

Doon Watch Nature Series for Dehradun Live Hindustan Times by Sanjay Sondhi

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What a "galling" sight!

I was on my morning walk with my wife, Anchal, when we crossed paths with a neighbour. As we stopped to greet each other, he said to my wife "Your friends are in trouble!". Looking around me, I could not figure what he was talking about. I thought that a bird was in trouble, and looked up in the trees. Anchal, too, was puzzled. Following his gaze, we realized that he was looking at the young trees planted along the roadside by the forest department. And then realisation dawned. The young trees had loads of galls on them, and our neighbour was alluding to the galls!

My wife is a "tree lover" and her reputation about this extends to our housing colony! Not only has she planted many trees within the society, but she was also involved in assisting to transplant a 20 year old, 40 foot high Toon tree in Dehradun, instead of chopping it down!

The entire road we were walking on, stretching for more than half a kilometer had 4 to 5 feet high saplings of the Indian Devil Tree *Alstonia scholaris*, planted 10 feet apart. The leaves of every tree had a ball-like swelling. Years ago, I had mistakenly assumed that these ball-like shapes on the leaves meant that a disease had affected the plant. Only after some investigation did I realise, that these "balls" were not a disease, but were plant "galls".



The galls are basically an outgrowth of the plant tissue, caused by parasites that could be bacteria, fungi or insects. A known plant host for the Indian Devil Tree is an homopteran, *Pauropsylla tuberculata* which is a small winged insect. I broke open one of the galls to check whether I could make out what was inside, but did not see any signs of life. The insects use the galls both as a place for their larvae (young ones) to feed and grow, and sometimes as a safe place to live, even for the adult

insect.

What was astounding was that the leaves of every single Indian Devil Tree lining the road had these galls, while other trees such as Gulmohar, Toon and other trees did not! The cause for this is simple-most insects have specific plants that they use as hosts. This, in fact, was a stark example as to why monoculture plantations are a bad idea. In nature, typically any habitat has a variety of plants and trees. Its only when humans intervene, that we introduce only a single plant or tree species. And we do so at our own peril! Planting many different species of plants or trees reduces their susceptibility to disease or infection. Can we learn from this?

Feedback on this column is welcome at sanjay.sondhi1@gmail.com

Making a difference: A lesson learnt even for your home! Don't plant a single species in your garden. Ensure that you have many different species of plants and trees, and preferably ones that are indigenous and grow naturally in the Dehradun area.

Photograph caption: Galls on leaves of the Indian Devil Tree

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