New York State Integrated Pest Management Program

REPORT TO CORNELL INTEGRATED PEST MANAGEMENT PROGRAM
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Development of IPM strategies for the control of fungal-induced russet of pear and apple

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Introduction:

Fruit russet can be a severe problem on apples. The amount of russet and its economic impact will vary from season to season. We recently found that two common fungi that survive on the surfaces of apple fruit, cause russet. In order to more fully understand how these fungi cause russet and how control strategies may be implemented into IPM programs, field and laboratory experiments were undertaken. Specific research objectives included:
1. Identify overwintering sites of *Aureobasidium pullulans* in orchards.
2. Identify when during fruit development they are most susceptible to russet caused by *A. pullulans* .
3. Test the effectiveness of different biological controls and fungicides for control of russet in the orchard.

In addition to the fungus *A. pullulans* we also included the yeast *Rhodotorula glutinis* in the experiments because it is also a common epiphytic fungus on apple and we demonstrated that it can cause russet. This season we were also able to measure natural populations of *A. pullulans* on different apple cultivars with the assistance of Kate McNamara, a Howard Hughs scholar from William Smith College. A final goal of the research is to incorporate new russet IPM strategies into existing apple IPM programs.

For a printed copy of the entire report, please contact the NYS IPM office at:

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