

other Myrmicinae, they do not spin cocoons but form naked pupae, they nevertheless possess huge salivary glands. Even in the very young larva the salivary receptacle on each side is full of a clear liquid secreted by the large cells of the two branches of the gland. In the nearly full-grown female larva the glands are very voluminous and their lumen and that of the receptacle full of secretion shown as dark, compact masses in the figure, which was, of course, drawn from a specimen hardened and dehydrated in alcohol. As such an amount of saliva would hardly be necessary for digestive purposes and as it is not used in the form of silk by the full-grown larva, it probably serves as a store of food for the nurses. The *Paedalgus* larvae, therefore, would seem to resemble the repletes of honey ants . . . except that the food for the workers is metabolized and stored as saliva by the larva, instead of merely being ingurgitated and stored in the ingluvies, or crop by a certain number of workers. From the fact that other Myrmicine ants, although they spin no cocoons, often have well-developed salivary glands, we may infer that these organs have much the same function as in *Paedalgus*" (pp. 301-302). Fig. 5 on p. 303: *A*, very young larva in side view showing internal anatomy; *B*, nearly mature female larva in side view showing salivary glands.

Wheeler, 1922: "They are white, nearly spherical, with short neck, small head, and very feebly developed mouthparts, indicating that they are fed by the tiny workers with regurgitated liquid food. They are . . . covered uniformly with short, stiff, sparse hairs, each of which has two recurved branches. Even in alcohol, the larvae cling compactly together in masses by means of these hooks. When stained and cleared, the larvae are seen to possess unusually voluminous salivary glands. The youngest individuals, scarcely 0.2 mm. long, have the receptacle full of clear secretion. In older larvae, the secretion after dehydration forms great masses in the receptacles and lumen of the glands. As these organs are not used in spinning a cocoon, it is very probable that the secretion . . . is elaborated and used as a food for the workers (trophallaxis)" (pp. 179-180). Fig. 43 on p. 179 = Wheeler, 1918, Fig. 5.

In this same article Wheeler concluded (pp. 118-119)