

ABSTRACT

The Efficacy of *Tagetes erecta* L. in the Control of *Plutella xylostella* L. on Cabbage

Tricia Shelly Ann David

The aim of this study was to investigate the effect of intercropping *Tagetes erecta* L. with four recommended cabbage cultivars against Diamondback Moth (DBM) damage. Local farmers' concepts and attitudes towards Diamondback Moth management with *T. erecta* were also assessed. Rainy season larvae counts were significantly lower ($p < 0.05$) on intercropping plots in comparison to homogenous cabbage plots. Planting densities 2:1 and 1:1 marigold: cabbage had economically manageable larvae counts of 1.04 and 0.94, respectively. Ruby King cabbage had the lowest DBM population of 0.77 ± 0.34 larvae/plant.

Damage indices during both Dry season 2010 and Wet season 2010 had significant differences ($p < 0.05$) for densities 2:1 and 1:1. However, Wet season 2010 Diamondback Moth damage index scores were clearly lower than that of the Dry season with ranges of 1.3 – 4.3 and 5.1 – 8.1, respectively.

Cabbage farmers' survey confirmed farmers' awareness of the importance of DBM and its severity as a pest. Most farmers indicated their interest in adopting these sustainable practices including *T. erecta* intercropping with cabbage.

Keywords: Tricia Shelly Ann David; Sustainable vegetable production; *Plutella xylostella* L. in cabbage; *Tagetes erecta* L. and intercropping; Cabbage farming in Trinidad and Tobago; Cabbage pest management.