

the males walking at the same rate of speed in their ranks. The activity of the colony appeared to reach its height between five and seven o'clock, and then to subside as the night came on, when the colony again clustered with the males in its midst. Even a lamp kept in the room with the nest, if not too near it, failed to interrupt their slumber. This striking rhythm of alternating activity and rest was observed on each of the nine days during which the males lived, and was continued by the workers alone for some weeks afterwards".

Als Beute fanden Wheeler & Long im Nest Larven und Puppen von *Pheidole* (3 spp.) und *Solenopsis geminata*. Sie sahen sie auch Carabiden (kleine Arten von *Harpalus* und *Pterostichus*) eintragen. Die Beute wurde erst mehrere Tage aufbewahrt, bevor sie verzehrt wurde. Die im Nest gefundene Brut von *nigrescens* bestand aus zahlreichen nackten Puppen und wenigen reifen Larven. Die Larve wurde von G. C. Wheeler (1943) beschrieben.

Bisher wurden vier Staphyliniden-Arten als Gaeste von *nigrescens* bekannt: *Ecitonidia wheeleri* Wasm., *Ecitoxenidia brevipes* Brues, *Ecitopora tenella* Wasm. und *Ecitopora laticollis* Brues. Wheeler beobachtete *Ecitonidia* im kuenstlichen Nest. Er schreibt (1900 p. 571): "Of greater interest is a small staphylinid beetle 2.75 mm. long, which is so much like a small worker, *Eciton sumichrasti* [*nigrescens*], that I did not notice it in the artificial nest till the ants had been under my observation for a month! One morning I happened to see it as it was marching around the nest in the files of the Ecitons. The movements of its legs and antennae were precisely like that of its host. This resemblance extends also to its size, coloration, and the character of the surface of its body. Its head, thorax, and elytra are opaque, dark red, rather irregularly punctate, and furnished with a few scattered hairs. The abdomen is smooth and shining, of a lighter red color, widened towards the tip, and covered with longer, denser hairs than the remainder of the body. The eyes are well developed. The antennae show a decided resemblance to those of the ant. The most striking character; however, is a very deep, elongate elliptical depression in the middle of the pronotum. The bottom of this depression seems to be formed by a white membrane. It is difficult to assign a function to this singular structure, unless it be the orifice of a huge gland that may secrete some substance relished by the Ecitons. During life the broadened tip of the shining red abdomen is bent up after the manner of staphylinids, and the resemblance of the insect to a worker Eciton becomes even more striking". Am Schluss fuegt Wheeler hinzu (p. 573): "It is... an admirable illustration of the truth of some of Wasmann's remarks concerning these cases of mimicry. Since the Ecitons are blind, the color of the ecitophiles is of no consequence and may differ from that of the ants, — although in the present case there is great similarity even in coloration, — but the form and surface sculpture of the guest insect are of the greatest importance. Wasmann believes that the resemblance in sculpture between the staphylinids and their hosts — rough beetles with the opaque species of Eciton, and smooth beetles with shining species of the ant — enables the former to prey on the eggs and larvae of the Ecitons or to share their booty without being suspected as aliens. It is, indeed, quite probable that we have here a new and elsewhere unknown form of mimicry — a deception of the sense of touch which must be extraordinarily keen in these blind ants". — Ueber die Lebensweise von *Ecitopora tenella* machen Wheeler & Long (1901, p. 161 nota 1) einige Angaben.