

tufts of hair near its base and also a patch of characteristic spines shown at *a*. The last segment has a single dorsal tuft with a large bristle below it; the ventral fan rather long and prominent and four ventral small tufts.

Length.—When mature, 9 mm.

The *pupa* has cylindrical siphons contracted towards the apex, with small, slightly-oblique, opening; there is a dense median tuft on the first abdominal segment. The anal fins are large, rounded, with median rib and double-contoured border towards the base of each fin; a distinct apical dorsal tuft on the last segment.

Length.—5 mm., with anal fins 6 mm.

HESSIAN FLY REARED IN THE LABORATORY.

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It has always been claimed that there is but one brood of Hessian Fly in Minnesota. On June 25th of current year larvæ of Hessian Fly in second stage were found working on wheat in an adjoining county, brought to the Experiment Station and the wheat plant placed in moist sand in breeding jar in laboratory. These specimens quickly formed puparia, and one fly, a female, emerged July 19th. She lived about two days, before dying depositing between 80 and 90 eggs on green blade of wheat and on dried wheat stem in breeding cage. The eggs were laid indiscriminately on leaf and stem, some singly, some in clusters of two or three and some in strings attached by ends.

On July 1st one larva was found in field in first stage, brought into laboratory on wheat plant, but did not live.

On the same day larvæ in second stage were secured and placed in breeding jar in laboratory. Upon July 8th they formed puparia, and on Aug. 16th one female emerged. She died Aug. 18th without ovipositing.

The season here has been cold and damp, ideal condition for Hessian Fly. Probably more favorable conditions existed outside than in the laboratory.