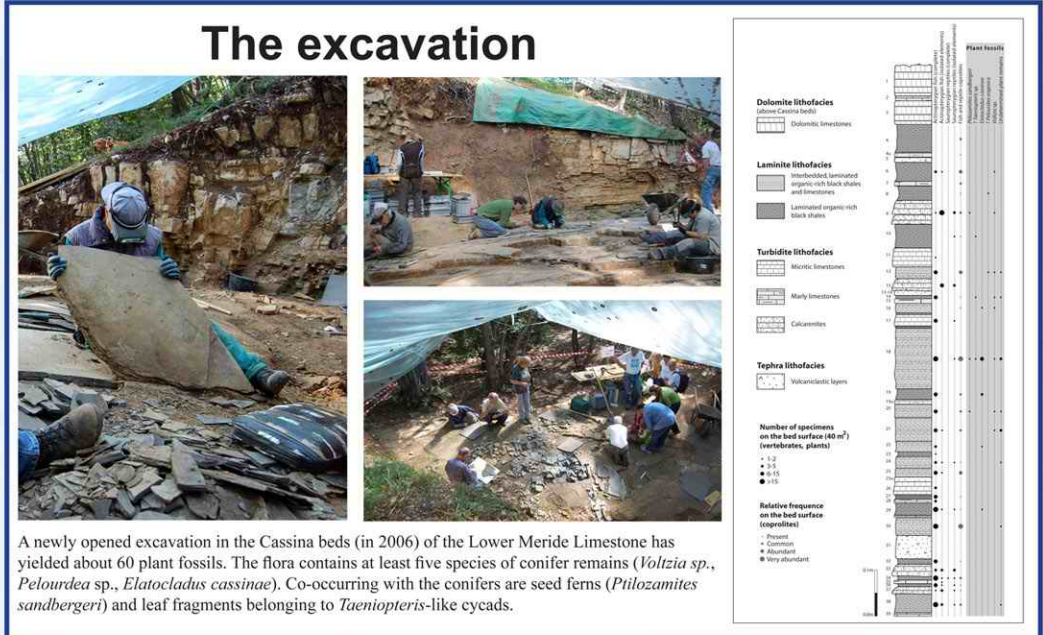
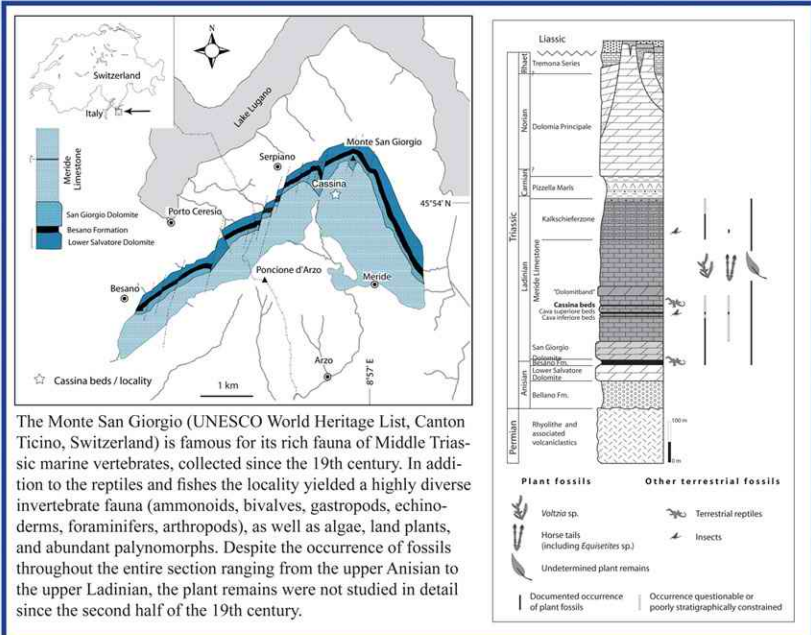


The Ladinian flora from the Cassina beds (Meride Limestone, Monte San Giorgio, Switzerland): preliminary results

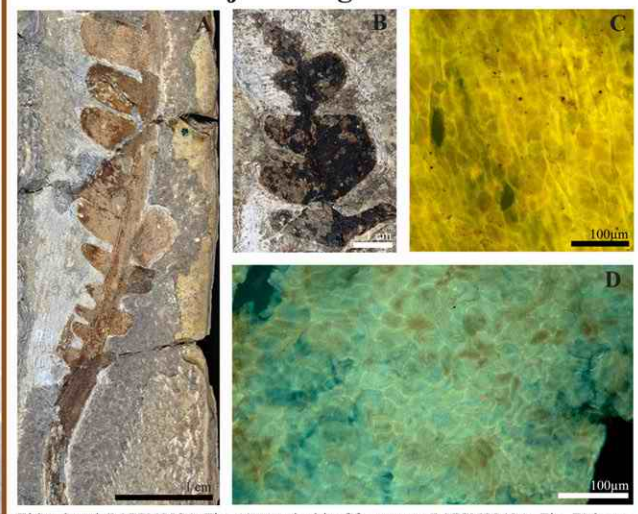
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Ptilozamites sandbergeri (Schenk) Kustatscher et Van Konijnenburg-van Cittert 2007



