

PIPUNCULIDAE AND STYLOPIDAE IN HOMOPTERA.

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Few entomologists realize the number of Homoptera that are parasitized by *Pipunculidae* and *Stylopidae*. Dr. R. C. L. Perkins* has described a number from Australia and Hawaii, and I have found them equally numerous wherever I have looked for them. When in Scotland several years ago I swept over a small patch of grass for *Delphacidae* and found about thirty per cent. bearing *Stylops*, and when collecting *Delphacidae* in the Hawaiian Islands I have always noticed that a number of these insects were parasitized. In the Philippines, Java, and the Malayan Islands, Jassids and Fulgorids bearing these parasites are not uncommon. If careful search were made among British Homoptera it is highly probable that parasitic *Pipunculidae* or *Stylopidae* would be found to be not uncommon.

While studying the male armature of *Delphacidae* in the Hawaiian Islands, I have noticed that a number of parasitized hoppers had abortive genitalia. Upon dissecting such specimens it was always found that the parasites had injured or destroyed the testes. The abortion of, or alteration to, the genitalia was not confined to the aedeagus or penis, but was common to the armature of the anal segment, the aedeagus, the genital styles, and to the connecting-rods that co-ordinate the movements of these organs. This connexion between the testes and the external genitalia is of interest, as it may throw light upon the specific differences of these organs; for if an injury to the testes can cause such a large alteration to the genitalia, is it not possible that an alteration of the germ-plasm may account for the specific phallic differences?

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Acanthocinus aedilis L. in N. Devon.—On September 1st, 1917, I was at Mortehoe, N. Devon, and noticed that the shore from Croyde, along Woolacombe Sands and Morte Point to Rockham Bay, was thickly strewn with pit-props, which were being washed up from a vessel that had gone down off Hartland some days previously, and the sea continued to throw up logs in large numbers for a fortnight. A fine ♂ specimen of *Acanthocinus aedilis* was captured here by a lady, with the result that a search was made by my friend Mr. C. D. Heginbotham and myself amongst the pine-logs, which were about 10 feet long by from 3 to 12 inches diameter. A large proportion of those thrown up on the rocks were entirely stripped of bark through the rough treatment they had received, and a careful examination of them disclosed a not very

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