

A Search for Trypanosomes in Mourning Doves¹

BY ANDREW B. COUCH, JR., B. GRABSTALD
AND KENNETH J. KIMBROUGH

Diamond (1954) described a technique for the detection of trypanosomes in geese. We used a similar technique in the search for trypanosomes in each of 64 mourning doves (*Zenaidura macroura*) collected on September 1-2, 1960, 4 miles west of Celina, Denton County, Texas. The condylar surfaces of the femur, sterilized with alcohol, were removed with sterile scissors, and the marrow, forced from the femur with a hemostat, was collected with a sterile nichrome wire. The inoculum was incubated in the blood agar, broth overlay medium described by Diamond. One sample of the culture was stained on the 6th day of incubation, and a second sample was stained on the 14th day.

None of the cultures contained trypanosomes. Stabler (1960), using fresh bone marrow from the femur mixed with Ringer's solution, found trypanosomes in 2 of 51 white-winged doves. He found peripheral blood smears from the infected doves negative. I (Couch) have not found trypanosomes in samples of peripheral blood taken from 1000 mourning doves collected during the last ten years.

The necessity of using bone marrow as the inoculum for culture or as the material for direct study is apparent. Slide preparations of fresh bone marrow were not made of the September, 1960 collection. However, 6 caged mourning doves that were collected at the same time as the aforementioned, and 20 doves collected September, 1961, did not reveal trypanosomes upon direct study of the bone marrow. Bone-marrow smears of 21 mourning doves collected June 7-21, 1961, were also negative for trypanosomes. The value of the technique described by Diamond for the culture of trypanosomes that may occur in mourning doves is questionable, especially in consideration of the failure to demonstrate the presence of these parasites by other techniques.

LITERATURE CITED

Diamond, L. S. & C. M. Herman. Incidence of trypanosomes in the Canada goose as revealed by bone marrow culture. *J. Parasit.* 40: 195-202, 1954.

Stabler, R. M. A parasitological survey of fifty-one eastern white-winged doves. *Ibid.*, 47: 309-311, 1961.

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