

Abstract

Standing on the uniformitarian principle, quaternary palaeoecology strives to match fossil proxy data assemblages with their vegetation equivalents in order to understand spatiotemporal ecosystem dynamics. Finding such an equivalent in today's world – a modern analogy of an analyzed fossil sample (or a fossil analogy of a known modern sample, respectively), may represent a highly welcomed helping hand with proxy data interpretation. Nevertheless, one might be skeptical to which extent we can rely on such assumptions in rather specific contemporary state of nature, reflecting f.e. increased CO₂ levels, atmospheric nitrogen deposition, habitat fragmentation, or traditional management abandonment. The thesis discusses advantages, difficulties, and some examples of using analogs in quaternary palaeoecology with emphasis on charcoal and pollen analysis since these are the most used in the study of vegetation dynamics over long time scales. It aims to understand and summarize the extent to which modern analogs are helpful with sharpening focus on past landscapes and processes, that formed them into today's state.

Keywords: modern analogs, vegetation reconstructions, palynology, anthracology, charcoal, pollen, quaternary palaeoecology