



Brassicas for controlling soil-borne pathogens of concern to potato producers in New York State

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PROJECT GOAL: to evaluate brassicas as part of a rotation for potato producers in NY as a means to controlling soil borne pathogens.

DESIGN of PROJECT: this project is entirely farm based with all the studies being performed on farms and by the grower.

WHO IS INVOLVED? We have **SIX** growers involved. They produce table stock (conventional and organic), seed (conventional and organic), fresh processing and chip stock.

WHAT DISEASES AND OTHER ISSUES ARE WE ADDRESSING?

Rhizoctonia, Common scab, Powdery scab, Pink rot, Nematodes, Wireworms



Nemat is red, due to nematodes, herbicides, or phosphorus deficiency

HOW ARE WE USING THE BRASSICAS? We have sown the best known crop mustard **Caliente 199** and the more stress resistant **Caliente 61**. They were allowed to grow 7-12 weeks. To achieve the bio-fumigant activity from the brassica it needs to be chopped and incorporated into moist soil. As the bio-fumigants can inhibit seed germination, 2 weeks needs to pass prior to additional seeding. Only a week needs to pass before seed potatoes are sown. **Nemat**, an arugula blend also has high bio-fumigant activity and is an excellent trap crop for nematodes, and is very cold and drought tolerant. We are evaluating it in nematode trapping and as an over winter cover crop.



Caliente after 6 weeks growth



Chopped Caliente



Incorporation of Caliente

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