

Scymnus sp.

The Potential Low Cost and Alternative Biopredator of *Aphid* sp.

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Introduction

According to the plantation technology's developments, people always search new things to maintain and to protect their plantation. One of them is pest control. There are many kinds of pest controls such as chemical, organic compound, or using the mother nature herself to protect the crops. The latter method is known as Biopredatory.

From my observation on a lemon tree near my house, I found that *Scymnus* sp. feed on Aphids. This species could potentially become a biopredator which solve pest problems naturally.

Even it is natural, Biopredator can also be destructive if it is overpopulated. This happened once in the Netherlands [1] when the asian ladybirds became overpopulated during the winter time. Therefore, I decided to research how potential the *Scymnus* sp. is as biopredator.

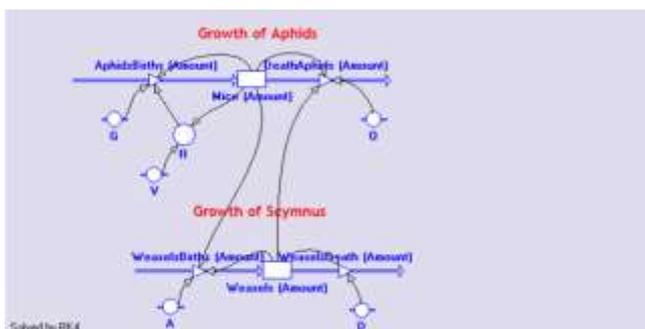
Purpose

To use *Scymnus* sp. as alternative biopredator against *Aphid* sp. in a balance life cycle condition.

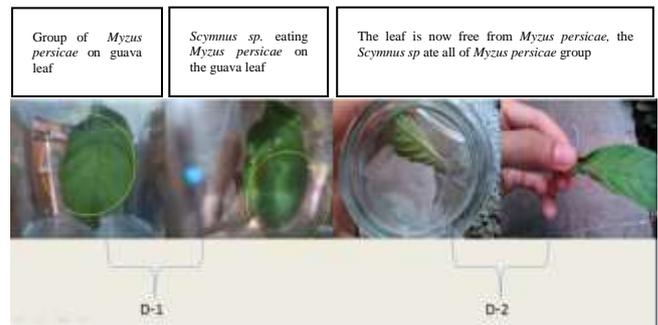
Method

The life of *Scymnus* sp. was observed, especially their interaction with an Aphid species (*Myzus persicae*) as a predator and its prey. Afterwards, their life and interaction are modeled.

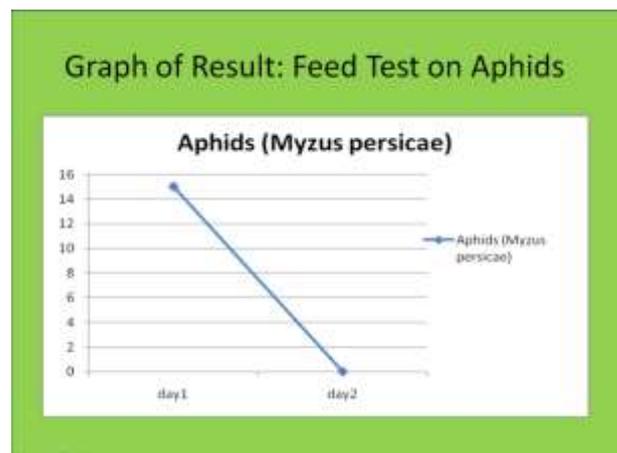
Result of the Experiment



(The model between *Scymnus* sp. and *Aphid* sp.)



Note::D=Day,all specimens were put in the glass container



Conclusion

Scymnus sp. might be a potential alternative biopredator against *Aphid* sp.,also can be one of the simple and low economical way to control farmer's crops, but before that the behaviour and balance control between each species must be informed first to the farmer.

References

1. Berg et all. Mode of overwintering of invasive *Harmonia axyridis* in the Netherlands. *BioControl*, Volume 57 Issue 1 (2012):71-84
2. Soroushmehr et al. Comparative life rable statistics for the ladybeetle *Scymnus syriacus* reared on the green citrus aphid, *Aphis spiraecola*, fed on two host plants. *Entomological Science*, Volume 11 Issue 3 (2008): 281-288.