

ACANTHOCEFALAN EGGS IN ANIMAL COPROLITES FROM ARCHAEOLOGICAL SITES FROM BRAZIL

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An important point in paleoparasitology is the correct diagnosis of the origin of coprolites found in archaeological sites. The identification of human and animal coprolites, through the study of the shape, size, characteristics after rehydration, alimentary contents, and the presence of parasites, has proved to be accurate for human coprolites. For non-human ones we compared coprolites with recent faeces of animals collected near the archaeological sites, following the methodology above mentioned.

In this paper anteaters coprolites (Tamandua tetradactyla; Myrmecophaga tridactyla) with eggs of Gigantorhynchus echinodiscus (Archiancanthocephala; Gigantorynchidae) were identified.

Key words: Paleoparasitology – animal coprolites – acanthocephalan eggs in coprolites

Paleoparasitology developed through findings of parasites in human coprolites collected from archaeological sites. However, among human coprolites, material of animal origin have also been found, and it is necessary to separate and classify them according to its zoological origin. For that it was developed a methodology comparing the coprolites with animal faeces presently existing in the region of archaeological sites, assuming that no modifications on the composition of hosts and parasitic fauna occurred during this relatively short period of time. It consists in their morphological and morphometric study as well as that of the alimentary contents and parasitic fauna (Araújo et al., 1982).

This report refers to the diagnosis of acanthocephalan eggs in animal coprolites from two geographical regions of Brazil, corresponding to the caatinga and cerrado biomes.

MATERIALS AND METHODS

The coprolites were collected from the following archaeological sites, occupied by prehistoric population:

Archaeological Site of Baixão da Vaca – São Raimundo Nonato, Piauí State – This site

is still under study by the staff of the “Museu do Homem Americano”, headed by Dr Niède Guidon. There are not yet data about radio-carbon dates, however the material examined was related to hearth remains and pigments used in rock paints (Dr Niède Guidon, personal communication).

We received from this site 1 sample with 3 cylindrical and brownish fragments (about 10 x 2.5 cm), covered by a thin layer of clay that, when removed, showed fragments of insects on the surface of the coprolites.

Archaeological Site of Boqueirão Soberbo – Varzelândia, Minas Gerais State – Excavations on this site were performed by the staff of the “Instituto de Arqueologia Brasileira”, headed by Prof. Ondemar Dias. The cave and a rock shelter are situated 45 km from the city of Varzelândia, on a calcareous wall, where rock paints were found. The study about the stages of human occupation are still under way.

Fifty five samples were recovered from layers dated by radiocarbon from 2955 BC (Si – Smithsonian Institute-2789) to 625 AD (SI-4486) (Prof. Ondemar Dias, personal communication).

The coprolites were rehydrated on a 0.5% aqueous solution of trissodium phosphate (Na_3PO_4) for 72 hours (Callen & Cameron, 1960) followed by spontaneous sedimentation on conical glass jars (Lutz, 1919).

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