NOTES ON MEDIORHYNCHUS GRANDIS, AN ACANTHO-CEPHALAN PARASITE OF MEADOWLARKS*

MARVIN C. BACHMAN and ANA BRUNET BEERY Oklahoma A. and M. College, Stillwater

The material of this report comprises 37 specimens (24 females 2.2-48 mm long, 13 males 1-4 mm long) of *Mediorhynchus grandis* Van Cleave 1916. Some 17 of 28 eastern meadowlarks, *Sturnella magna* (Linnaeus), collected near Stillwater, Oklahoma, in 1946 and 1947, harbored from 1 to 15 examples of the parasite.

The worms were fixed in a saturated aqueous solution of mercuric cyanide at 50° C for 1 hour, washed in 70-percent ethyl alcohol, stained in borax carmine, and studied in temporary mounts in the clearing agent, beechwood crossote.

Early descriptions (Van Cleave 1916 and 1925) of M. grandis were based on specimens taken mainly from the purple grackle, Quiscalus quiscula (Linnaeus), although a few examples from meadowlarks were referred to the species. The type material was not in good condition for study; consequently the early descriptions were somewhat incomplete and at error in certain respects. For these reasons our worms seemed to differ sufficiently from the type to warrant recognizing it as at least a new subspecies. A description to this effect was prepared and submitted to the Journal of Parasitology. The paper was rejected on the grounds that the Journal already had in press a paper by Van Cleave (1947) in which the species under consideration is morefully and accurately described.

We are forced to abandon the view that our specimens represent a new form. Nevertheless, our description included details concerning the embryonated eggs and the reproductive systems in both sexes which apparently have not been covered heretofore in the literature. These features are sufficiently revealed in the accompanying illustrations (Figs. 1-4).

LITERATURE CITED

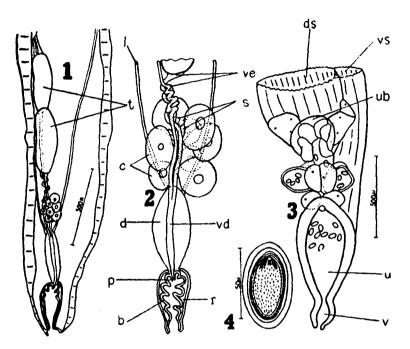
Van Cleave, H. J. 1916. Acanthocephala of the genera Centrorhynchus and Mediorhynchus (new genus) from North American birds. Tr. Am. Micr. Soc. 35(4): 221-232.

Van Cleave, H. J. 1925. A critical study of the Acanthocephala described and

^{*}Contribution No. 134 from the Department of Zoology, Okiahoma Agricultural and Mechanical College prepared under the direction of R. Chester Hughes.

identified by Joseph Leidy. Proc. Acad. Nat. Sc. Philadelphia (1924) 76: 279-334.

Van Cleave, H. J. 1947. The acanthocephalan genus *Mediorhynchus*, its history and a review of the species occurring in the United States. J. Parasitol. 33(4): 297-315.



Figs. 1-4. The sketches all represent Mediorhynchus grandis Van Cleave and were all made with the aid of a camera lucida. Legend: b, bursa copulatrix; c, cement glands; d, ductus ejaculatorius; ds, dorsal ligamental sac; l, ligament; p, penis; r, receptacle of bursa copulatrix; s, seminal vesicles; t, testes; u, uterus; ub, uterine bell; v, vagina; vd, vas deferens; ve, vasa efferentia; vs, ventral ligamental sac.

- Fig. 1. Posterior part of body of male. Note slight overlapping of testes.
- Fig. 2. Posttesticular portion of male reproductive system. Composite study.
- Fig. 3. Postovarial portion of female reproductive tract. Dorsal view. For diagrammatic clarity, the ventral ligamental sac is twised to one side.
 - Fig. 4. An embryonated egg.