

June 10. *Duloticus* colony: 5 or 6 pupae emerged; scouting activity of the workers declining.

June 21. *Duloticus* colony: most of the pupae emerged; 3 or 4 workers scouting.

June 27. *Duloticus* colony: all but 1 or 2 pupae emerged; the brood consisting of 2 winged females, 1 male, and about 50 workers. On this day and thereafter there is no more scouting activity on the part of the workers. A few larvae and eggs are present which apparently are not growing. This completion of the emergence of the brood and the cessation of scouting activity would take place under natural conditions, so far as I can determine, between August 5th and 10th.

September 4 and 5. *Duloticus* colony: nuptial flights.

The development of the brood and the onset and cessation of scouting activity in *L. duloticus*, it will be noted, is the reverse of what it is in *Harpagoxenus americanus* (Wesson, 1939). The two forms may be contrasted as follows:—*duloticus*: brood develops principally from eggs laid the same spring; *americanus*: brood develops from larvae produced the previous summer; *duloticus*: nuptial flights take place in September; *americanus*: nuptial flights take place immediately after emergence of the winged brood; *duloticus*: workers begin scouting in the spring about the time that the eggs laid at the commencement of the season begin to hatch, and cease on the emergence of the brood in midsummer; *americanus*: workers begin scouting after the emergence of the brood and continue to do so until fall.

### III. SLAVE RAIDS.

I have observed but 3 slave raids by *L. duloticus*. Since the 3 were very similar, only 1 is described as follows:—

April 27, 1938. A *duloticus* colony, containing 28 workers, a queen of *duloticus*, and about 40 *curvispinosus* slaves, was placed at one end of a box. At the opposite end (14 in. distant) was placed a *curvispinosus* colony containing 30 workers, a dealate queen, about 80 pupae, and some larvae. Both the *duloticus* and *curvispinosus* were nesting in small, glass-covered wooden chambers designed to imitate the natural nesting sites of the ants. The room in which the box was placed had been cool in the morning, but became much warmer during the afternoon. At 1:30 P.M. (temp. 73° F.) 2 *duloticus* workers emerged from the nest. By 2:15 (temp. 79° F.) 6 *duloticus* were scouting. Meanwhile, most of the remaining workers in the nest tended to cluster just inside the entrance. The scouting workers walked rather slowly and hesitatingly over the floor and sides of the nest, and reminded one