

A NEW SPECIES OF NEMATODE WORM FROM THE SAGE GROUSE

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On October 18, 1929, three sage grouse (*Centrocercus urophasianus*) were killed on the United States Range Livestock Experiment Station, Miles City, Mont. On post-mortem examination two large red nematodes were found coiled underneath the horny lining of the gizzard of one of the birds. On October 26, there were found in the gizzard of another sage grouse killed on Moon Creek, a near-by tributary of the Yellowstone River, 108 additional specimens of this same nematode. This is the first record, so far as the writer knows, of the collecting of a nematode belonging to the genus *Habronema* from the gizzard of a sage grouse.

HABRONEMA UROPHASIANA, new species

Specific diagnosis.—*Habronema*:

Male.—14.5 millimeters long by 324μ wide. The cuticle over the entire body is distinctly cross-striated. The head (figs. 1 and 3) is provided with four lips, two large laterals, a dorsal, and a ventral. Each of the lateral lips is divided externally into three lobes, each lobe bearing a more or less distinct tooth on its inner surface. Slightly external to the row of teeth there appears to be a horizontal row of two or three small papillæ. The dorsal and ventral lips have keel-like projections. The lateral ala is 4.16 millimeters long. It arises about 277μ from the anterior extremity of the body. The cervical papillæ, which are indistinct except under high magnification, are a short distance anterior to the ala, about 245μ from the head end. The narrow chitinized pharynx is 50μ long. The esophagus is 3.02 millimeters long and is surrounded by the nerve ring 367μ from the anterior extremity of the body. The caudal extremity is coiled spirally. The caudal alæ are broad; they are supported by eight pairs of pedunculated papillæ and bear four or five pairs of sessile papillæ (fig. 2) arranged as follows: Four pairs of preanal, two pairs of adanal, and two pairs of postanal pedunculated papillæ, and four or five pairs of small sessile ventral papillæ at the caudal

extremity. The spicules are unequal, 1.1 millimeters and 410μ long, respectively. Accessory piece present.

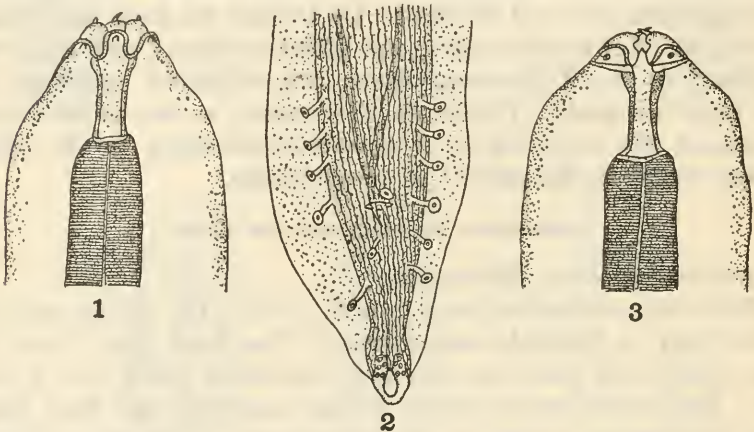
Female.—23.5 millimeters long by 438μ wide. The ala is 4.81 millimeters long. The vulva is distinctly visible and is situated anterior to the middle of the body, 10.58 millimeters from the head end. The ovejector is 324μ long and claviform. The nerve ring surrounds the esophagus at a point 394μ from the tip of the head. The pharynx is 72μ long; the esophagus 3.28 millimeters long. The tail is 148μ long. Eggs are 37 to 42.5μ long by 25.5 to 27μ wide.

Host.—*Centrocerus urophasianus*.

Location.—Gizzard.

Distribution.—United States (Moon Creek, Mont.)

Type specimens.—U. S. N. M. No. 29766; paratypes No. 29767.



FIGURES 1-3.—HABRONEMA UROPHASIANA. MALE. 1, HEAD, LATERAL VIEW; 2, TAIL, VENTRAL VIEW; 3, HEAD, DORSAL VIEW. ORIGINAL

This species differs from *H. colaptes* in the number and position of the caudal papillæ of the male, in the position and extent of the lateral ala, and in the head structure; from *H. uncinipenis* by having cervical papillæ, and by having shorter spicules; from *H. pileata* by being larger in size, in the presence of cervical papillæ, and by having armed lateral lips; from *H. longispicula* by having shorter spicules.

KEY TO NORTH AMERICAN SPECIES OF HABRONEMA IN BIRDS

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| 1. One lateral ala present..... | 2 |
| Two lateral alæ present..... | 4 |
| 2. Lateral lips unarmed; male more than 14 millimeters long..... | 3 |
| Lateral lips armed; male less than 14 millimeters long..... | <i>pileata</i> |
| 3. Left spicule 2.4 to 3.3 millimeters long; cervical papillæ not observed | <i>uncinipenis</i> |
| Left spicule 1.1 millimeters long; cervical papillæ present. | <i>urophasiana</i> , new species |
| 4. Lateral alæ unequal; margin crenulated..... | <i>incerta</i> |
| Lateral alæ equal; left spicule 3.24 millimeters long..... | <i>longispicula</i> |

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