

HELMINTH PARASITES OF CATS¹

Literature exists on the helminth parasites of cats in Puerto Rico. Van Volkenberg² in 1938 reported six helminth species of cats in Puerto Rico, based on the collection from 1924 to 1937 at the former USDA Station in Mayagüez. This note is a report of a survey of the helminth parasites of cats in San Juan, P.R.

Seventy adult cats from the Districts of the Municipality of San Juan known as La Perla and Santurce, during the period April 12 to June 22, 1964, were used in this study. The cats were placed in wire cages and killed with ether following the technique described by Fox and García-Moll.³ Immediately after death, the stomachs, small intestines, and large intestines were separated and opened up in individual containers, and washed with 500 cc. of water. The washings were cleared of debris by repeated pouring and decanting of the supernatant fluid. After gross examination, the intestines were suspended in water at 40° C. in Baerman apparatuses. The resulting sediments were examined under a stereomicroscope. The lungs were pinned down in a dissecting pan half-filled with physiological salt solution and examined for *Aelurostrongylus abstrusus*. The livers were examined grossly for *Platynosomum fastosum*.

Ten species of helminth were observed in 60 (85 percent) of the 70 cats examined. Incidences of infection in percentage: *Ancylostoma braziliense* 85, *Toxacara cati* 75, *Platynosomum fastosum* 72, *Ancylostoma tubaeforme* 51, *Dipylidium caninum* 42, *Diphyllobothrium mansonii* 10, *Trichuris vulpis* 6, *Physaloptera praeputialis* 3, *Taenia taeniaeformis* 3, *Oncicola canis* 1.5 percent. Ten cats were negative.

No *Aelurostrongylus abstrusus* was found. Only 3 percent of the cats examined harbored *Taenia taeniaeformis*, although the incidence of its infective stage, *Cysticercus fasciolaris*, in the rats was relatively high (15.8 percent).⁴

A. braziliense, the cat hookworm, had the highest incidence of infection (85 percent). Mixed infections of *A. braziliense* and *A. tubaeforme* were very common. Usually, there were more *A. braziliense* than *A. tubaeforme* in each

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² Van Volkenberg, H. L., Checklist of parasites found among principal domestic animals in Puerto Rico, *Proc. Helminth. Soc. Wash.* 5: 7, 1938.

³ Fox, I., and García-Moll, I., Rat ectoparasite surveys in relation to murine typhus in Puerto Rico, *Amer. J. Trop. Med. Hyg.* 10: 556-73, 1961.

⁴ De León, D. D., Helminth parasites of rats in San Juan, P.R., *J. Par.*, 50: 428-79, 1964.

affected cat. *A. braziliense* may cause "creeping eruption" in man⁵. According to Maldonado⁶, the parasite may invade the skin on any part of the body of man. Generally, however, it affects the hands, the forearms, the feet and legs, and the buttocks. Cases of "creeping eruption" have been observed in Puerto Rico by Fleischer⁶.

The incidence of infection of *Toxacara cati* was also high (75 percent). It has been reported as one of the causes of "visceral larva migrans" in man⁷. The parasite usually affects children and may invade the liver or the brain⁸.

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⁵ Kirby-Smith, J. L., Dove, W., and White, G. F., Creeping eruption, *Arch. Dermat. and Syph.* 13: 139, 1926.

⁶ Maldonado; J. F., Helminthiasis del Hombre en América, Editorial Científico-Médico, Barcelona-Madrid-Lisboa-Rio de Janeiro, 91-6, 1966.

⁷ Karpinski, F. E., Everts-Suárez, E. A., and Sawitz, W. G., Larval granulomatosis (visceral larva migrans), *Amer. J. Dis. Child.* 92: 34, 1956.

⁸ Beaver, P. C., Zoonoses with particular reference to parasites of veterinary importance, *Biology of Parasites*, Academic Press, New York, N.Y., and London, England, 215-27, 1966.

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