## 2017 Research Report

Efficacy of chemical and biological treatments for the management of bacterial spot on processing butternut squash, 2017

Prepared for the Ontario Processing Vegetable Growers research committee November 1, 2017

## Research Team:

- Cheryl Trueman (M.Sc.), College Professor, University of Guelph Ridgetown Campus
- Elaine Roddy (OMAFRA) worked collaboratively on this trial and completed all foliar disease assessments and assisted with fruit assessments.

## Highlights/Summary:

- The products tested are all registered for other cucurbit disease in Canada, and were chosen because they are reported to help manage bacterial spot in cucurbits in other regions (i.e. United States) or cropping systems.
- Products were tested from 2015-2017. None of the products reduced the incidence or severity of bacterial spot on foliage or fruit in any years. Therefore, it is unlikely that application of any of these products would be economically beneficial for the prevention of bacterial spot outbreaks in Ontario squash and pumpkins. Products tested included: Copper 53W (copper sulphate), Copper Spray (copper oxychloride), Manzate Pro-Stick (mancozeb), Regalia Maxx (extract of Reynoutria sachalinensis), Actinovate (Streptomyces lydicus strain WYEC 108), Serenade Opti (Bacillus subtilis QST 713) in 2017, and Serenade Max (Bacillus subtilis QST 713) in 2015 and 2016.

Funding: Ontario Tomato Research Institute, OMAFRA-UofG Partnership, Ridgetown Campus – University of Guelph