

play any necessary or important role in the economy of *Sarracenia*. Speaking of the *Sarcophaga* larva, Mr. Ravenel asks, "May he not do some service to *Sarracenia* as *Pronuba* does to *Yucca*?" And if so, may not all this structure for the destruction of insects be primarily for his benefit? Can he be merely an intruder, sharing the store of provision which the plant, by ingenious contrivance, has secured for itself, or is he a welcome inmate and profitable tenant? Self-fertilization does not take place in *Sarracenia*, and the possibility that the bristly flesh-fly aids in the important act of pollination, lends interest to the facts. No one has witnessed with greater pleasure than myself the impulse which Darwin has of late years given to such inquiries; but we should be cautious lest the speculative spirit impair our judgments or ability to read the simple lesson of the facts. My own conclusions summed up are:

*First*: There is no reason to doubt, but every reason to believe, since the observations of Dr. Mellichamp, that *Sarracenia* is a truly insectivorous plant, and that by its secretions and structure it is eminently fitted to capture its prey.

*Second*: That those insects most easily digested (if I may use the term), and most useful to the plant, are principally ants and small flies, which are lured to their graves by the honeyed path, and that most of the larger insects, which are not attracted by sweets, get in by accident and fall victims to the peculiar mechanical structure of the leaf.

*Third*: That the only benefit to the plant is from the liquid manure resulting from the putrescent captured insects.

[Mr. Ravenel, in making a transverse section near the base of the young leaf, noticed large tubular cells passing down through the petiole into the root, and much of the liquid manure may possibly pass through these into the root stalk.]

*Fourth*: That *Sarcophaga* is a mere intruder, the larva sponging on and sharing the food obtained by the plant, and the fly attracted thither by the strong odor, as it is to all putrescent animal matter or to other plants, like *Stapelia variegata*, which give forth a similar odor. There is nothing to prove that it has anything to do with pollination, and the only insect that Dr. Mellichamp has observed about the flowers with any frequency, is a Cetonid beetle—the *Euryomia melancholica*, which, with other species of its genus, is commonly found on many different flowers.

*Fifth*: That Xanthoptera has no other connection with the plant than that of a destroyer, though its greatest injury is done after the leaf has