

# Introduction

## Welcome to your Greenhouse Tomato Integrated Pest Management (IPM) Guide

Tomatoes NZ, Bioforce and A Lighter Touch (ALT), have been researching and trialling a number of beneficial Insects and pest management strategies since August of 2021.

This project is an extension of the initial research by Emiliano Veronesi and the team at Lincoln University. This work set out to identify if New Zealand had native and endemic beneficial organism's that can be effective as biological pest controls.

Laboratory trials showed *Engytatus nicotinae* to be an effective predator of both the Tomato - Potato Psyllid (TPP) and, Greenhouse Whitefly.

Biological Control Agents (BCA's) are but one part of effective Integrated Pest Management (IPM) control strategies. It is important for growers to not only understand how BCA's control pests, but also how to combine them with other mechanical, physical and, soft chemical controls.

New Zealand tomato growers produce within a huge number of variables and, that their differing circumstances may enhance or hinder their ability to successfully use IPM.

Research has been carried out at both large and small growing sites throughout New Zealand.

Our ultimate goal is to identify effective, sustainable and economically viable pest control systems that can be used by all tomato growers.

The material in this guide is intended to provide basic understanding and guidelines as to how to identify and control the main pests that growers have identified as being issues in New Zealand tomato crops.

### IPM Guidance:

- The guide is a living document and, content will be updated as the results of ongoing research in both academic and commercial growing sites is completed.
- This guide contains both action cards and a decision tree for the main pests encountered in New Zealand's Greenhouse Tomato Crops. Action cards give tips on identification, life cycles, potential control measures, scouting tips and some, what to do's.
- Supporting this material is a series of "how to" videos that are available on both the Tomatoes NZ website and the A Lighter Touch-You Tube Channel.
- This guide should be used in conjunction with your usual crop management advisors.

**Good luck on your IPM journey**