

“13th Symposium of the International Work Group for Palaeoethnobotany”, Girona, Spain, 16th-22nd May 2004

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Every three years, archaeobotanists are brought together for the International Work Group (IWGP) for Palaeoethnobotany to discuss new methodologies, theories and recent discoveries. The 13th symposium was held in the beautiful medieval city of Girona, northeast Spain. The symposium was very well attended, especially by European-based scholars, and in total approximately 50 papers and 60 posters were presented over five days. The content of the papers reflected the large attendance by European scholars, and consequently the symposium focused principally on Europe, particularly the Mediterranean region. There was a stimulating mixture of lectures, poster and laboratory sessions and a field excursion to examine the Mediterranean vegetation, allowing sufficient time for discussion amongst the attendees.

The first day of lectures focused on analytical methods used in archaeobotany. Methods used for the identification of archaeobotanical material – such as morphometrics and the application of molecular studies, including DNA analysis – gave valuable insights into the use of scientific methods. There was an emphasis on the use of weed species to identify husbandry practices, with two papers focusing on the Functional Interpretation of Botanical Surveys (FIBS) methods: the application of functional attributes of weeds to distinguish between various arable systems (Bogaard *et al.* 1999, 2001; Charles *et al.* 1997; Jones *et al.* 2000).

One paper, given by Dorian Fuller, Institute of Archaeology (IoA), demonstrated the application of parsimony analysis, and another presented a more traditional attempt at locating ancient agricultural fields from patterns in the weed assemblage. Gordon Hillman introduced the subject of *Triticum* spp. (wheat) identification problems, a central theme of the symposium, with a paper on the identification of naked wheats from the rachis remains. This paper was continued the next day and caused much discussion of ‘misbehaving’ wheats, which will now be reassessed by many scholars using the new criteria. The first day was rounded off by an impressive poster session which covered considerably more aspects of archaeobotany than the papers presented at this symposium. Macrobotanical remains dominated both papers and posters, but the latter also included studies of phytolith and pollen analysis.

Gathering and cultivation were the themes of the second day of the symposium. The morning sessions focused on the Near East and Neolithic Europe. The first session opened with an overview of new evidence from the Near East, by George Willcox. He proposed that the idea of a single domestication event in this area, caused by climate change, needs reevaluation. He suggested that regions should be considered separately and that there were multiple domestication events. This model was supported by a

paper given by Diego Rivera-Núñez on plant domestication and cultivation in western Asia. This session showcased an impressive increase in the knowledge of the Mediterranean Neolithic, especially concerning the Iberian Peninsula, with papers from Leonor Peña-Chocarro and Lydia Zapata on the spread of agriculture in northern Spain, and Hans-Peter Stika on the Neolithisation of central Spain.

The afternoon was filled with a laboratory session dedicated to new identification criteria for wheats. This was a very useful session allowing all symposium attendees to study recently identified glume wheats, and to observe the criteria put forward by Gordon Hillman the previous day for the 'misbehaving' rachises of *Triticum aestivum* L. (bread wheat) and *Triticum durum* L. (durum wheat). The day was topped off by a welcome reception at the Museu d'Arqueologia de Catalunya-Girona, a beautiful and historic building. Attendees were welcomed by civic dignitaries and the museum director, followed by a lovely wine reception where we sampled locally produced cava and traditional pastries.

The third and fourth days of the symposium were dedicated to papers on historical archaeobotany. A particularly interesting talk was given by Reinder Neef on grain storage in the Hittite capital of Bogazköy. A large quantity of archaeobotanical remains was present at this site, demonstrating that not all archaeobotanical assemblages are hampered by preservation issues. Indeed, the silos were so rich that no flotation was needed. Ahmed El-Din Fahmy gave a talk that contrasted greatly with most of the other papers presented by concentrating on aspects other than the economy of cultivation. His paper focused on the burial assemblages uncovered at Predynastic Hierakonpolis, Egypt. He recognised that the contents of one basket included tubers, leaves and mericarps, possibly used for perfume, representing plant remains that are not usually recovered from domestic assemblages.

