

Coprolites are faeces that have become fossilized. They are very important source of palaeozoological and palaeoecological information. Coprolites provide unique insights into animal diet, behaviour and physiology, the digestive processes, and the predator-prey interactions. Additionally, the coprolites are unique microenvironments of exceptional preservation potential for organisms that are otherwise poorly known in the fossil record such as parasites and bacteria.

The Miocene coprolites are poorly known so the present project was undertaken. From the Europe these fossilized faeces are initial known only from the Czech Republic and Spain. Main scopes of the project are document and classify Miocene coprolites collected from Poland, Czech Republic, Germany, Slovakia and Spain and determine accurate producers of these coprolite samples by comparing them to coprolites from the Smithsonian and London National Museums of Natural History and the faeces of Recent animals from Zoological Gardens. Additionally geochemical and mineralogical description of fossil faeces will be make. It is assumed that the producers of coprolites may be terrestrial-aquatic tetrapod fauna, such as: frogs, salamanders, crocodiles and choristoderans, turtles, lizards, snakes and mammals that willingly inhabited the Miocene swamps of Europe. The results from a forementioned research methods will enable to better understand the evolution of primitive vertebrates in Europe over the last 23 Ma, their relation to food acquisition and animal interactions.