

Distinguished visitors of the National Insect Museum of ICAR-NBAIR, Bengaluru

The newly established National Insect Museum of this bureau has been a key visiting attraction for various dignitaries, renowned researchers, students and public in general.

Here is a glimpse of some of our visitors:

International visitors

FAO representatives- Dr AnneSophie Poisot and Mr Tomio Shichiri had a close look of the new collection facility and the specimens preserved.



Dr C.A. Viraktamath, ex-Professor Emeritus, Department of Entomology, University of Agricultural Sciences, Bengaluru and globally renowned leaf hopper taxonomist visited the insect museum at ICAR-NBAIR, Bengaluru on 2nd July 2021 and suggested the road map for future.



Dr. A. Vishnuvardhan Reddy, Vice-Chancellor, ANGRAU visited the museum and appreciated the collection of the rare and endemic species.



Dr Kailash Chandra, the then Director Zoological Survey of India, appreciated the historical collections of the Common Wealth Institute of Biological Control (CIBC).



Other distinguished visitors:



Research visitors: Examination of specimens by renowned taxonomists

Dr R. Swaminathan, Emeritus Scientist (Entomology), Department of Entomology, Maharana Pratap University of Agriculture and Technology, Udaipur and Dr Tatiana S. visited the museum and examined the Orthoptera collections.

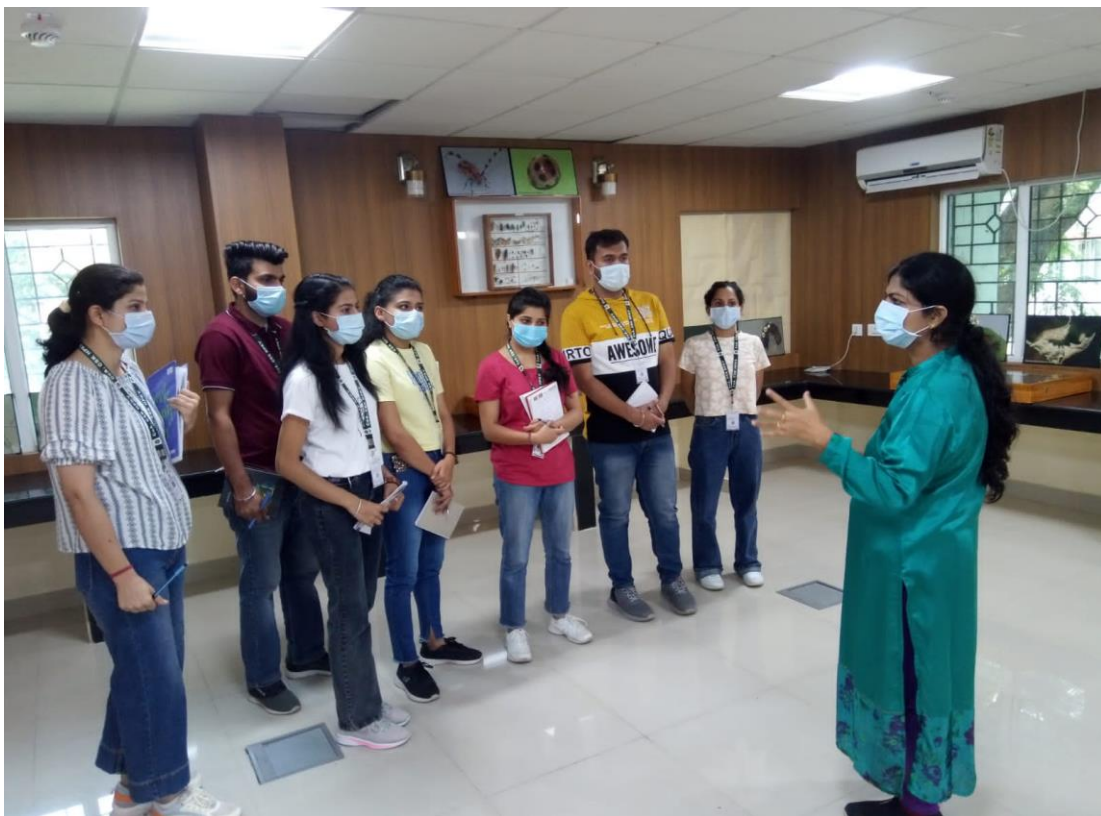




Dr S. C. Dubey, ADG PP & BS, ICAR and RAC committee members with Chairman Dr H. C. Sharma inspected the entire collection facility and provided suggestions for further museum expansion and improvement.



