

18<sup>TH</sup> CONFERENCE OF THE INTERNATIONAL WORKGROUP FOR PALAEOETHNOBOTANY

## NAKED WHEAT

The lab session is structured to train participants on how to differentiate between tetraploid and hexaploid wheat to ensure that this important distinction does not go unremarked in the archaeobotanical assemblage.

The presence of tetraploid naked wheat was first reported by Hillmann (1986), who defined the rachis criteria for the identification of naked wheats, and Jacomet and colleagues who recognized tetraploid wheat in the Late Neolithic Swiss Lake dwellings (Jacomet and Schlichtherle 1984; Jacomet *et al.* 1989).

Later studies proved the co-existence of tetraploid and hexaploid naked wheat in Neolithic dwelling of Central Europe (Schlumbaum et al. 1999). In recent years, Kirleis and Fishcer prove that the tetraploid naked wheat was among the staples used by the Funnel Beaker North group in Denmark and Germany (2014). In addition the interrelation of the origin of tetraploid naked wheat and the beginning of agriculture in the Alpine foreland, as well as northern Germany have been discussed in Kreuz *et al.* 2014.

Since the 6<sup>th</sup> IWGP in Groningen, 1983, the meeting has become a platform to evaluate the role of tetraploid naked wheat among the early farmers and an opportunity to advance the identification criteria. The 16<sup>th</sup> IWGP in Thessaloniki, 2013, with its theoretical and practical lab sessions, highlighted the importance of training new generations of archaeobotanists on the identification of tetraploid wheat.

Here at the 18<sup>th</sup> IWGP, we pursue the same education goal and we invite the attendees to bring specimens of naked wheat chaff or grains to the lab-session for training in the analysis of their samples.

The laboratory session will be held by Angela Kreuz, Ferran Antolin and Marlu Kühn

## References

Hillman, G.C., Mason, S.R.L., de Moulins, M.D., Nesbitt, R.M. (1996) Identification of archaeological remains of wheat: the 1992 London Worshop. Circaea, The Journal of the Association for Environmental Archaeology 12, 195-209.

Jacomet, S., & Schlichtherle, H. (1984). Der kleine Pfahlbauweizen Oswald Heer's: neue Untersuchungen zur Morphologie neolithischer Nacktweizen-Ähren. Sixth Symposium of International Workshop for Palaeoethnobotany, Plants and Ancient Man: Studies in Palaeoethnobotany. Groningen, 30 May-3 June, 1983, 153-176.

Jacomet, S., Brombacher, C., & Dick, M. (1989). Archäobotanik am Zürichsee: Ackerbau, Sammelwirtschaft und Umwelt von neolithischen und bronzezeitlichen Seeufersiedlungenim Raum Zürich: Ergebnisse von UntersuchungenpflanzlicherMakroreste der Jahre 1979-1988 (Vol. 7). Komm. Orell Füssli.

Schlumbaum, A., Neuhaus, J. M., & Jacomet, S. (1998). Coexistence of tetraploid and hexaploid naked wheat in a Neolithic lake dwelling of Central Europe: evidence from morphology and ancient DNA. Journal of Archaeological Science, 25(11), 1111-1118.

Kirleis, W., & Fischer, E. (2014). Neolithic cultivation of tetraploid free threshing wheat in Denmark and Northern Germany: implications for crop diversity and societal dynamics of the Funnel Beaker Culture. Vegetation History and Archaeobotany, 23(1), 81-96.

Kreuz A., Märkle T., MarinovaE., Rösch M., Schäfer E., Schamuhn S., Zerl T. (2014). The Younger Neolithic Michelsberg culture – just ramparts and ditches? A supraregional comparison of agricultural and environmental data. Prähistorische Zeitschrift 89 (1), 72-115.