L-Università ta' Malta Faculty of Science

Department of Biology

Department of Biology Museum Newsletter April 2020 | No 7

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Curator's Note

This issue of the Newsletter is being composed at home as I have not been to the Museum since mid-March. I am homebound as I am considered vulnerable. I considered skipping the April Newsletter but then decided that I would produce it in a reduced form since I have no access to Museum specimens. Fortunately, I happen to have a copy of the database for one of the Museum's reference collections on my home computer, so that section will be featured as usual.

I know most of the readers of the Newsletter, whether Academics, Technical staff or students of the Department of Biology, as well as others at the Institute of Earth Systems and the Junior Lyceum, are working under similar restrictive conditions. Online lectures, I understand, are ongoing, at least until the Easter recess. Whilst congratulating all those delivering and receiving such instruction by remote means, in all Departments, Insitutes and other bodies of the University and Junior College, I urge all to keep up the good work. We will surely see better times soon. Till then, I hope this small contribution of mine will serve to alleviate these difficult conditions.

News

Peacock Spiders

One of the largest families of the arachnid Order Araneae is the Salticidae or jumping spiders, readily recognisable because of a pair of large headlamp-like eyes (besides 3 smaller pairs) and their saltatory habits. Here in Malta we have several salticid species, some of which can often be observed stalking flies on some sunny garden wall. We also have a species which is subendemic to Malta and Sicily which was described in 1982 by Cantarella and named after Professor Patrick Schembri who had collected the first specimens from Malta.



The sub-endemic Aelurillus schembrii

But the subjects of this item are much more colourful than our local jumping spiders. The peacock spiders belong to the genus *Maratus* and are chacterised by their brightly coloured abdomens which, like those of their avian namesakes have an attractive function during courtship. All *Maratus* species are Australian endemics and the reason they are here being treated as News is because seven new species were last month described and named by Joseph Schubert, a young spider specialist at the Melbourne Museum¹.



Joseph Schubert, who described and named the new *Maratus* species

Peacock spiders are seldom larger than a grain of rice. While the males have rather flamboyantly coloured abdomens, the females have a much more sombre coloration of brown and black. During their courtship display, the males dance around in front of the females waving their legs and abdomens. In some species they extend fan-like flaps, hence the name of peacock spiders.

Schubert named one species *Maratus constellatus* with the following etymological comment: "To me the colours and the markings on the abdomen look a lot like The Starry Night by Vincent Van Gogh, so I named it *constellatus*, which means starry in Latin,".



Maratus constellatus, one of the new species

Like most aranaeids peacock spiders are venomous, but they are completely harmless to humans. They prey on small insects such as flies and moths. They do not trap their prey on webs but they stalk their victims and suddenly pounce on them. Their jumps are very accurate and they are even known to capture their victims in mid-air.

Seventy-five new species of peacock spiders have been discovered in the last seven years, 22 of them by Schubert. The total number of *Maratus* spp. now stands at 85.



Four of the new *Maratus* species. From top left clockwise: *M. laurenae, M. volpei, M. noggerup and M. azureus.*

Reference Collections

The DoB Museum houses an important collection of bryophytes assembled by Edwin Lanfranco. The Bryophytes are an informal group of non-vascular plants which comprises the mosses (Bryophyta), liverworts (Marchantiophyta) and hornworts (Anthoceratophyta). They are mostly limited in size and generally prefer moist habitats although they can survive in drier environments.

The museum's collection consists of a total of 439 specimens comprising 62 identified species of mosses, 15 of liverworts and 2 of hornworts. The majority of specimens were collected by Edwin Lanfranco but specimens by other workers are also included. The specimens are in a dry form and are placed in labelled paper envelopes. Labels include locality, date, collector and habitat data. The 62 species of mosses belong to

33 genera while the 15 liverwort species belong to 10 species. There are two genera of hornworts.



Some of the bryophytes in the museum's collection: Top: I. Barbula rigidula, r. Bryum argenteum Middle: I. Dicranella varia, r. Lunulata cruciata Bottom: I. Riccia bifurca, r. Anthoceros laevis

Quote of the month

"There is nothing so patient, in this world or any other, as a virus searching for a host."

Mira Grant Countdown (2011)

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