Biological Studies of Bioactive Compounds From Fox Tail Palm Wodyetia bifurcata L. and Nerium oleander L. Against the Feeding Behaviour and Vectoral Transmission of Hemipteran Insects Whiteflies

Srivastava, Aditya (School: DLF Public School)

The project has created a botanical anti-feedant against the feeding behaviour of whiteflies while also preventing vectoral transmission of various plant diseases caused by these insects. Whiteflies are a major threat to agricultural production throughout India and the world as a large, Mostly being found in tropical regions; they are a threat to the prosperity of Developing nations which rely on agriculture. The antifeedants created are made from the leaves of Nerium oleander and the fruits of Wodeytia bifurcata using solvent extraction in soxhlet apparatus. The solvents used were hexane and methanol. These anti-feedants were then tested against whiteflies in 1:10, 1:100, 1:1000 dilutions in water wherein The 1:100 dilution of the 2 extracts from Nerium were found most effective. following this, Field experiments were conducted on tomato plants wherein the tested plants reported a lack of insect incidence as well as no inhibition to growth.

Awards Won: