Title:

**Progress Report** 

Grant Code: 2013 E-02

**Extension Proposal** 

Name, Mailing and E-mail Address of Principal Investigator(s):

E. Barclay Poling, Professor Emeritus (retired in August, 2013)
Department of Horticultural Science
Campus Box 7609
NC State University
Raleigh, NC 27695-7609
Barclay Poling@ncsu.edu
919-418-9687 (cell)

#### Co-PI

Jeremy Pattison (assigned Strawberry Extension duties in July 2013)
Assistant Professor, Strawberry breeding and genetics
North Carolina State University
Department of Horticultural Science
Plants for Human Health Institute
600 Laureate Way, Kannapolis, NC
Office: 704.250.5410

Cooperator

Leah Chester-Davis (left the University in July 2013)
Director of Communications
Plants for Human Health Institute and N.C. MarketReady
N.C. State University at the North Carolina Research Campus
600 Laureate Way
Kannapolis, NC 28081, (704) 250-5400 (Kannapolis)

### Objectives:

- 1. To revise and update the 2005 SRSFC *Southeast Regional Strawberry Plasticulture Production Guide* (complete by March 2014)
- 2. To provide regional coordination of *Summer Strawberry Plasticulture Pre-plant Meetings* in 2013 across the Southern Region states and produce a Webinar

Justification and Description:

Objective 1. Update to the Southeast Regional Strawberry Plasticulture

## **Production Guide (Objective 1)**

As stated in the 2012 RFP, the Consortium is especially interested in multistate projects that involve cooperative ventures between scientists of various disciplines, and in this project we propose to bring together the expertise of a multi-disciplinary group of extension specialists as well as 'lead' extension agents with small fruit responsibilities, for the purpose of providing a thorough review and update to the Southeast Regional Strawberry Plasticulture Production Guide, that was last updated in 2005 http://www.smallfruits.org/SmallFruitsRegGuide/Guides/2005culturalguidepart1bs1.pdf Other production guides on the SRSFC site are similarly in need of updating (e.g. 2008 Southeast Regional Bramble Production Guide). In the July 2013, Dr. Jeremy Pattison, Assistant Professor, NCSU, assumed the responsibilities for statewide delivery of strawberry extension programs, and he was also able to participate in several of the Summer Strawberry Plasticulture Pre-plant Meetings, including the program in VA Beach (discussed below under Objective 2). Though Dr. Poling retired from his part-time strawberry plasticulture position after the Pre-plant meetings in August, he continues to work on the completion of the revision of the Southeast Regional Strawberry Plasticulture Production Guide. He is currently providing winter season Strawberry Weather Alerts to the industry in late Dec/early Jan. (Figure 1), but he intends to have a rough draft ready for review by mid-February and Poling anticipates that his team will have a final draft for submission to the SRSFC by March 1, 2014, as originally planned.



Figure 1. States in the mid-South experienced record-breaking cold in early January 2014, and during the period from Christmas through mid-January, a series of freeze alerts were issued on the Strawberry Growers Information Portal. Our region has not experienced such serious freeze conditions since the mid-1980s, when plasticulture was first introduced. This experience has provided a number of new lessons on winter season strawberry crop protection that will be included in the new Production Guide.

### Summer Strawberry Plasticulture Pre-plant Meetings (Objective 2)

Under this project, we committed ourselves to delivering a series of *Summer Strawberry Plasticulture Pre-plant Meetings* in August 2013. A total of 7 programs were conducted:

- August 1 Sandhills. At the Sandhills Research station, 2148 Windblow Rd., Jackson springs, NC, 5:30-8:30 pm.
- August 5 Central Piedmont, at the Alamance County Extension office. 209 N. Graham-Hopedale Rd., Burlington. 5:30-8:30 pm
- August 6 Charlottesville, VA. Piedmont vA Community College Workforce Center,
   601 College Drive, Charlottesville, VA 22902, 5:30-8:00 pm
- August 8 Webinar, NCSU campus, How to produce your own plugs. http://strawberries.ces.ncsu.edu.
- August 20 Tidewater VA/NC, at the Creeds Ruritan Barn, 1057 Princess Anne Rd., Virginia Beach, VA 23457. 6:30 pm – 9 pm
- August 27

  Nash, Wilson, Edgecombe, and Franklin counties, meeting held at Nash County Agriculture Center, 1006 Eastern Avenue, Nashville, NC. Morning program
- August 29 South Carolina, at Baxley Farms Country Market, 2606 Hanover Rd., Marion, SC, 6:30 – 8:00 pm. John McIntyre, 803-242-1413 or mcinty3@clemson.edu.

All of these meetings emphasized critical problems encountered in the 2012-2013 strawberry season with plant diseases, including virus infected runner tip supplies from Nova Scotia – see Fig. 1. In several programs, management strategies to help growers minimize rain-damage in future seasons were discussed by Poling.



Figure 1. Growers across North Carolina experienced up to 50% reduction in yields (right photo) due to a new virus complex that was imported on plant stock from Great Village, Nova Scotia





Figure 2. Dr. Guido Schnabel and Dr. Barclay Poling both may nursery site inspections in Nova Scotia and PEI, during July and August, 2013. Their findings were reported at the Summer Pre-Plant Meeting series that was sponsored by SRSFC in 2013. Poling also made a special report to the SRSFC website on the virus situation in Canada: Implementation of a Virus Management Nursery Program in Nova Scotia, <a href="http://www.smallfruits.org/Newsletter/Vol13-Issue3.pdf">http://www.smallfruits.org/Newsletter/Vol13-Issue3.pdf</a>

# Methodologies:

A Strawberry Cultivar Chapter is now being written by Pattison and Poling. Dr. Poling is also revising the Guide's information on fumigant and non-fumigant options - in consultation with Dr. Frank Louws, NCSU, Dr. Katie Jennings, NCSU, Dr. Chuck Johnson (VA-Tech), and Dr. Allen Straw (VA-Tech). A regional team of specialists and lead agents will then review the 1<sup>st</sup> draft in early February. In addition, Poling will work to incorporate information in Pre-plant Considerations section of the Guide that will reflect the economics of different fumigant and non-fumigant options (in consultation with Dr. Charles Safley, Department of Agricultural and Resource Economics and Dr. Olya Sydorovych, Researcher and Project Coordinator, NSF Center for Integrated Pest Management). The basic outline of the current guide on the SRSFC web site will not change, and the length of the document will be still be about 20 pages.

#### Request for Extension of Grant:

We are requesting a "no-cost" extension on this grant to complete the *Southeast Regional Strawberry Plasticulture Production Guide*, by mid-March 2014.