Motivational museum tours were provided to students from various agricultural universities





Cassava mealybug parasitoid- *Anagyrus lopezi* identification trainings were organized in the museum







Insect exhibition and motivational talks organized for kids on Open school day





Media coverage of the museum

Hindustan Times



Crawl of the wild

Some are rare, some beautiful, some strange. At the National Insect Museum, over 6 lakh specimens of all shapes, sizes and species are waiting to be discovered

Natasha Rego
natasha.rego@htlive.com

Specimens of the Malaysian moon moth and Tussar silk moth; a giant stick insect of the order Phasmatodea, a master of disguise; an owlfly perched on a finger for perspective; beetles from the beetle room (the order of beetles is so large, the head of the museum says specimens arrive by the bagful). IMAGES COURTESY ICAR-NBAIR

Think of it as a building with a delightful buzz. The National Insect Museum in Bengaluru is home to the world's largest moth, longest insect and tiniest wasp.

Also preserved in caskets, liquids and freezers are ants, butterflies, beetles and worms. The museum, hidden within the lush campus of the Indian Council of Agricultural Research-National Bureau of Agricultural Insect Resources (ICAR-NBAIR), will make you see moths. Consider these numbers: The two-storey structure, inaugurated in 2019, contains over 2 lakh mounted specimens and slides, from 11 insect orders, stored in temperature- and humidity-controlled spaces. It has another 4 lakh wet (preserved in alcohol) and cryo-preserved specimens; and a heritage collection with specimens over 100 years old.

"What distinguishes this collection from others is that every insect has some sort of agricultural relevance," says M Nagesh, director of the ICAR-NBAIR in Bengaluru. "They are either beneficial or pestiferous, or have the potential to be either."

Over 10 years in the making, NIM is meant primarily as a resource for researchers but does mark certain "open days" by inviting the public in. (There isn't a calendar of these, so it's best to call ahead to find out when the next one is.)

More than half the insects at NIM have been procured over the last 15 years by ICAR taxonomists, says Ankita Gupta, the entomologist in charge of the museum. Collecting insects is a two-pronged process; some can be collected only by day, others only at night. Day collections involve setting out bright yellow collection bowls filled with water and an adhesive. Night collections involve setting up light traps.

Taxonomists usually head into a region and set out traps to see what they'll attract. But sometimes, they go looking for a particular species, like the elusive giant stick insect in the tea gardens of Valparai, Tamil Nadu. "We must have gone at least three times over 10 years, looking for it, but it's so hard to spot," says Gupta.

A specimen of the order Phasmatodea was finally donated by P Mahendran, an entomologist from the United Planters' Association of Southern India, a tea research foundation in Coimbatore, who found it on the institute's campus.

In Yercaud, also in Tamil Nadu, ICAR taxonomists finally found a specimen of the world's tiniest winged insect, the Kikiki huna, which is two-tenths of a millimetre in size. "You cannot see with your naked eye," says Gupta, who specialises in parasitic wasps. "But it has all the systems an insect should have — six legs, wings, a reproductive and a respiratory system."

It was recorded in India for the first time in 2013, in the Eastern Ghats. It remains a prized find.

This, along with the rest of the collection at NIM, has been digitised and is publicly accessible on the institute's online database. (Actually viewing the species would require a microscope and special permission.)

Winged things

NIM is broadly divided into three rooms. One holds the samples collected most recently, mounted in wooden caskets stacked in movable metal shelves in a temperature-controlled room. A much bigger room



holds just the beetles (the order Coleoptera is the largest among the insects). "In due course we will get thousands more," says Gupta. "We pretty much get them in gunny sacks."

The third room holds the museum's heritage collection. Insect specimens here are kept in wooden cabinets that date back 50 to 100 years. A strong smell of industrial camphor hangs in the air. "Most of these specimens were collected before ICAR was formed, when it was the British-run Commonwealth Institute of Biological Control Indian Station," Gupta says.

The beauty of an insect collection, she adds, lies in how long it persists and how many researchers get to study it. NIM's heritage collection is therefore invaluable.

"There are specimens from entire lifecycles, gathered in remote regions of the Himalayas, in a time when researchers would camp out to rear and preserve insects and document every pest associated with a host plant," Gupta says.

As it turns out, the institute's greatest treasure is not quite an insect, she adds, though those are immensely precious; not the beautifully preserved butterflies, leaf insects, or even the praying mantises that mimic orchids. She locates a small wooden box, and holds it out. In it lie three larvae specimens, one yellow, one black and one green. They're the result of a lost art where the larvae of insects were mummified by sucking out the internal sap, disinfesting each husk, and inflating it with just enough air to not burst the outer skin.

"This preservation was secured in 1960 and they managed to maintain the exact shape of the larvae," Gupta says. Such samples are rare in the world. This is the masterpiece in our collection, Gupta says.



SEE more specimens from within the museum

N S V C S N S C R N N I N A S (J A U L I S B A I