## **Abstract**

This bachelor's thesis deals with the application of geochemical methods in the area of the deserted village Hol with a focus on phosphate analysis. The goal of the research of the area was to define the relative differences in the geochemical composition of soil in individual parts of intravilan and fields and contribute to the knowledge about their economic utilization. The evolution of the phosphate analysis in the world and in the Czech Republic with the focus on the issue of application of different methods used mainly in the medieval locations constitutes a significant part of the thesis.

Natural conditions and other external effects influencing the content of phosphate in the soil were taken into account. The macroscopic observations during the probe digging proved the absence of a strong humic horizon in a place, where gardens were originally assumed. This absence could point to the location of economic buildings. The bleaching of upper soil horizons in the area could be caused by previous human activity; this phenomenon is connected not only to natural conditions, which are not opportune, but also to the absence of medieval tillage.

The content of P in the assumed gardens does not differ greatly. It is relatively high which could indicate the presence of previous economic buildings or unspecified activities. Relative differences have been marked in the content of P in the field. It cannot be conclusively stated that the content of P in the soil decreases with the distance from holdings or that the holdings' intensity of fertilization differed. It is even possible that the intensity of fertilization was very low.

Due to the low content of minerals in the soils in the area it is appropriate to compare Hol with localities with similar natural conditions where comparable if not the same results in the economic marketability can be expected (Svídna, Kří u Sadské).

## **Keywords**

High Middle Ages; Prague; Bohemia; Central Europe; settlement studies; agrarian history; deserted villages; geochemical methods; land use