

## EIMERIA OOCYSTS IN DEER COPROLITES DATED FROM 9,000 YEARS BP

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Excavations performed by the archaeological team of the “Fundação Museu do Homem Americano” at the site of Perna I, São Raimundo Nonato, Piauí State, northeast Brazil, yielded small rounded coprolites from a layer dated by radiocarbon from 9,000 years BP (Before Present).

In the laboratory the coprolites were identified as deer faeces (*Mazama* sp.) by their shape and size, and by comparison with *Mazama* fresh faeces from the Rio de Janeiro Zoo.

After rehydration in trisodium phosphate solution and microscopic analysis, several oocysts characteristic of the genus *Eimeria* were found, measuring 22.97 x 30.64 µm (X20) (Figs 1-5).

Their identification was not yet possible to the species level, since the parasite has not been recorded in *Mazama* spp. However, oocysts with the same morphometric parameters were also found in the zoo deer feces.

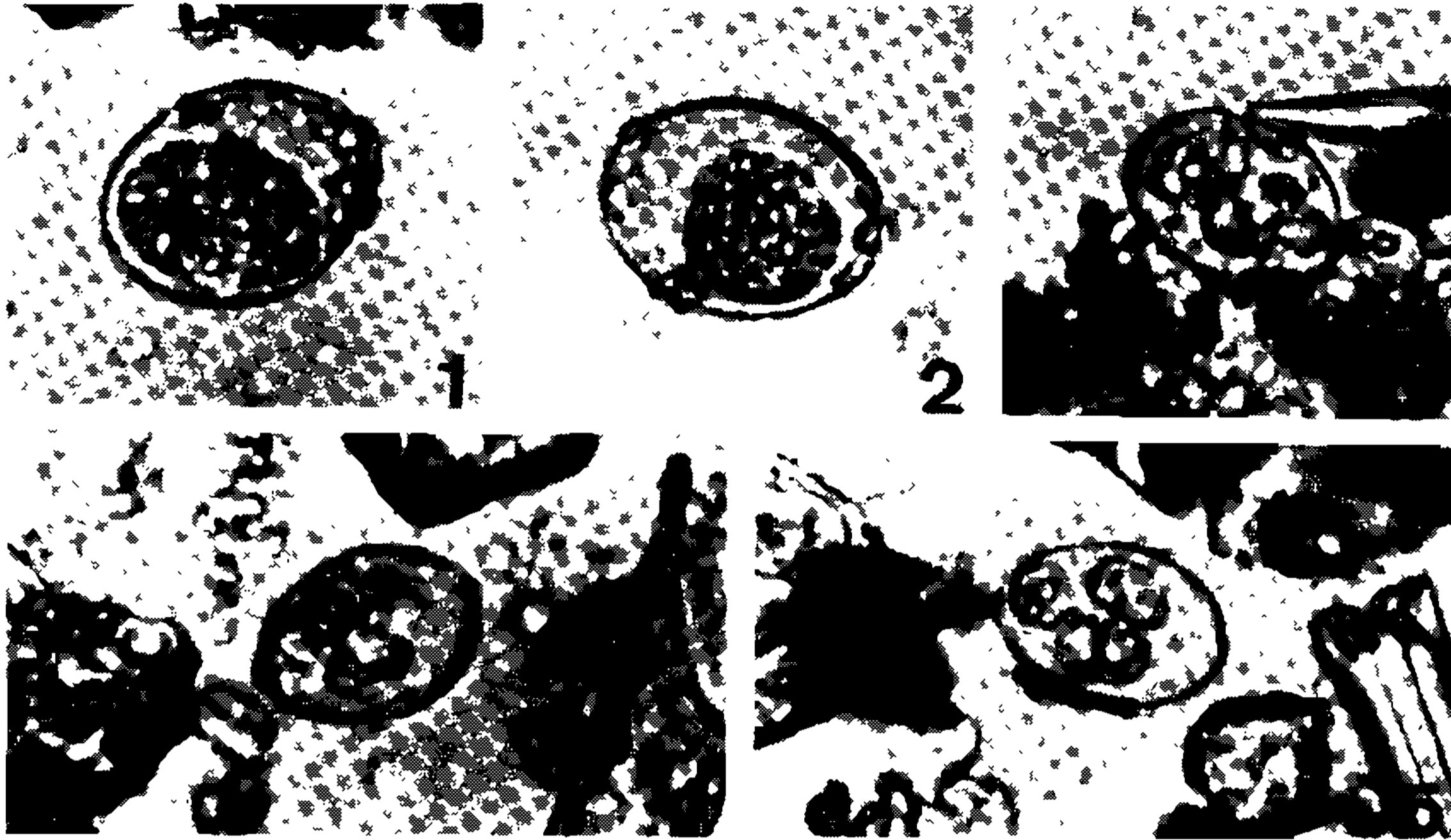
As recorded elsewhere (L. Ferreira et al., 1989, *Mem. Inst. Oswaldo Cruz*, 84: 201-203; A. Araújo et al., 1982, *J. Parasitol.*, 68: 511-512; A. Araújo et al., 1989, *Mem. Inst. Oswaldo Cruz*, 84: 483-496) unindetified paleopara-

sitological findings can induce systematic research on the parasitic fauna of present animal species. In this case paleoparasitology evidences the poor knowledge of South American wild animal fauna.

It is interesting to note that *Eimeria* oocysts are one of the rare protozoans found in archaeological material but, as discussed by G. Hill (1990, *Paleopathol. News.*, 69: 9-12) its diagnosis at the species level is difficult, because of the overlap of oocyst measurements and the usually poor inner structures.

The *Eimeria* oocysts found in deer coprolites suggest a new species, now found for the first time in archaeological material. A review of the available literature shows that the present *Eimeria* species is being found for the first time in archaeological material. Since identical oocysts were also found in *Mazama* deer at the zoological garden of Rio de Janeiro, we considered it a new species, for which the name *Eimeria lobatoi* is proposed in honour of Professor W. Lobato Paraense.

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Figs 1-5: *Eimeria lobatoi* n. sp. oocysts in 9,000 years BP deer coprolites (X20).