



An analysis of Mnyaa Extract to Control Caterpillars



Gedio Fabiano Yohana and Alphonse Laurent Kahuya

Kasokola Secondary School

Introduction

The farmers in most rural villages face the problem of presence of Caterpillars in their farms and destroy the crop vegetation including maize plants. This project arose soon after invasion of Caterpillars to school maize garden. These organisms feed mostly on leaves of a plant and left it with poor leaves. The main goal of the project was to solve and control destructive larva in the farm and improve crop production.

Method

In this project, the method used to conduct and explore data was through experimentation and observation.

Materials and apparatus used.

Branches of Mnyaa tree and sample of maize plants
Knife, Mortar and Pestle
Beakers, storage container and sprayer pump
Filter funnel, petri dishes and clock
Forceps and eye goggles
Litmus paper, universal indicator and methyl orange

Results

The project was done following the three basic scientific skills that was observation, measurement and experimentation as follows;

The survey was done in a maize garden to identify the plants affected and which still host the caterpillars

The Caterpillars were picked out and collected in the petri dishes

Mnyaa branches were cut from the Mnyaa tree using a knife and cut into small pieces, then put in a mortar and crushed by pestle

The mixture was sieved to get the clear Mnyaa extract solution and stored

50mls of the filtrate was put in 250mls beaker and the universal indicator was dipped into the solution

The extract solution was put in a petri dish having Caterpillar and left for one hour. Also extract was sprayed to chosen maize plant sample holding Caterpillars and the observation were made after two hours.

You must wear the goggles when preparing and using Mnyaa extract solution, it is harmful. When the solution comes into contact with your eyes cause irritation, inflammation and drains a lot of tears which reduce eye vision.

Results

- Mnyaa extract solution was acidic in nature and its PH value was 5.
- The caterpillars both in petri dishes and on maize plant samples were dead within two hours.

Conclusion

The observation and results declared that Mnyaa extract was acidic, harmful and corrode the soft body of larva and eventually they die. The succession of this project will help the farmers in rural areas with low economic to fight against Caterpillars using their available materials which may lead them to harvest high yields and enjoy life with no hunger.

References

TIE (2009), Biology for secondary schools form six, TIE, Dar es Salaam.

Acknowledgments

We would like to give our grateful thanks all who assist us to develop this project, our mentor teacher Mr. Renatus Ndagije, our school headmaster Mr Mpoki Mwaifuge, The regional yst coordinator Mr Livinus Edward.