Thursday brought a very refreshing paper from Gill Campbell on brewing in Roman Britain. It set out criteria for the recognition of this particular activity: detached sprouts and chaff representing waste, remains of flavourings and additions, structural evidence of corn-dryers; and textual evidence.

There was an open session on Friday morning. Mary-Anne Murray presented an overview of the progress made in the very impressive Giza Millennium Project. Feeding the whole city required considerable social organisation and involved bakeries churning out massive quantities of bread and huge storage areas to keep all the grain needed, in this case *Triticum dicoccum* L. (emmer wheat) and *Hordeum vulgare* L. (two-row barley).

The afternoon was dedicated to a round-table session on wheat evolution, continuing the predominant theme of the symposium. It included a very interesting synopsis by Rachael Giles of her continuing work on the origins of hexaploid wheat using DNA analysis. She suggested that there are likely to have been two separate origins: one in the Fertile Crescent and one possibly in the Caspian Sea area.

Mike Charles (Sheffield University) spoke about the new multi-disciplinary project in collaboration with Cambridge University and the University of Manchester Institute of Science and Technology (UMIST), concentrating on the domestication, spread and establishment of barley and emmer wheat crops in Europe. The project will use the database on Near Eastern and European crops previously compiled by Sue Colledge (IoA), and aims to draw together other previous studies, initiate new archaeobotanical investigations where data is lacking, and also include substantial genetic studies to address these issues. The round-table session was drawn to a close by Gordon Hillman, who highlighted some important points such as issues of disruptive selection and outbreeding that may hinder the identification of early crop plants.

This symposium aimed to encompass all aspects of the discipline and, if achieved, this aim would lead to a much better understanding of issues relating to all the sub-disciplines, both theoretical and methodological, and how they can work together. The only disappointing note was the lack of papers on world regions other than the Near East and Europe. The posters, however, showed much more variation in terms of geographical area than the papers.

Most of the discussion focused on wheat crops and less attention was paid to other crops, especially tropical ones such as *Oryza sativa* L. (rice), millets and pulses. This emphasis at the symposium does, however, reflect the areas that are more traditionally the focus of archaeobotanical studies. A wider focus for this type of meeting would allow everyone to hear and learn about new aspects of archaeobotany and incorporate more of the work carried out around the world.

The IoA was well represented at this symposium with five papers and three posters from staff and research students. Gordon Hillman played a key role with his discussion of the identification of wheats and papers were also given by Dorian Fuller, Francis Maclaren, Mary-Anne Murray and Michele Wollstonecroft. Posters on Irish Bronze Age arable agriculture, charcoal from Bedouin hearths, and early agricultural sites in India were presented by Meriel McClatchie, Phil Austin and the author respectively, demonstrating the wide range of research being carried out at the IoA.

Overall, the symposium in Girona was a great success. It presented many new lines of research and started to clarify some problems of identification, especially where wheat species are concerned. I would like to thank the main organisers, Ramon Buxó and Raquel Piqué, who did a fantastic job and looked after everyone so well. I am now looking forward to the next IWGP symposium, to be held in 2007 in Kraków, Poland.

References

- Bogaard, A. C., Jones, G., Charles, M. and Hodgson, J. G. 2001. On the Archaeobotanical Inference of Crop Sowing Time Using the FIBS Method. *Journal of Archaeological Science* 28, 1171-1183.
- Bogaard, A. C., Palmer, C., Jones, G., Charles, M. and Hodgson, J. G. 1999. A FIBS Approach to the Use of Weed Ecology for Archaeobotanical Recognition of Crop Rotation. *Journal of Archaeological Science* 26, 1211-1224.

- Charles, M., Jones, G. and Hodgson, J. G. 1997. FIBS in Archaeobotany: Functional Interpretation of Weed Floras in Relation to Husbandry Practices. *Journal of Archaeological Science* 24, 1151-1161.
- Jones, G., Bogaard, A., Charles, M. and Hodgson, J. G. 2000. Distinguishing the Effects of Agricultural Practices Relating to Fertility and Disturbance: A Functional Ecological Approach in Archaeobotany. *Journal of Archaeological Science* 27, 1073-1084.