

Editorial

This volume of *Studia Quaternaria* deals with two palaeoecological proxies: non-pollen palynomorphs and subfossil Cladocera.

Palaeoecology is a discipline of relationships between past organisms and the ecosystem in which they lived in. It involves reconstruction of past biota, communities, ecosystems, climate and human impact. Waterbodies and wetlands store knowledge about past environments as the remains of past organisms are preserved in their sediments. Equally important task of palaeoecology is the research about taxonomic and ecological diversity of different organisms.

Non-pollen palynomorphs and subfossil Cladocera are often found in the sediments of waterbodies and wetlands. Non-pollen palynomorphs are microscopic remains of algae, cyanobacteria, fungi, insects, other invertebrates and cormophytes, found during palynological analysis. Subfossil Cladocera are the remains of tiny zooplanktonic animals, their chitinous carapaces, ephippia, head shields, and postabdomens, which are preserved in lacustrine sediments.

Although, non-pollen palynomorphs and subfossil Cladocera analysis are separate areas of study, the remains of both are often found together during laboratory work. Frequently, specialists of non-pollen palynomorphs count and identify the remains of subfossil Cladocera, and in opposite, specialists of subfossil cladocerans find non-pollen palynomorphs very informative, when interpreting their results of

Cladocera remains. Therefore, these two fields of palaeoecology were combined in to two continues workshops, where the scientists of those interests had opportunity to broaden their mind.

The set of the articles in the current issue of *Studia Quaternaria* are the results of the XIII Subfossil Cladocera Workshop and VI Workshop on Non-Pollen Palynomorphs, mentioned above. The international workshops were held in Tallinn University in Estonia from June 16–20th 2014. The goal of the workshops was to discuss the methodological, taxonomic and ecological aspects of subfossil Cladocera and non-pollen palynomorph research. Scientists introduced their results, had microscoping sessions and advised younger researchers.

The articles in this special issue deal with: zooplankton and especially Cladocera in cenote lakes; climatic and environmental changes in the Eemian interglacial period reflected by Cladocera remains; development of dystrophic lakes on the basis of non-pollen palynomorphs; palynological investigations of fen-bog transition and reconstruction of regional vegetation changes and local conditions; human-induced vegetation changes during the Middle Ages, investigated by pollen, non-pollen palynomorphs and microcharcoal particles.

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Participants of XIII Subfossil Cladocera Workshop and VI Workshop on Non-Pollen Palynomorphs, Tallinn, Estonia, June 16-20th 2014