



The Effectiveness of Mnukanuka for Mosquito Repelling

8. Buteko

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Introduction:

Malaria is a pandemic disease that causes deaths to many people including Tanzanians. Different methods have been used to combat malaria like by using medicines, mosquito nets and fighting mosquitoes by the use of repellants.

Mnukanuka is a bushy plant which is found in many parts of Kigoma and it has been used by local residents for repelling the mosquitoes. The plant is medium size and has moderate smell and can be cultivated and planted easily. It resembles the group of pennyroyal plants.

Our project aimed to find out to what extent the local "mnukanuka" plant can expel the mosquitoes as some people are using this plant. According to our investigations these shrub plants are available in most part of savanna grassland, tropics and semi-deserts.



Method:

Trees were planted in plastic bottled, these have different advantages; for easy movement to rooms, kitchens, and in places where mosquitoes are found; plastics are plenty in our environments so if the project has to be useful it could reduce these plastics.

Boxes and plastic containers and glass cupboard are among of materials that were also constructed so that caught mosquitoes using sweep nets were kept for investigation. Since mosquitoes can be attracted by carbon dioxide, dark cloth, skin temperature and moisture, (Marie 2011) these were used in our project to attract mosquitoes. The glass cupboard was used so that the escaping of mosquitoes from the source of smell of plant can be photographed for demonstrations as below pictures shows.



Results:

Different experiments were conducted to show how "mnukanuka" tree can keep away mosquitoes. In experiment 01. Plants were placed in the room that had mosquitoes and overnight few mosquitoes remained in the room. In second set of experiment 02, Mosquitoes were kept in containers then a plant was placed one side; after some time many mosquitoes were found in another side. The same procedures were repeated several time and almost the plants indicated to repel mosquitoes.

Another way of testing the work of this plant was to put the plant in different rooms for regular interval, when the spray applied those rooms had few mosquitoes compared to rooms that had no the "mnukanuka".

However, lack of good apparatus (technology and finance) has limited the clear showing how the results were being obtained. This was big challenge for our project though the plant can repel mosquitoes.

Conclusions:

From the observation and results, this plant can be the next solution for reducing the mosquitoes around homes and hence the malaria disease can consequently be eliminated. In addition to that, further study can be done to improve the findings and open the door for other researchers (scientist) to find out the content of the smell of "mnukanuka" for extraction of mosquitoes repellants and for further investigation.

References:

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