Cloncluding from the finding of erratics, the height of glaciation of the Inn valley glacier system in the vicinity of Innsbruck (574 m. a. s. l. = 1,780 ft.) reached as high as 2,400 m. a. s. l. (= 7,440 ft. a. s. l.).

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## Evolutionary trends in the foraminiferal genus Uvigerina in the Badenian of the Vienna basin

## (Abstract)

The zonation of the Badenian was proved by means of the evolution of the benthonic foraminiferal genus Uvigerina and several guideforms were described already in 1953 (PAPP & TURNOVSKY, Jb. Geol. B.-A., 96). Unfortunately, these guide-fossils sometimes are lacking while other species, occuring throughout the Badenian beds, normally are present in a sufficient number of specimens.

Due to this fact a method was developed recently, demonstrating the evolution of Uvigerina by means of metrical methods (PAPP & SCHMID, Verh. Geol. B.-A., 1971/1). In this study it is shown, that sculptural features may be neglected and the number of specimen restricted too, thus having the possibility to use this method for samples from wells with an often limited material. The features taken into consideration are: the number of chambers and the length of the tests. An average in dex-number of chambers are the degree of evolution, was determined arithmetically for several surface outcrops representing the type-localities of the Badenian zonation. The increase of the indices from the oldest to the younger beds of the Badenian (14.0 to 64.8) was checked and confirmed by the study of well-samples in superposition too. As the main result it is pointed out, that we are able to evaluate the stratigraphic position of Uvigerina bearing beds from the Badenian of the Vienna basin merely by determination of the index-numbers of the Uvigerina populations.