

faced, and that is the reason for studying insect behaviour. It is not enough for the imago to deposit its eggs upon the food-plant of its larva. The crisis of pupation has still to be passed. And all this is done, without reflection or premeditation, by hereditary predestination depending ultimately upon the specific physico-chemical properties which make up the "hereditary patrimony" of the organism.

The habits of the insects of to-day afford a picture, more or less altered by repetition and by circumstances, of the habits of their ancestors, so that their observation has an antiquarian or historical interest as well as an economic bearing, and it is not necessary to mix up these two aspects. It is one of the paradoxes of natural history that ancestral types can persist for untold ages alongside the more differentiated types. The tropical genus *Peripatus* is to the insect world what *Amphioxus* is to fishes. The latter has the English name of lancelet, and by a corresponding verbal transposition, *Peripatus* might perhaps become known as the "larvelet" since it has some of the properties and much of the appearance of an insect larva. Its habits are to this extent amphibious that whilst breathing air it requires an excess of moisture; hence, like the alpine salamander amongst batrachians, it is characteristically, though not invariably, viviparous. Whether oviparous or viviparous, there is no free larval period in the life-history of *Peripatus*; its trophic and reproductive phases are not separated.

The multitudinous traits of insects may be grouped under two categories corresponding approximately with their larval and imaginal phases. Idiotropic tendencies comprise the feeding, resting and protective devices of individual life. Phylotropic tendencies comprise habits looking to the preservation of the race, e. g., nest-building, egg-laying and brood-nursing. As an example of a casual observation of an idiotropic performance I may relate a small incident in my own experience. In December, 1905, I was descending the bund or high embankment of one of the ancient irrigation tanks of Ceylon when I noticed a dark brown Mantid ensconced amidst the green foliage of a low shrub. It happened to be a male of *Gongylus gongylodes*, a floreate species with foliaceous expansions on prothorax, legs and abdomen, known to Aldrovandus and figured by him in 1602.