



Micromorphological aspects of various human activities recorded in the Scafati pedocomplex (Napoli, Italy).

Ivano Rellini (1), Sebastian Vogel (2), and Michael Märker (3)

(1) Department of Earth, Environment and Life Science, University of Genova, 16132 Genova, Italy (rellini.ivano@dipteris.unige.it), (2) Department of Geography, University of Tübingen, 72070 Tübingen, Germany (seb_vogel@gmx.de), (3) Department of Earth Science, University of Florence, 50144 Florence, Italy (michael.maerker@unifi.it)

The stratigraphic sequence of Scafati, about 3 km east of ancient Pompeii, is presented consisting of a multilayered sequence of repeated volcanic deposition and pedogenesis that was caused by several phases of volcanic activity and volcanic quiescence of Somma-Vesuvius, at least, the last 20,000 years. Micromorphological analysis were carried out at the soil material and selected volcanic deposits to establish a chronological succession of different phases of volcanic deposition, pedogenetic transformation but also to highlight the anthropogenic influence. The micromorphological analysis testified furrow irrigation and soil cultivation in the medieval stratigraphy and allowed the identification of very significant antropogenic features in the Bronze Age/Iron Age paleosol, i.e. complex depositional crusts and dusty clay coatings and hypocoatings, which are often used as an indicator for tillage activity. In contrast to the clear macroscopic and chemical evidence of ancient soil cultivation, the Roman paleosol did not exhibit distinct micromorphological signs of soil cultivation.