



Date: 1/18/2019

PSU Ref. No: 206465

Title: High Density Pear Tour in Southern and Southeastern Pennsylvania

Submitted to: Patti Keller

State Horticultural Association of Pennsylvania
480 Mountain Road
Orrtanna, PA 17353

Submitted by: Donald Seifrit

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Proposed Project

4/1/2019 - 3/31/2020

Total Project Request: \$3,500

AUTHORIZED UNIVERSITY OFFICIAL



DATE 1/18/19

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Please reference PSU Ref. Number in all correspondence.

**Grant Proposal Submitted to SHAP Extension Committee
January 2019**

Title: High Density Pear Tour in Southern and Southeastern Pennsylvania

Personnel: Donald Seifrit, Extension Educator – Berks County
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James Schupp, Professor of Pomology – Penn State FREC, jrs42@psu.edu
Daniel Weber, Extension Educator – Adams County, dew326@psu.edu

Duration

of Project: 1 year (new)

Justification: High density orchard production is a staple of the fruit tree industry, and the production of pears in Pennsylvania is estimated to be a little over 900 acres, making PA the 4th highest producer of pears in the US (USDA Agricultural Census, 2012). Dr. James Schupp has done previous work, funded by the State Horticultural Association of Pennsylvania, to maintain two high density pear plantings at the Penn State Fruit Research and Education Center (FREC) in Biglerville.

There are 14 varieties of pears located at FREC. The purpose of the original proposal was to evaluate fire blight-resistant European pear varieties, as well as demonstrate high density plantings of pears. The varieties planted in 2011 are as follows:

<u>Variety</u>	<u>Blight Resistance</u>
no	Bartlett
Bosc	no
D'Anjou	no
Harrow Delight	yes
Harrow Sweet	yes
Blakes Pride	yes
Magness	yes
Shenandoah	yes
Sunrise	yes
Potomac	yes
US71655-014	yes
US84907-069	yes
US84907-166	yes
US84909-391	yes

The original pear plantings were planted as ten of each variety and were trained to vertical axis at 6 ft. x 14 ft. spacing. Also, five trees of each variety were planted in a neighboring block to the Bi axis

system (two leaders in an in-row V) at 4 ft. x 12 ft. spacing. Both spacings proved to be acceptable, and the planting was down-sized to include only the Bi-axis trees.

A third block, identical to the original 4 ft. x 12 ft. spacing block, was planted in 2016. The varieties included in the 2016 planting are:

<u>Variety</u>	<u>Blight Resistance</u>
Bartlett	no
Bosc	no
Harrow Crisp	yes
Harrow Sweet	yes
Sunrise	yes
US446	yes
US69426-38	yes
US84907-069	yes
US84907-140	yes
US84907-144	yes
US84907-160	yes
US84907-166	yes

In addition to the pears at FREC, several growers have high-density pear blocks already in production and would be valuable resources for other growers looking to plant their own pears. Showing is better than telling, and tree fruit growers considering plantings of pears should have the chance to observe orchards in active production and ask questions of growers and researchers. This proposal would fund 2 to 3 tours for growers in 2019 to FREC and the farms of grower cooperators to give other Pennsylvania growers that opportunity.

Procedure(s): We will reach out to several growers who may be willing to host tours at their properties. Potential cooperators for this grant are: Hollabaugh Bros., Inc. (Biglerville, PA), Kauffman’s Fruit Farm (Bird in Hand, PA), and Frecon Orchards (Boyertown, PA). After establishing their willingness to participate, 2 to 3 acceptable tour dates within 2019 will be chosen. Penn State Extension will put together the online registration website and create fliers for marketing and distribution. Furthermore, we will produce a publication (fact sheet or similar) for pear growers and a pear production LearnNow video.

Budget:

Supplies \$2,500
Travel \$1,000
Total \$3,500