



Editor Marcel Mîndrescu

Climate Change in the Carpathian-Balkan **Region During Late Pleistocene and Holocene**



Ştefan cel Mare University Press

Quaternary Palynostratigraphy of the Bulgarian Black Sea coastal area Filipova-Marinova Mariana*

Museum of Natural History, Varna, Bulgaria

*Corresponding author: Mariana Filipova-Marinova. Email: marianafilipova@yahoo.com.

The palynological method is one of the main biostratigraphic methods. Pollen analysis of marine sediments offers the possibility of obtaining long and presumably continuous records of coastal vegetation that are the source of plant microfossils found in the marine basins. Such sequences provide opportunity to develop complete and high-resolution records of terrestrial events. The stratigraphic subdivision of sediments from the western Black Sea area is based on qualitative interpretation of the pollen and spore assemblages, and the vertical and spatial distribution of selected indicator taxa. The pollen assemblage zones distinguished are based entirely on the percentage abundances of the predominant and indicator pollen and spores in the assemblages. Pollen spectra delimited for each assemblage zone were obtained from several samples in each sediment core and provide a picture of vegetation changes for the period represented by sediments. Because these zones are present in two to several sediment cores in adjacent areas, they are delimited as regional pollen assemblage zones (RPAZ) and can be correlated in time and space with concurrent chronostratigraphic scales. The palynological record comes from the 12 most representative cores from the western Black Sea zone. Fifty LPAZ are grouped into nine RPAZ that are tentatively correlated to the regional Black Sea stratigraphic scale and to the traditional Northern European climatostratigraphy. These RPAZ are defined corresponding to the European intervals marking the end of Günz Glacial, Riss I Stadial and Riss I-II Interstadial of the Riss Glacial, Plenigalcial and Late Glacial of the Würm Glacial (including Oldest, Older and Younger Dryas Stadials and Bølling and Allerød Interstadials), and the Preboreal, Boreal, Atlantic, Subboreal and Subatlantic chronozones of the Holocene.