

Studia breviora

Palynological results

Pollen analysis of the deposit San Faustino, Central Italy

Five samples were taken for a palynological analysis from a section with a diameter of 10 m, where sample 35 is located 10 meters beneath sample 30 and comprises of carbonised plants. The vertical succession observed under microscope, shows that it involves coniferous trees (*Pinus silvestris* type). The pollen spectra are dominated by coniferous plants: these include *Pinus* (with a distinct predominance of *Pinus silvestris* - type, *Abies*, *Picea*, Taxodiaceae - Cupressaceae, as well as a small percentage of *Tsuga* and *Sequoia*. Among the deciduous trees, *Fagus*, *Quercus*, *Betula*, *Alnus*, *Carpinus*, *Carya* and Juglandaceae are the most important. The typical Tertiary plants (*Podocarpus*, *Sciadopitys*) appear very rarely, a very small percentage of them was found in sample 31, and in sample 34 the appearance of *Eucommia*

was assigned. The pollen spectra of NAP are dominated by herb and shrub pollen grains (Compositae, Gramineae, Chenopodiaceae, Cruciferae) including several steppe elements (*Artemisia* and five pollen grains of *Ephedra*). The most common are Sphagnum and monocolpate Polypodiaceae in sample 35. There are also Algae to be distinguished.

The proportion of NAP in the spectra of samples 34, 33 and 31 reaches 20%. The steppe elements indicate a general lowering of the temperature in the Mediterranean region, which occurred in the Early Pleistocene. The pollen grains of *Eucommia* and *Celtis* and the disappearance of the typical Tertiary plants characterized the coenosis of Umbria, in Central Italy, in the very Early Pleistocene.

References

Suc. S.-P. 1984. Origin and evolution of the Mediterranean vegetation and climate in Europe. *Nature*, 307; 429-432.

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