
Introducing the unknown? A study of the use of "inferior" legumes in the Bronze Age Carpathian Basin (Hungary)

Sonja Filatova^{*†1} and Wiebke Kirleis

¹Institute of Pre- and Protohistoric Archaeology, Christian-Albrechts Universität, Kiel – Germany

Abstract

Agricultural innovations and the incorporation of new dietary attitudes and habits, can often be related to transformations that occur within societies. Archaeobotanical results suggest that the use of legumes in the Hungarian Carpathian Basin became widespread during the Bronze Age, more so than in the preceding periods. For instance, the presence of bitter vetch (*Vicia ervilia*) is first attested for this period, and grass pea (*Lathyrus sativus*) as well is more frequently encountered for the Bronze Age archaeobotanical record.

Legumes (Fabaceae) have been important staple crops in most regions characterised by grain agriculture. (Wild) legumes contain different types of toxic compounds that protect them from predation. In domesticated legumes, these compounds have either been reduced or completely removed. Still, most species of legumes require soaking, cooking and/or fermentation before they are safe for human consumption.

At least since the Roman period, both bitter vetch and grass pea have generally been viewed as inferior for human consumption. Historical and ethnographic records indicate that the two legumes were primarily utilised as animal fodder, and were only consumed by the very poor or during times of famine. They have, thus, been considered as "inferior" human food. Ethnographic studies also show that legumes in general have been part of traditional food culture in many communities.

The use of these "inferior" legumes in pre- and protohistoric societies is not yet fully understood. Exploring their status in Bronze Age plant economy in Hungary may shed light on the reasons for their appearance (bitter vetch) or increased presence (grass pea) in this period, and thus add to the current knowledge on the variety of ways in which legumes could have been exploited within prehistoric societies. Does the appearance of such legumes indicate famine? Is there a relationship between their introduction and adaptations to changing environmental conditions? Or do the archaeobotanical data suggest intensified cultural exchange with neighbouring regions? The aim of this paper is to use legumes as a proxy to identify changes in the Bronze Age crop assemblage in the Hungarian Carpathian Basin, and thereby relate these changes to further socio-environmental transformations.

*Speaker

†Corresponding author: s.filatova@ufg.uni-kiel.de

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