

Is Kivumbasi (Ocimum Canums) a Solution for Bee Keepers?

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Introduction

In our experiment we aimed to use kivumbasi tree so as to help bee keepers as a simple method / way of attracting more bees to enter the beehives in short period of time instead of waiting for flowery season. The kivumbasi tree also reduce the cost of buying beeswax due to the fact that it is expensive compared to kivumbasi leaves because they are locally available and natural method which increases bees in beehives.

NB

1 beehives cost 100,000/= to 160,000/= while a bundle of five leaves of kivumbasi can be obtained free.

Method

The kivumbasi tree is the African tree widely distributed, species in genus aromatic annual it is found naturally on well drained soil but not exclusive on limestone from latitude 900 also it is classified in kingdom plantae clade angiospermophyta order supindules family lamiaceae genus ocimum species canum and binomial name (ocimum canum). It originated in Unguja Zanzibar and can also be propagated by cutting. It is mostly used as mosquito repellent, decoration, preparation of local sprays, washing of milk husks, herb of ulcers and natural broom.

In Tanzania kivumbasi tree is mostly found in all regions. Its common behavior is to produce good smell especially day and night when it is in flowery stage.

Around our school there are many kivumbasi trees which excite us to research the use of its leaves and flowers.

The leaves and flowers were applied on a sample of 5 beehives that shows a wonderful success of attracting bees within three weeks instead of using beeswax which attracts bees for a long period of time such as 2 months.

Procedure

Most of beekeepers had low honey production because they were depending mostly on the flowering season especially April, May to December and using beeswax because they were unaware of this simple way of attracting bees to enter the beehives at any time.

In our project we preferred to use observation and experiment method as a key method of collecting our data. In our experiment a sample of 14 beehives were used. Also the following materials were used during the experiment. Materials in completing the experiment which are:-

Protective clothes, gumboots, gloves, bee wax, kivumbasi tree, overall, touch, a veil. The researcher preferred observations.

Results

The researcher observed that the kivumbasi leaves are more effective than beeswax due to the fact that it works within a short period of time (week) compared to beeswax that takes a month for the bees to enter beehives and start honey processing.

The fourteen beehives of the beekeeper which were used for the experiment provided the following results;

Results from the first seven beehives applied with kivumbasi leaves shown that soon after two weeks enough bees were found ready to manufacture the honey.

Results from the four beehives left applied with beeswax shown that after 2 months amount of bees were found in only one hive to manufacture.

Results from three beehives shown that after two months no bees were found.

The amount of bees depends on the number of hives that were applied with kivumbasi.

"The more the bees the more the honey production"

From the graph the researcher observed that the application of kivumbasi leaves extracted from the kivumbasi tree was more effective on attracting bees compared to using beeswax and waiting for the flowery season.

Conclusions

According to our results we have observed that only after three weeks the kivumbasi tree application works effectively rather than beeswax and waiting for the flowery season and also kivumbasi application increases honey production so the researcher advises the beekeepers to use kivumbasi because it is more available, cheap and more profitable than depending on the flowery season and using beeswax. NB.

The beekeepers are challenged with ants during the activity of honey production by the researcher came up with the idea of fusing Vunja Genge fruit juice which contains aromatic material which is naturally an insect & ant repellent.

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A picture showing Kivumbasi seed collected during the preparation of Kivumbasi garden.



NUMBER OF BEEHIVES	DAYS	OBSERVATIONS
First 7 beehives applied with Kivumbasi leaves	12	Few bees were found
	15	Amount of bees were found
	20	Enough bees were found in all 7 hives
Average no. of days	15.7	
Four beehives which were left with beeswax	12	No bees were found
	15	Few of the bees were found
	20	Only one hive contained few
Average no. of days	15.7	
Three beehives waiting for flowery season	12	No bees were found
	15	No bees were found
	20	Few bees were found
Average no. of days	15.7	