Mindre Meddelelser og Anmeldelser.

Three Species of Goniocryptus (Hym. Ichn.) reared from Cocoons of Spiders.

In July and August 1933 in Adserbo Plantation I found the spider *Xysticus ulmi* abundantly at the tops of *Phragmites*, where it watched over its white egg-web. Nevertheless, in many cases ichneumon flies had laid their eggs in the egg-web, alwaysonly one egg by each spider. It was generally possible without opening the egg-web to see, whether there was a parasite in it or not, because the larva of the ichneumon fly had so late in the summer already spun its cocoon, the outline of which stood off on the outside of the egg-web as an elongate body; to be quite sure it only needs to feel the egg-web, and when it feelshard it is infested with a parasite. There was never more than one cocoon of the parasite in an egg-web (fig. 1).

The collected cocoons were kept in a warmed apartment, and with long intervals the imagines emerged during the winter, which of course indicates that in nature they are destined for hibernation and not emerge until in June, when the spider commencesits egg-laying. On one of the first days in July 1934, I found in a single egg web a hatched larva of the ichneumon fly. --It is a fact, which applies to all the finds, that the larva of the ichneumon fly had devoured all the spider's eggs. Dr. A. Roman at Stockholm, who was so kind as to determine the reared ichneumon flies, ascertained them to belong to the following two species: Goniocryptus pictus Thoms. and G. cf. rusticus Tschek. According to Roman the two species are only distinguished by the colour; as regards the structure of the body they are alike; as moreover both species were reared from the same material and the individuals of the two species emerged in a succession regardless of rules, they may probably be forms of the same species.

Goniocryptus glabriculus Thoms. was reared by me from the egg-webs of Ocvale mirabilis. As soon as its larva has pupated, this is visible on the egg-web, which - being now emptied of the eggs — the larva draws close on to its cocoon, so that the egg-web becomes the outside clothing of the parasite's cocoon, the shape of which it has now assumed (fig. 2). — The reared cocoons were all taken direct from spiders, as Ocvale very long continues carrying its egg-web with it when infested with parasites.



The cocoons were taken in July and August 1933 at Adserbo but were reared in an apartment the following winter. In nature the imagines would have emerged the next summer; whether it takes place early or late in the summer makes no difference, as O. mirabilis is found with its egg-web from the end of June until so late as in September.

In ancient literature it is recorded that species of this genus were bred from spiders' cocoons, thus according to Schmiedeknecht (Opusc. Ichn. 1904) Goniocr. gradarius Tschek, was bred from cocoons of Drassus.

I want to render my best thanks to Dr. Roman for his amiable readiness to meet my desire of getting the three species of Goniocryptus determined.

E. Nielsen.

Explanation of the Illustration.

- Fig. 1. At top, 3 egg-webs of Xysticus ulmi; that in the middle is opened, showing a cocoon of Goniocryptus pictus and the cocoon of another parasite. In the second series, left, an open egg-web with a cocoon of G. pictus is shown. All the remaining of the figure are cocoons, more or less bright, of Goniocryptus; the largest has a length of 8 mm.
- Fig. 2. Egg-webs of Ocyale mirabilis. On left a fresh-made egg-web, no. 2 from left is an old egg-web deserted by the young; the remaining egg-webs contain cocoons of Goniocryptus glabriculus. Natural size. E, Nielsen phot.