

# Potential for Biocontrol of Diamondback Moth in Myanmar by using a predatory bug

Khin Thein Nyunt and Stefan Vidal

Georg-August-University Goettingen, Department of Crop Science ,  
Entomology Section, Germany



## Introduction

- Diamondback Moth (DBM) is the most damaging cabbage pest in Myanmar and in almost all tropical countries
- Cabbage plants and ideal temperatures for high DBM populations prevail throughout the year
- Due to frequent insecticide applications resistance development, including *B. thuringiensis*, has been selected for

## Hypothesis

- We tested a predator bug (*Eocanthecona furcellata*-EO), native to Myanmar and commonly found in the field, for its effectiveness to prey on Diamondback Moth larvae

## Methods

- ➔ We used 2nd instars of EO nymphs and 5 different DBM larval densities(2,4,6,8,10) in the experiments
- ➔ DBM larvae were placed in 9 cm Ø plastic petri- dishes; one EO nymph was placed in the centre of each arena; these were then kept at a constant temperature (30°C, 75% RH and 12:12 L:D) photoperiod in climate cabinets.
- ➔ DBM larvae consumed per day, larvae still alive and EO moulting dates to adult stage were recorded

## Results

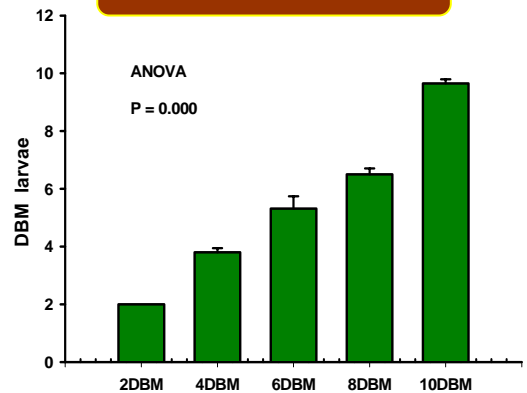


Fig 1. Amount of DBM larvae daily consumed by *E.furcellata*

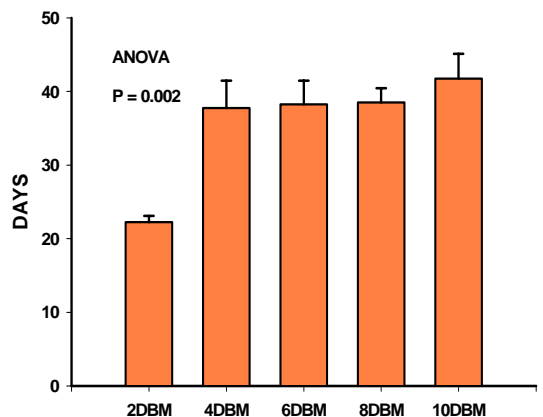


Fig 2. Logevity of *Eocanthecona furcellata*

## Conclusion

Base on these preliminary data, and given that mass propagation in the lab is no problem, we propose that this predatory bug *Eocanthecona furcellata* might hold potential for controlling DBM populations in cabbage field; it thus should be tested under field conditions in Myanmar.

