

Scientists discover antibiotic-producing bacterium *Planctopirus hydrillae*

The new discovery may provide a solution to the problem of diseases becoming resistant to a majority of known drugs and, from the ecological point of view, help in tidying up ammonia waste. | Photo Credit: [Getty Images/iStockphoto](#)

A novel species of a bacterium that produces antibiotic has been discovered by a professor in the University of Hyderabad (UoH) and his researchers, the university said on Thursday.

“Found in the Buffalo Lake on the UoH campus, the newly discovered bacterium, *Planctopirus hydrillae*, may provide a solution to the problem of diseases becoming resistant to a majority of known drugs,” UoH said in a release.

The new bacteria would also clean up ammonia waste, a growing environmental concern, it said.

The bacterium was discovered by Venkata Ramana, Professor and Head, Department of Plant Sciences, School of Life Sciences, UoH and his researchers, it said.

Scientists have been striving hard to find drugs to overcome the challenge of antimicrobial resistance in the wake of disease-causing germs failing to respond to even the most potent antibiotics, the varsity said.

“In this scenario, the discovery of antibiotic-producing Planctomycete may help in the development of a new drug. The bacterium was isolated from aquatic plant Hydrilla,” the release said.

The discovery was published in the latest issue of the scientific publication, *Journal of Antibiotics*, it said.

“The new species reported by the researchers is a very uncommon bacterium belonging to the phylum Planctomycetes and was isolated from the university campus,” Mr. Ramana said.

“This is the first report of an antibiotic producing bacterium from the phylum Planctomycetes. Cultivating the bacteria of this phylum is extremely difficult. And we are the first group from India to develop the art of cultivating these bacteria which are very useful even for environmental issues particularly for the treatment of ammonia waste,” he said.

The bacteria are called as “Anamox (Anaerobic ammonia oxidising) bacteria,” Mr. Ramana said.

The senior professor said he and his team have been working to identify the chemical nature of the antibiotic and the spectrum of antibiotic.

“They have also sequenced the genome of the bacterium,” the release said.

The team included researchers from Bacterial Discovery Laboratory, Centre for Environment, Institute of Science and Technology, JNTU (Jawaharlal Nehru Technological University), Hyderabad and UoH, it added.

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