

FOUR NEW SPECIES OF *TRICHOMONAS* FROM THE WOODCHUCK (*MARMOTA MONAX* LINN.)*

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Trichomonas has been observed in the caecal and colic content of a number of species of rodents, but there are no records of the occurrence of this genus in woodchucks.

During the last two years the writer has examined the alimentary tracts of twenty-two woodchucks (*Marmota monax* Linn.) for protozoan parasites—thirteen from Iowa and nine from Kentucky. The caecal contents of all these animals contained numerous flagellates. Smears of the living flagellates were studied in all cases; and in certain selected cases, fixed and stained slides of caecal content were made and studied.

It was possible to recognize four distinct types of *Trichomonas* in these preparations. These forms appear to exhibit sufficient morphological differences from trichomonads previously described from rodents to warrant the creation of four new species.

Trichomonas wenrichi, sp. nov.

This flagellate was found only in woodchucks from Kentucky. Its enormous size and habits render its identification easy. It has many features in common with *T. muris* (Hartmann), as described by Wenrich (1921), and with *T. muris* var. *citelli* (Becker, 1926).

The shape of the body varies from pyriform to sub-spherical. The cytoplasm is neither highly granular nor vacuolated. With Heidenhain's iron-hematoxylin it stains a grayish-blue color.

Three adjacent blepharoplasts are situated at the anterior margin of the body just beneath the cuticle. The group of these bodies measures from 1.5 to 2.4 μ across. The axostyle is a large hyaline rod arising from the ventral blepharoplast and passing through the central axis of the body. The anterior one-third is usually curved ventrally. The posterior half is curved forward in the more rounded individuals. The smallest diameter of the axostyle is at the point of origin which increases to about one-half its length. It tapers rapidly into a point at the posterior end. Two rows of granules are found around the axostyle where it emerges from the body.

A dark-staining plate-like structure originates from the ventral blepharoplast and passes down the ventral surface of the axostyle

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