

adjoining the laboratory where all but a few trees had been cut down to make room for a cassava patch and where the vegetation at the edge of the intact jungle could be easily scrutinized. Here the *Camponotus* and *Crematogaster* were the dominant insects over an area of several acres. The former species, for its size the fiercest and most aggressive *Camponotus* of my acquaintance, makes observation in this locality anything but an unalloyed pleasure. In company with the tiny *Crematogaster* it forms long files continually descending and ascending the trees, traversing the soil and exploring the foliage. The main occupation of both species is herding Jassids and Membracids on the terminal twigs of various Melastomaceae. Leguminosae and other plants and collecting nectar from the huge extrafloral nectaries of several species of *Inga*. The pinnate leaves of these plants, unusually common along the edge of the clearing, are remarkably adapted to the visits of these and other ants. A large, saucer-shaped nectary is situated at the junction of each pair of leaflets and the alate sections of the petiole form a series of convenient bridges running the full length of the leaf. Frequently a *Crematogaster* or a *Camponotus* or one of each was seen drinking at each of the nectaries of a leaf. *Ectatomma tuberculatum*, a large sleepy Ponerine, was also an habitual visitor to these sugar fountains. The *Crematogaster*, when alone or in small numbers, in a timid and inoffensive ant, too diminutive to be annoying, but touching a leaf or twig on which a few of the *Camponotus* are engaged in collecting their sweets is an experience to be remembered. The large workers, without a moment's hesitation, bury their mandibles in one's skin, and curving the gaster forward drench the wound with formic acid. The resulting pain is surpassed only by that inflicted by the much larger though fortunately less common *C. abdominalis*, which is also a member of the subgenus *Myrmothrix*.

The common files of the *Camponotus* and *Crematogaster* are sometimes very long—more than 70 to 100 feet—and the workers of both species, intermingled, straggle along in both directions, the *Camponotus* frequently stopping for an instant to exchange antennal greetings with the *Crematogaster*.

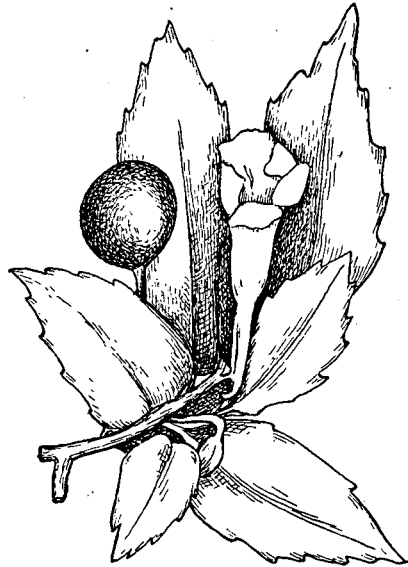


FIG. 3. Flower and berry-like fruit of an ant-garden epiphyte (Gesneriaceae), from a sketch of a specimen found by Wm. Beebe at Kartabo in November, 1920.