

### THREE ADDITIONAL TENNESSEE CASES OF HYMENOLEPIS DIMINUTA INFECTION IN MAN

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Since only about 200 human cases of infection with the rat tapeworm, *Hymenolepis diminuta*, have been reported (Belding, 1952) we wish to place on record the finding of three cases in a rural west Tennessee community in Fayette County. All of the eight cases previously reported from the State of which we have knowledge (Keller, 1931) were from the central or eastern portion. These three cases may represent the first from west Tennessee.

Our cases were found during the course of an epidemiological study of *Endamoeba histolytica* which is being reported separately (Eyles, Jones, and Smith, 1953). Three stool specimens were examined from each of 2657 persons in this study, so the three cases represent an overall prevalence rate of about 0.1 per cent. All three cases were from a single Negro family.

The family was composed of 10 members, consisting of the father and mother, aged 59 and 34 respectively, and eight children ranging from 1 month to 14 years of age. The infections were present in two girls, aged 2 and 4, and in a 14-year-old boy. The two-year-old female was also infected with *Ascaris*. All three children had *Endolimax nana* and the two youngest had *Endamoeba coli*. All persons appeared to be symptomless.

The original examinations were made in the autumn of 1950. The family was again examined in the summer of 1952 at which time no *H. diminuta* was found, but five cases of ascariasis were detected.

Visits to procure epidemiological data showed that the family lived in a house of poor construction. The standards of cleanliness maintained were also classed as poor; however, they were not below the average of the community in question. The family stated that rats were frequently seen around the house. Harborage was abundant but fresh rat signs were not seen. No insects were to be found in the food supplies (the flour supply had been recently purchased). Aside from an abundance of flies, no insects were found elsewhere in the house. The livelihood of the family was derived from the cultivation of cotton on shares. Fecal disposal was by means of an open pit privy of poor construction. Water was from a bored well and presumptive tests for coliform organisms upon three occasions showed that it was polluted.

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TENNESSEE ADDERSTONGUE FERNS

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ENGELMANN ADDERSTONGUE

*Ophioglossum Engelmanni* Prantl

*Ophioglossum Engelmanni* is a very unfern-like plant (Fig. 216), as are all species of *Ophioglossum*. Each leaf consists of a broad and entire sterile leaflet and a stalked spike-like fertile leaflet; a combination of characteristics not present in any other Tennessee genus. Some leaves have only the sterile leaflet and are thus entirely sterile. In Tennessee, this fern is mainly or altogether a limestone fern, being found most often in the cedar glades. Leaves of *Ophioglossum Engelmanni* have large areolae formed by anastomosing veins and there are in these areolae many smaller areolae formed by the anastomoses of the smaller veins (Fig. 215, B). The leaf blade is apiculate. These characters are sufficient to separate this plant from *Ophioglossum vulgatum* for this last plant does not have smaller areolae within the large areolae nor does it have an apiculate sterile leaf blade.

The adderstongue ferns are regarded by some fern students as so called because of the supposed resemblance of the acuminate apices of their fertile spikes to the tongues of adders. The word, *Ophioglos-*