New York State Integrated Pest Management Program

Biological Control of Powdery Mildews of Greenhouse Ornamentals

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Abstract

The mycophagous mite, *Orthotydeus lambi* (Acari: Tydeidae) is very abundant on several woody perennial species found in New York (e.g. wild grape, *Vitis riparia* , ornamental linden, *Tilia cordata*, paper birch, *Betula papyrifera*), and we have demonstrated that this mite can effectively and dramatically reduce the incidence and severity of powdery mildew of grape, *Uncinula necator*. Moreover, once established this mite offered continual control on grape in the presence of high inoculum pressure. We are examining the impact *of O. lambi* on powdery mildews of two common greenhouse floral crops grown in New York. Specifically, we are testing the ability of releases of *O. lambi* to protect Rose from rose powdery mildew, *Sphaerotheca pannosa* f. sp. *rosae* and Poinsettia from poinsettia powdery mildew, *Oidium* sp. Since this research is still in progress, we can only provide preliminary results at this time.

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