

Dr. A. Dohrn has made inquiries in Rome about the Hessian fly, but without success.

The passage quoted out of A. Costa's lectures is of prominent interest. It proves without any doubt that the insect is *not C. tritici*, which never lays the eggs between the stem and the leaf, and which has never the coloration of the imago as given in the description. Both facts agree perfectly well with *C. destructor*. The determination of a species of *Cecidomyia* of course can not be considered to be doubtless before specimens have been compared, the more as the short description contains some statements which if based on personal observation, are entirely new.

One of them is decidedly startling. I point to the fact that some larvæ after having completed their development, give place to an *agamous reproduction*. [Compito che hanno, queste larve, il loro sviluppo, mentre talune danno luogo alle riproduzioni agamiche altre, nel posto stesso in cui trovansi si trasformano in pupe delle quali dopo pochi giorni schiudono gl'insetti perfetti che, depongono nuove uova.]

I have purposely put the Italian text in brackets after the translation, as the end of the passage seems to state that the larvæ which have an agamous reproduction do not when full grown transform themselves into pupæ. A similar reproduction, as is well known, has been observed in several species of *Cecidomyia* by Nic. Wagner, Meinert, Leuckart and others—the so-called paedogenesis. It has never been observed till now for the Hessian fly, and the principal reason for doubt that Mr. A. Costa has really meant paedogenesis, is the fact that he has not expressed himself in a more explicit manner, though he must have been aware of the importance of his statement. I should remark that Mr. Balt. Wagner speaks indeed of two different kinds of larvæ of the Hessian fly. The fact that females of the Hessian fly lay eggs without copulation was long ago published by myself. These eggs developed so far that the segmentation of the embryo was visible. The glass tube containing the eggs having unfortunately been left in the sunlight, no further development could be observed.

Mr. A. Costa states that the larvæ sometimes make niches by *shaving* the wall of the stem. This is contrary to all other observations, which state that these niches are made simply by pressure. Asa Fitch is very explicit about these facts, but when he states that the larvæ do not enter the central cavity of the stem, he is largely at variance with the direct observations of Mr. B. Wagner and myself. I have indeed still before me