

New insect species named after Singanallur lake

Host-specific insect can live only on the leaves of the jujube tree

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SINGANALLUR lake, which was declared an urban biodiversity conservation zone, got a feather in its cap when a new insect species was recently named after it.

The newly discovered insect, *Asphondylia singanallureusis*, was first spotted near the lake by nature enthusiasts in 2015. Found attached to the jujube tree (*Elantha maram*), the insect intrigued researchers as it left galls on the tree leaves. "I have been to many places, but I had not seen any other species causing leaf galls on the jujube tree except near Singanallur lake," said D Vasanthakumar, a researcher at Western Regional Centre of the ZSI in Pune.

After exhaustive study over the next three years, the discovery was published in the peer-reviewed *Zootaxa* journal in March 2020 jointly by the Zoological Survey of India (ZSI) and the Centre for Urban Biodiversity Conservation and Education (CUBE) in Coimbatore.

District Forest Officer D Venkatesh, along with the Director of Institute of Forest Genetics and Tree Breeding C Kunhikannan, on Sunday unveiled the characteristics of the new-found species during an event held on the occasion of World Wetlands Day.

Vasanthakumar, who was the author of the study, told *TNIE* that the species is host-specific as it can live only on the leaves of the jujube tree. During field studies, the researchers documented the life cycle of *Asphondylia singanallureusis* through its egg, larva, pupa,



Asphondylia singanallureusis, an insect species which was spotted in Singanallur lake. The insect was named after the water body | EXPRESS

and adult stages. The adult insect is responsible for the leaf galls, and females reproduce by laying eggs on the leaves.

The researchers also conducted a DNA study to ensure it was not among the 6,300 insect species of order Diptera, commonly known as flies, that have been previously recorded. "We browsed through journals published in the last 100 years on Diptera to go ahead with DNA sequencing," said Vasanthakumar.

P Senthilkumar of the SRM Institute of Science and Tech-

nology, Vinny R Peter of CUBE, and Radheshyam M Sharma, a retired ZSI scientist, co-authored the study.

IFGTB director C Kunhikannan opined that the host-specificity of the insect could imply that other species are dependent on them. However, further study would help understand these relationships better, he further added.

Sources said four other species have also been discovered near Singanallur lake, which would be made public after publishing in journals.