

**CERDOCYON THOUS (L.) (CARNIVORA, CANIDAE) NATURALLY INFECTED
WITH LEISHMANIA DONOVANI CHAGASI (CUNHA & CHAGAS, 1973) IN
CORUMBÁ (MATO GROSSO DO SUL STATE, BRAZIL)**

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Chagas et al. (1936, 1937, *Mem. Inst. Oswaldo Cruz*, 32: 321-385 and 33: 89-229) were the first to suspect of the existence of a wild animal as reservoir of *Leishmania donovani* in the New World. The finding of this parasite in a wild mammal of this continent was due to Deane & Deane (1954, 1955, *O Hospital*, 45: 419-421 and 68: 347-364). In Ceará State, they isolated *L. donovani* from a wild canid, *Dusicyon vetulus* (= *Lycalopex vetulus*), in which the infection behaved in the same way as in diseased domestic dogs, suggesting that *D. vetulus* could be a recent host of the parasite.

Later, Lainson et al. (1969, *Trans. R. Soc. Trop. Med. Hyg.*, 63: 741-745), Silveira et al. (1982, *Trans. R. Soc. Trop. Med. Hyg.*, 76: 830-832) and Lainson (1985, *Rev. Soc. Bras. Med. Trop.*, 18: 47-56) found *L. donovani* in specimens of another species of wild canid, *Cerdocyon thous*, in localities near Belém and in the Marajó Island, in Pará State, Amazon region. All animals appeared to be in good health, so that this host might be regarded as a primitive reservoir of the protozoon.

Recently, Sherlock et al. (1984, *Mem. Inst. Oswaldo Cruz*, 79: 511) found a naturally infected opossum, *Didelphis albiventris*, in Jacobina, Bahia State. The marsupial had no symptoms, indicating a primitive host-parasite relationship.

The present paper reports a natural infection of a *Cerdocyon thous* from outside the Amazon region. It was captured in Mr. Alberto Lira's farm, 3 km from Corumbá city, in Mato Grosso do Sul State. During a field work conducted in April and May of 1985 and 1986, wild animals

were caught in traps baited with living chickens or dead fishes. Eleven *Cerdocyon thous* and 2 *Nasua nasua* (Procyonidae) were captured. Sent to the laboratory in Corumbá city, they were externally examined and later anesthetized with ketamine chloridrate (10 mg/kg) and autopsied. Bone marrow and fragments of spleen, liver, kidney, lung and lymph nodes were used for Giemsa stained smears and cultures in NNN maintained at 24°C and examined every week, during 30 days. A pool of liver, spleen and lymph nodes from each wild animal was washed, homogenized in sterile saline with antibiotic and inoculated intraperitoneally (0.5 ml) in two hamsters. These were examined every two weeks and sacrificed three and six months, respectively, after the inoculation, pieces of spleen, liver and lymph nodes being used for smears and cultures.

No parasites were seen in the material obtained directly from the wild animals, but one of the hamsters inoculated with the pool of viscera from one of the *Cerdocyon thous* and sacrificed after six months had become infected with *Leishmania*: amastigotes were found in the spleen and liver, from which cultures with promastigotes were obtained. This strain was sent to the Evandro Chagas Institute, in Belém, where it was numbered 0912. Therefore, of the 11 *C. thous* examined, 1 harboured visceral leishmaniae, or 9.9%.

Nowadays, visceral leishmaniasis in Corumbá is sporadic in humans, being enzootic in the canine population, with epizootic peaks (Rego et al., 1983, Res. VIII Congr. Soc. Brasil. Parasitol.: 2 and Nunes et al., 1986, Res. XX Congr. Brasil. Med. Vet.: 80).