

EPIMECIS WILTHI CRESSON AND ITS HOST.

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The life history of the Ichneumonid, *Epimecis wiltoni* Cress., as far as could be ascertained, is entirely unknown. The observations here presented show that its larva is an external parasite of spiders. Another genus, *Polysphincta*, of the same family, has very similar habits, being also an external parasite of spiders.

While collecting with Mr. C. Shoemaker at Black Pond near the mouth of Difficult Run, Virginia, September 14, 1913, a spider, (*Epeira trivittata* Keys.) was found which had a very small parasitic larva, probably recently hatched, upon its thorax. The spider with larva attached was brought to the Museum and placed in a breeding jar, where the spider soon spun a web, in which it stayed. The larva grew gradually, while the spider remained alive, and apparently quite healthy, until the sixth day. The larva was then found to have grown to over twice the size that it had been the previous day. It was now hanging by two of its prolegs to a strand of the spiders web, and with its mouth thrust into the spider's abdomen, was supporting the dead and collapsed body of its host. The following morning it had dropped the spider and had spun its cocoon among the threads of the spider's web. The adult issued eleven days later, October 1, 1913.

CHANGES DURING QUIESCENT STAGES IN THE
METAMORPHOSIS OF TERMITES.BY THOMAS E. SNYDER, *Bureau of Entomology.*

There have been several theories as to when the larvæ of termites become differentiated to the various castes in the social organization, the prevalent one being that undifferentiated larvæ are developed to the castes by the character of the food that they receive. The results of Heath's¹ experiments, however, to determine the relation of various kinds of food to polymorphism, were negative. In the case of ants, Wheeler² with Emery believes, "the adult characters to be represented in the germ as dynamical potencies or tensions rather than morphological or chemical determinants" and that "nourishment, temperature and other environmental factors merely furnish the conditions for the attainment of characters

¹ Heath, H. The Habits of California Termites. Biol. Bull., Woods Holl, vol. iv, December, 1902, pp. 47-63.

² Wheeler, W. M., The Polymorphism of Ants, Bull. Amer. Mus. Nat. Hist., vol. xxiii, January, 1907, pp. 1-93.