The land planarian, Bipalium kewense, 1878, in middle tennessee

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abstract

Several specimens and fragments of Bipalium kewense (Class Turbellaria, Order Trichladina) were found at two sites in middle tennessee: 1) Gallatin, Sumner County and 2) Murfreesboro, Rutherford County. At both sites the populations seemed well established.

introduction

Bipalium kewense (Class Turbellaria, Order Trichladina) is easily recognized by an expanded limaxed head, five dark longitudinal stripes dorsally on an olive background, and a dark patch in the "neck" region. sometimes attaining a length of 30 cm, it is a mucus on which it moves over the substratum.

Although thought to be native to the indo-Malay region (Hyman, 1940), B. kewense has become established in many areas outside of its original range, supposedly through importation with plants and soil. several occurrences of B. kewense in the adjacent U.S. have been recorded: Hyman (1943, 1954); wallen (1954); klotz (1969); dundee and dundee (1963); cole (1969); and Connella and stern (1969). It also has been found in Japan (kawakatsu and aoki, 1968) and

area was well shaded, and the soil under the boards was damp, dark, apparently rich in organic matter, and had a temperature of 24°C. Centipedes, inopods, slugs, and arachnids were associated with the planarians. four trichads were collected and ranged in length from 7 to 12 cm.

On 9 September 1973, Charles T. Aston, a student at mTSU, brought me one specimen of B. kewense (ca. 7 cm long) and three fragments that were the result of inadvertent extraction by fence. these worms were collected from the yard of the W.M. Dedman home Lakeshore Drive, Gallatin, Sumner County. the largest specimen of this collection was fixed in FAA, preserved in 70% ethyl alcohol, and deposited in the vertebrate collection of mTSU.

bipalium kewense, in which numerous specimens of Bipalium kewense were found.

On 14 September 1973, Dr. Charles R. McGhee and I visited the collecting site in Gallatin and found numerous specimens and fragments of B. kewense beneath bricks and a flower pot tray adjacent to a patio at the rear of the house (fig. 1). this area was partially covered with ivy, and the soil appeared similar to that of the Murfreesboro site and had a temperature of 25°C. a large population of inopods and some snails, earthworms, and phaenoges were found with the planarians. eight specimens of B. kewense were collected, the longest of these being ca. 17 cm when extended (fig. 2). all of these worms together with soil and leaf litter from the collecting site were placed in a glass battery jar and maintained following the suggestions of barnwell (1967).

Since both of the collecting sites had relatively large and apparently healthy populations of B. kewense, one may speculate that other populations have become established in similar microhabitats in tennessee.

acknowledgment

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literature cited


