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Water Treatment Using Plants: College Shows Way



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The Nitte students with a copy of their project • S Manjunath

• S Lalitha

Repeated news about the largescale pollution of lakes in Bengaluru has troubled a lot of Bengaloreans. It however goaded four engineering students to start a project that attempts to provide a solution to redress this issue, in an eco-friendly way.

These students used six saplings of the Canna Indica plant after water was treated in Sewage Treatment Plant(STPs)to further remove metallic contaminants. The results have been very positive as their effort

have succeeded in removing Nickel, Lead, Chromium and surfactants from water.

C J Kiran Mai, S R Rajesh, D H N Pavithra and Krishna A Galagali, all final year students of Nitte Meenakshi Institute of Technology, under the guidance of their professor, Dr N Vidyavathi were involved in the three-month project called 'Phytoremediation of Heavy Metals from College STP.' "Readings carried out after the project revealed that 100 percent of Nickel, a considerable amount of Chromium and Lead were removed from the water," says Kiran.

In case of residential complexes, with low level of contamination of water, it can even used as a substitute for STP altogether, she adds.

"Using plants offers a low-cost, eco-friendly solution. It also looks aesthetically appealing," says Pavithra. Ornamental plants like Canna Indica, Vetiver Grass and Water Hydrilla could hold the solution to do away with metal contamination in lakes in the City if tried out on a large scale, she adds.

Rajesh states, "It not only removes metals but also helps in eradicating the odour that emanates from contaminat-

ed water. Removal of surfactants by plants is a big plus. They were mainly responsible for the pollution in the Bellandur Lake." Another positive would be that plants are bound to reduce the loss of aquatic life caused by the contamination.

At the international level, many such studies which use plants to reduce contamination in water have been carried out. "Since few such studies have been done in India, we decided to try it out. We also plan to bring out a paper on our findings," Kiran says.