

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.