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### **Chasing Chinese millets in Ukraine using seed impressions in pottery**

In recent years, there has been much debate about the timing and route of the spread of millet to Europe. Following the AMS dating results from Dr. Motuzaite-Matuzeviciute, the results of this large-scale project of Kiel University further support the arrival of *Panicum miliaceum* in the Middle to Late Bronze Age. This finding is consistent with the arrival around 1500 BC estimated by Dr. Stevens et al based on the archaeobotanical database AsCAD and with our results from Ukraine. My presentation will introduce the procedure, and the methodology of the impression study we have employed in Ukraine, which is still under development. In particular, this method is based on the observation and identification of seed impressions using a scanning electron microscope, which allows to differentiate between *Panicum miliaceum* and *Setaria italica* by observing the surface structure. After that, I will report the results from Ukraine. Even though many *Panicums* dating backed to Neolithic and Eneolithic have been reported, our re-assessment and new analyses of Neolithic and Eneolithic pottery did not detect *Panicum*. However, impressions of *Panicum miliaceum* seeds suddenly appeared in pottery from the Sabatinovka culture period (1600-1300/1200 BC). In addition, the detected 44 *Panicum* in pottery from the Novokyivka site were only accompanied by 10 grains of West Asian crops. Such tendency of *Panicum* as the primary cereal in the spectra is also reported from the Hungarian site and some areas in northern Germany dating to the late Bronze Age. If such a change in cultivation indeed occurred in those areas, it is necessary to accumulate data and examine the factors and the impact on European Bronze Age societies.