

TITLE: Development And Publishing Of IPM-Based Management Of The Major Plant Pathogens Of Strawberry: An Extension Project.

PROGRESS REPORT

GRANT CODE: SRSFC Grant 2008 E-02

EXTENSION PROPOSAL

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OBJECTIVES: The objectives of our proposal are to: 1) Complete IPM-based factsheets on most diseases of strawberry including biology and management 2) post the factsheets on the Southern Region Small Fruit Website and in the department of plant pathology.

REPORT SUMMARY: During the summer and fall months we focused on field work and disseminating information through various conferences and meetings. Beginning December 2008 we started focusing on the fact sheet preparations. I modified several factsheets (of the 5 major diseases we encounter in the Southeast) and they have been reviewed and edited by Dr. Mahfuzur Rahman. We find that the winter months are the ideal time to complete this type of work. We will continue to work on the factsheets and post them so they are accessible through the small fruit center website and we will work with the small fruit center personnel to learn how these can be linked to our regional IPM guide for strawberries. We will complete our objectives by March 31, 2009 – before the harvest season of strawberries commence.

It was not feasible to complete all these factsheets between the time we received support and December 2008 (when reports were due). I have applied for a second Small Fruit Center extension grant to build on the work we will complete. It seems reasonable, that if the Small Fruit Center considers the follow-up proposal worthy of support, that the money not be allocated until we have completed the objectives on the current proposal. Alternatively, if we secure funding for the second round, we may be able to accomplish some of those objectives before March 31, 2009 and the busy field season time.

Here is a summary of our strategy and completion of Plans.

Over the last several years I have written factsheets on most of the serious plant pathogens of strawberry. These factsheets are used routinely for disseminating information on the symptoms, biology and management of the strawberry plant pathogens. For example, when we had serious problems with *Phytophthora cactorum*, the factsheet that was written – but not published, was used to disseminate IPM-based information for controlling the pathogen and for educating growers about the disease. See: http://www.smallfruits.org/SRSFC_News/Phytophthora0404.pdf. I had drafts of factsheets of most of the major diseases in strawberries and a large collection of diagnostic pictures, in the field, of the plants (diagnostic infected plant parts and many diagnostic pictures using microscopes). To date, we have edited and are near completion on: *Botrytis* gray mold; *Colletotrichum* fruit rot; *Colletotrichum* Crown rot; *Phytophthora* crown rot and Angular leaf spot.

There is a need for more detailed and readily available factsheets that have more detailed information about the biology of the pathogens, diagnosis (at the field level and at the clinic level), and a holistic plan for managing the pathogens not yet completed. We will complete these by March 31, 2009. It is my

goal to link these factsheets to our fungicide/IPM recommendations currently published through the Southern Small Fruit Working Group in the [Southeast Regional Strawberry Integrated Management Guide](#). In this manner, we can provide a comprehensive source of information for agents (especially) and growers as they develop IPM programs for managing their pests. With the collection of microscopic pictures, the factsheets can also have a section for advanced diagnostics by clinicians and other diagnostic professionals.

IMPACT STATEMENT AND SUMMARY: Completing factsheets by March 31, 2009 on the major diseases of strawberries is a priority task we have identified in our program. We have nearly completed 5 on the most important problems encountered in the Southeast and will work through the winter months to complete other priority factsheets on strawberry diseases. Once available, these factsheets will be a major source of readily available information for agents, growers and other key stakeholders.