

## BEST PRACTICES

**Title of the practice :** Green Locality.

**Objective of the practice :** To plant more trees in the adopted slum areas. Successfully grown some trees and made the people aware of the value of trees.

1. **The Context :** Sometimes the local people are found to be too indifferent to the issue due to ignorance and do not try to understand the value of trees. Creating awareness among the local people is the greatest challenge.
2. **The practice :** The practice is not only intended to make the locality green but also to impart in our students awareness about environmental issues. When the students are found to be enthusiastic, the local people are callous about it. Some even do not allow to plant trees in their land.
3. **Evidence of success :** Some trees are successfully grown in the locality. The rate of success indicates that locals are coming up.
4. **Problems encountered and resource required :** Some local people create problems as they steal away the fencing materials. Some even cut the trees for silly purpose. More money is needed for good fencing of the trees as well as for frequent awareness programmes.

**Title of the practice: "Spraying of ecofriendly biopesticides to control the vectors of Malaria , Dengue, and Chikungunia diseases."**

**1. The Context:**

The malaria disease is caused by protozoan pathogen ; Chikungunya and dengue diseases are caused by the viral pathogen and all the pathogens are carried by mosquito as vector. Both the disease are highly dangerous and epidemic one. The female Anopheles Mosquito when bite the human, suck the blood from infected people and transmit it to the blood of fresh people. The protozoa Plasmodium sp complete its half life cycle in the body of human and other half within the body of Mosquito . Malaria, dengue and Chikungunya disease are not contagious, not spread from person to person and are not sexually transmitted but transmission is only possible by mosquito.

Malaria, Chikungunya and Dengue pathogen transmitted through blood and causes fever in severe form, may cause death. That's why steps to be taken to control the Mosquito life cycle.

**2. Objectives:**

- a. To stop the Life cycle of Mosquito.
- b. To stop transmission of Malaria , Dengue and chickengunia, pathogens.
- c. To apply the eco-friendly ,non pollutantbiopestide to control the Mosquito within the campus.

**3. The Practice :**

The mosquito lay their eggs in the water and multiply in numbers. The drains, water reservoirs, and many open pots retain water and that are the main sources for the multiplication of Mosquito in the campus as well as adjacent areas of the college campus. In place of spraying chemical pesticides which are highly fatal, causing cancerous diseases, impaired soil health, also poisoned other aquatic life processes, we have selected swietenia

macrophylla leaves to prepare leaves extract and to spray the juice in the water body of our campus as well as adjacent areas of the campus. The extract is prepared on the following way :

- I. Collect 250 grams fresh leaves and chopped into small pieces with the help of chopper and then taken in the mixer grinder with 10 ml. water.
- II. Grind in the mixer grinder until and unless it will be converted into paste.
- III. In a can take the paste and add approximately 1 liter water with it and then shaken properly.
- IV. With the help of filter or clean cloth the mixture is filtered and the filtrate is taken into the sprayer.
- V. The filtrate is sprayed with the help of sprayer into the water bodies as well as different place of the campus and adjacent areas to the campus.
- VI. As mosquito complete its life cycle within a week we have the moto to spray the filtrate once in a week.
- VII. The emphasis is given mainly on the aquatic places and also in the darker areas, corners of the classrooms, basal sides of the boundaries, toilets and wash rooms, etc.
- VIII. Through awareness program we motivate our students to follow this and adjacent people of our campus are also being motivated through NSS activities.

#### **4. Obstacles:**

To adopt this strategy we have not faced any obstacles. We have convinced our students through seminar that the chemical pesticides have adverse effects on both biotic and a biotic components of the environment. The chemical residues destroy the quality of soil, water, air, food, causes genetical disorders, physiological deformities, diseases, mortality rate, bio-accumulation and bio-magnifications trigger effects of unforeseen consequences. So the flora as well as fauna will be critically affected. To check this dangerous effect we have to follow the eco-friendly pesticides the biopesticides like swieteniamacrophylla- a plant based pesticides. Through NSS camp we have convinced the common people:

Biopesticides that can reduce pesticides risks as :

- A. Biopesticides are best alternatives to conventional pesticides and usually inherently less toxic than conventional pesticides.
- B. Biopesticides generally affect only the target pest and closely related organisms.
- C. Biopesticides often are effective in very small quantities and often decompose quickly.

So it does not create any health problem.

Thus we never face any obstacle.

#### **6. Impact: of the practice:**

Active Principles that are present in the extract of Swietenia macrophylla leaves perhaps kill the larvae of Mosquito in the water of drains and water reservoirs in the campus as well as in the adjacent areas. Higher concentration of leaves extract also harmful to the adult mosquito. If the extract sprayed on the body of the mosquito it become inactive and ultimately die. The extract is harmless and have no side effects if we use the water mixed with the extracts for cooking and

drinking . This concept is focused to the students coming from different parts of the district and also beyond the state. Students Circulated this message to the environment and also used the sap in their own household . The people of adjacent areas also followed this method and practiced this to remove the dengue, Chikungunya and Malaria fever.

**7. Resources required :**

- a. Biopesticides- Extract from the leaves as experimental tool of Switenia macrophylla. It is already present in the environment and easily available in huge amount.
- b. Sprayer – Ordinary low priced one.
- c. Mixer -Grinder or prepare paste in the mortar and pestle.

So this is bearable for any family.