## Magyari, E. (2002): Holocene biogeography of Fagus sylvatica L. and Carpinus betulus L. in the Carpathian-Alpine Region. Folia Historico-Naturalia Musei Matraensis 26: 15-35.

Reference: Magyari, E. (2002): Holocene biogeography of Fagus sylvatica L. and Carpinus betulus L. in the Carpathian-Alpine Region. Folia Historico-Naturalia Musei Matraensis 26: 15-35. Short reference: Magyari (2002) First author: Magyari, Enikő Year: 2002 Abstract

Holocene biogeography of Fagus sylvatica L. and Carpinus betulus L. in the Carpathian-Alpine Region Enikő Magyari

The present distribution of temperate forest types in the Carpathian basin suggests that the direction of forest succession, the order and timing of tree arrival and changes in dominance differed markedly between the eastern and western part of the Carpathian basin and in the adoining mountain zone. In order to throw light upon the historical aspects of temperate woodland succession in the Carpathian-Alpine Region, we examined in this study the Holocene expansion of two cold temperate tree species, Carpinus betulus and Fagus sylvatica. Pollen data were extracted from 30 sites, all of which were radiocarbon dated. The dates for the earliest regional appearance and marked Fagus and Carpinus pollen frequency rises were plotted on maps. Throughout analysis of these maps revealed that Carpinus betulus appeared the earliest in the SE Carpathians and in the North Hungarian Middle Mountains, around 8500 cal. BP. We inferred the development of a Carpinus-dominated forest belt in this region from ca. 7500 cal. BP. Furthermore, the local expansion of Carpinus preceded the spread of Fagus in all sites east of the Danube, except above 400 m asl. Local increase of the Fagus populations commenced the earliest in Slovenia, around 8000 cal. BP. For Fagus sylvatica, a migration route along SW Transdanubia and the Transdanubian Middle Mountains was conceived. Suprisingly early occurence of Fagus and Carpinus pollen grains in the joint pollen diagram of Nyíres-tó and Báb-tava suggested that refuges appeared in the nearby piedmont zone of the Eastern

Carpathians.

geology, geography

Notes

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Tartalom címszavakban:

Introduction

Data and methods

The timing of the first detection and local/regional expansion of Carpinus betulus The timing of the first detection and local/regional expansion of Fagus sylvatica Discussion

What trees did Fagus and Carpinus replace?

What do the buried macrocharcoals tell us about the history of Fagus and Carpinus?

Directions of spread and possible northern refuges

The role of humans in the expansion and population increase of Fagus and Carpinus

References

Címszavazva - VA

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