



Insect of the Week (81), *Aradophagus* sp. Ashmead, (Hymenoptera: Platygastroidea: Scelionidae: Scelioninae: Aradophagini)

Bob Copeland (ICIPE)

The genus *Aradophagus* (see image) was described by William Harris Ashmead in 1893. He described the discovery as follows “The two specimens in my collection were taken by myself in April 1887 under live oak bark badly infested with *Brachyrhynchus granulatus* Say and *Pityophthorus querciperda* Swz, the old egg masses of the Aradid being quite plentiful. I believe its habits will prove identical with other Scelionids and it will be found to be a parasite in the eggs of the Aradida”. He was right on both accounts. *Aradophagus* presently is placed in the Scelionidae, subfamily Scelioninae, as the sole genus in the tribe Aradophagini. It is a small family of small wasps numbering 11 species worldwide with four species known from the Afrotropical region. Specimens are readily identified by virtue of their dorso-ventrally flattened body (particularly the abdomen) together with their banded wings. There are few records of their hosts and these suggest that eggs of flat bugs (Aradidae) are attacked. The first fossil record of *Aradophagus* is reported from late Tertiary amber of Hispaniola (Dominican Republic), a relatively recent 10-15 mya.

While working as the publisher of an agricultural journal in Florida, Ashmead became interested in the insects injurious to oranges and the tiny parasitoids that controlled them. Soon thereafter he was offered and accepted a position as a field officer with the United States Department of Agriculture. Later he became the curator of the

Department of Insects at the US National Museum. Ashmead was a classic taxonomist, working away on the large collection in what is now the U. S. National Museum of Natural History. Ashmead's most important work is contained in his "A Monograph of the North American Proctotrypidae" in which he described many new genera and species. Over his lifetime he published ca. 250 articles in various journals. Ashmead was such a dedicated researcher that his colleagues were worried that the effect of such a singular interest to the exclusion of all other endeavors was deleterious to his health. "..... he devoted himself with such intensity to the study of Hymenoptera that he gave himself no rest, and literally wore himself out, to the grief and distress of his family and many friends." Ashmead died a young man.

Among the many insects described by Ashmead was the type species of the genus *Aradophagus* which he published in the year 1893. Similarly, 1893 was the year he published the genus name *Ampulicomorpha* and in the same paper. Reading of this I thought back to the period 2009-2010 when ICIPE was working in Burundi looking for aquatic insects in Lake Tanganyika that might be feeding on the invasive aquatic plant *Hydrilla verticillata*. We also ran a Malaise trap in Burundi in which we captured a few specimens of a new species of the parasitoid wasp family Embolemidae, parasitoids of true bugs. This species was subsequently described by Massimo Olmi, an expert on embolemids, as *Ampulicomorpha nzigidaheraei*.

It was a nice coincidence that brought together the Insect of the Week project with the Hydrilla project, a very different effort. During the latter project we worked together with the Institut National pour l'Environnement et la Conservation de la Nature (INECN). The chief scientific officer at the INECN was Benoît Nzigidahera, after whom the new *Ampulicomorpha* species was named. Benoît was an intrepid naturalist and, as evidenced by the several obituaries that followed upon his premature death, he was an inspiration to the students and junior officers that he mentored and a great friend to the many international scientists that he worked with. His interests were many and spanned the range of living things from Mycology to Botany and Zoology, especially spiders. He published many papers in international and national journals and was president of the national committee of the International Union for Conservation of Nature (IUCN) in Burundi.

Born in 1964 in Ruyaga (Bujumbura, Burundi), Benoît Nzigidahera died on May 10, 2018 in Bujumbura. It was another coincidence to realize that both he and Ashmead died young, at the ages of 54 and 53.