Palynological analysis of deposits ranging from the Middle Oligocene through the Upper Miocene from borings in the Great Poland Lowlands is presented. Main climatic-floristic phases on the territory under study have been characterized on the basis of the results of palynologic.ai analyses. A permanent tendency has been found to eliminate successive warmlike components of flora in younger warm phases of the Neogene. Descriptions of 174 species of sporomorph are given. A new genus, *Iteapollis* a new species *Microfoveolatisporis minutus* and several new combinations have been erected by the present writer.

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