Project #8780

Improved Management of Lettuce Diseases

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Duration of Project: May 2005 – April 30, 2007

I. Brief Project Description

Field research will be conducted to address the major issues in disease management of lettuce using an integrated approach and involving researchers from different regions. Control of lettuce downy mildew can require regular fungicide use. Control of Sclerotinia drop is one of the main challenges facing lettuce growers. To achieve control of either of these diseases, growers must use an effective fungicide and apply it before infection takes place. Thus, the combination of effective fungicide and correct timing of the spray is critical.

II. Project Objectives

1. **Improved management of downy mildew of lettuce**:

    a) Evaluate new, reduced risk fungicides for downy mildew control

    b) Evaluate a new disease forecasting method developed by AAFC, St. Jean-sur Richelieu, Quebec.

Fungicides include the standard Ridomil WG compared to BAS 516, Gavel, Alexin and Quadris.

2. **Improved management of sclerotinia drop and bottom rots of lettuce:**

Fungicides will be evaluated using a novel method of inoculation developed by AAFC, Saskatoon, SK, that allows for even inoculation of the lettuce, and thus may provide a much better test of fungicides. Fungicides include the standard Ronilan, compared to BAS 516, Scala, Contans, and in 2006 a biological fumigant, Arabesque.