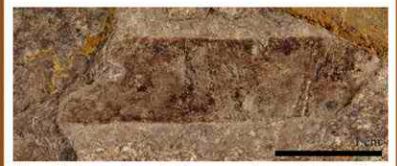
Either basal (MCSN8034; Fig. A) or apical leaf fragments (MCSN8040A; Fig. B) have been preserved. Unfortunately, the thick cuticle is poorly preserved. The cutinizations of the anticlinal cell walls are almost completely lost (probably due to taphonomy). Under epifluorescence microscopy (Fig. D) or with the aid of violet light (DM455 dichroic mirror, Fig. C) the remains of the anticlinal wall became at least partially visible.

Elatocladus cassinae Stockar & Kustatscher 2010



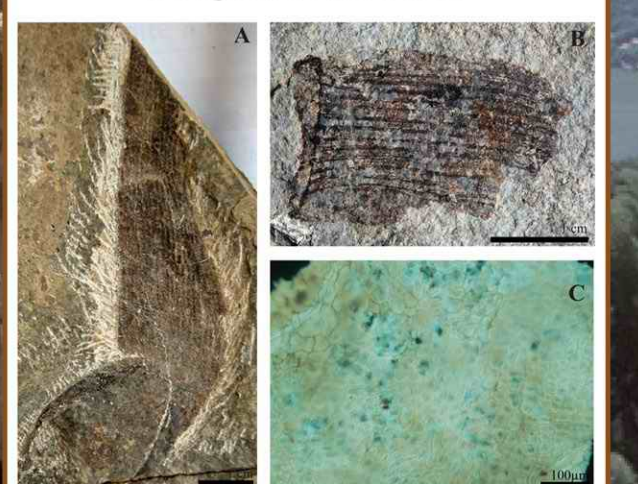
This taxon is abundant in the flora. The leaves (up to 30 x 2.5-3 mm) are arranged in a loose helix on the rachis (e.g. MCSN8045A, MCSN8039, Fig. A-C), with a rounded tip and a constricted base. The leaves are coriaceous and probably were vascularized by 6-8 veins. Branching has not been observed among the shoot fragments. In young shoots the axis is still very short, with leaves inserted in a dense helix (e.g. MCSN8043; Fig. D). Unfortunately the thick cuticle is poorly preserved. Sometimes the shoots show tectonically-induced dislocation (MCSN8040B, Fig. C).

?*Taeniopteris* sp.



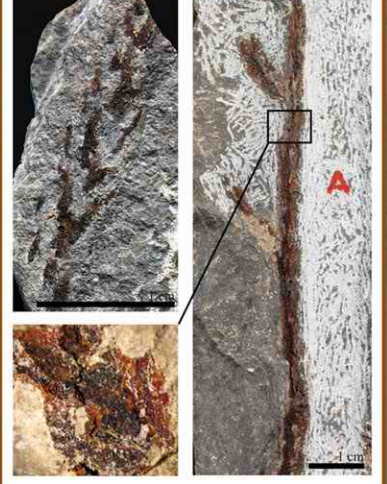
Few plant remains might represent cycadophyte foliage (e.g. MCSN8021) based on the strap-like appearance and delicate venation similar to the morphogenus *Taeniopteris* and *Bjuvia*.

Pelourdea vogesiaca (Schimper et Mougeot) Seward 1917



Straplike leaf fragments (e.g. MCSN8033; MCSN 8218, Fig. A-B) show the typical thickening with the crescent-shaped attachment area, as well as the strong parallel veins (10 per cm). Also some small cuticle fragments have been extracted.

Voltzia sp.



The shoot fragments are short, up to 10 cm long and 20 mm wide (e.g. MCSN8020, MCSN8023, Fig. A-C) with helically inserted falcate leaves (4-10 x 1-2 mm). The cuticles, although clearly visible are poorly preserved.

The patchy distribution of plant remains in the sediment mirrors a pulsating input from an elevated area (terrestrial area or islands). The exact paleogeographic location of this area remains unknown. Some authors suggest that these areas were nearby based on the completeness of terrestrial reptile skeletons. Unlike the excellently preserved marine vertebrate fossils, the plant remains are ill preserved and severely fragmented. The generally thick cuticles could be indicative of an arid place of growth, but in this case may rather be a result of selection during an extended pre-depositional transport. As a consequence, the preservation patterns of the plant fossils may suggest a relatively distant place of growth, on rather far-away islands belonging to the platform system surrounding the basin, or along the elevated southwestern border of the Meride Limestone basin.

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