

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

THE ADULT OF OUR COMMON NORTH AMERICAN
CHIGGER.

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The adult instar of our common North American chigger (*Trombicula irritans* (Riley)=*Trombicula tlalzahuatl* (Murray)) was first demonstrated by the writer in 1923.¹ During the summer of 1923 several adults of *Trombicula cinnabaris* Ewing were obtained in Stone Valley, Pennsylvania, and brought to the National Museum. These were kept in small breeding cells and a single larva was obtained which proved to be no other than *Trombicula irritans* (Riley).

This summer (1924) as many as five larvae were obtained from a single isolated female kept in a small breeding cell on my table in the United States National Museum. This adult female was collected at North Beach, Maryland, July 23. She was placed in a cell made out of a large neckless vial. The bottom of the vial was filled with sand and on top of the sand was placed a disk of cork. Water was added to the cork and sand until the atmosphere of the cell was brought to about saturation. As food for the adult a single fecal pellet from a springtail was added. On July 25 the adult *Trombicula* was placed in a new and similar cell but with many fecal pellets from springtails as food and also one dead springtail. In this cell the adult was observed to be very active and to feed from the fecal pellets and also from the cork that had now begun to undergo decay.

On August 13 two very active larvae were observed in the cell. They ran with great rapidity about the same and were ceaselessly restless. The next day five larvae were observed.

¹See Science (1924), Vol. LIX, No. 1515, Sup., p. XIV.

These were all killed and mounted on microscope slides. They agreed perfectly with the larva obtained in 1923, and were no

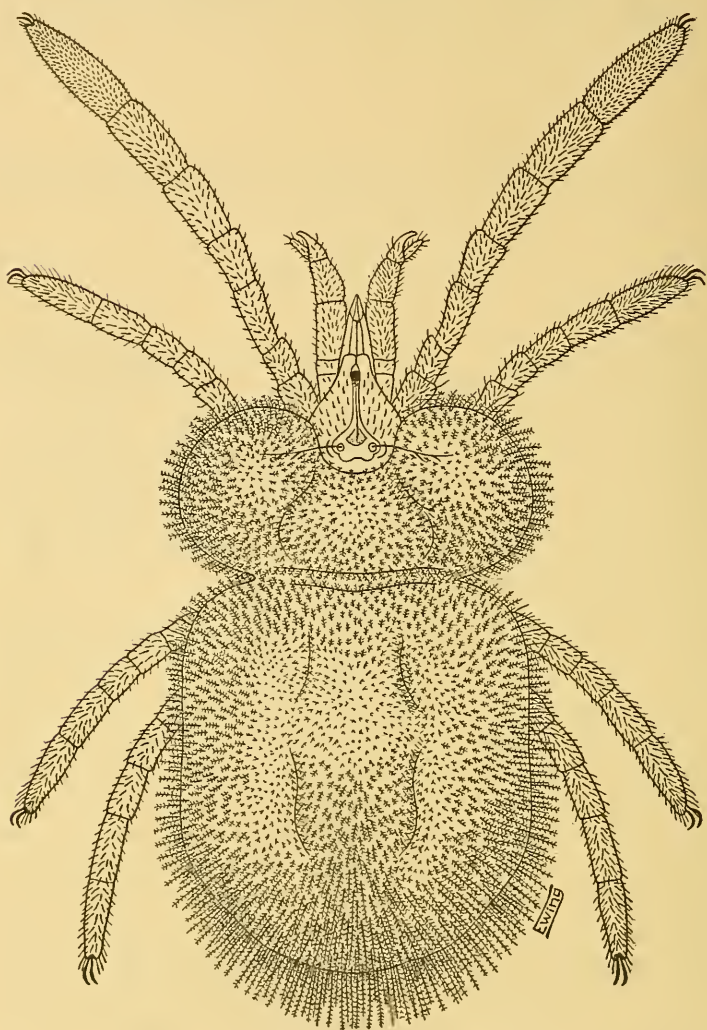


Fig. 1. Adult instar of our common North American chigger, *Trombicula irritans* (Riley). This drawing is of a female from which five larvae were obtained.

other than our common North American chigger, *Trombicula irritans* (Riley). Thus the prediction of the writer that, "The

adult form of our common chigger is very probably *Trombicula cinnabaris* Ewing,—” (Jour. Agr. Res., Vol. XXVI, No. 9, p. 402) is shown to have been a good one.

Already much has been learned in regard to the distribution, habits, etc., of the adult of *Trombicula irritans* (Riley). It is desired to state here only that it is a scavenger which lives in nature largely on fecal matter and decaying woody substances. Upon these materials I have kept many adults indefinitely in captivity and in the best of condition.