New Glume Wheat
from Kathreinkogel, Carinthia (Kärnten), Austria

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The discovery: On top of the Kathreinkogel hill (near Schiefling/See in Carinthia, Austria) visible structures indicated the possible existence of a medieval castle described in the 1920s.

The excavation: Quarry operations on the west side of the Kathreinkogel led to archaeological excavations in the years 1984–1990. These were carried out by the Federal Officer for Ancient Monuments (Bundesdenkmalamt, Landeskonservatorat) for Carinthia, in cooperation with the University of Innsbruck. Roman and Bronze Age sites were excavated on a terrace west of the top of the hill, where Bronze Age layers were encountered underneath late Roman graves. A late Bronze Age weaving hut was uncovered partway up on the west side of the hill (approx. 740 m AMSL). On top of the hill around the church of St. Kathrein (770 m AMSL) no traces of Bronze Age remains were detected.

The archaeobotanical investigation: in addition to ceramic and metal finds, botanical remains were also discovered. They derived from the layers underneath the Roman graves (ID 85, ID 115) and from an area east of the church (ID 127). Several examples of cereals and pulses from Bronze Age and Roman sediments turned up during the recent examination of the more than 25 year old samples taken during excavations made from 1986 to 1989.

Eight samples were analysed: ID 85 was divided into six subsamples. All of them derived from different stocks: ID 85/1 contained mainly millet Panicum miliaceum and emmer Triticum turgidum L. subsp. diococcum (syn. T. diococcum Shrank); ID 85/2 consisted of emmer together with a large quantity of Bromus cf. secalinus; ID 85/3 and 85/4 consisted mainly of lens Lens culinaris; ID 85/5 of emmer, hulled barley Hordeum vulgare ssp. vulgare and millet. ID 85/6 was a very clean stock of the broad bean Vicia faba var. minor. ID 115 was taken from a storage pit. It contained emmer and clearly identified spikelet forks and glume bases from new glume wheat. It was a mixed stock which contained also barley, einkorn and millet together with lens, peas Pisum sativum and broad beans. As it was then backdated to being probably Bronze Age some of the grains are on the way to receive a 14C-dating.

The New Glume Wheat: this seems to be one of the few stocks known up to now of this species of glume wheat, first described in 2000 by Glynis Jones from Greece. The second stock was presented a little later by Marianne Kohler-Schneider from Austria. Again from Austria the remains of new glume wheat detected on the Kathreinkogel offer the possibility of examining identification features as well as genetic relationships. Just recently, an application for support was accepted for the investigation of further material and for dating.

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