

**Project No.:** 13K-3455-5664

## **Title:** Commercial Production Methods for Bosc Pear

**Reporting Period:** 2000

### **Personnel:**

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### **Accomplishments**

Next year, 2001, will be the concluding year for this test planting of Bosc pear. Comparing productivity of selected rootstocks, training systems, and pollinizer varieties, all plots had fruit and were harvested, with records taken on yield per plot. Data for Bosc on different rootstocks also included fruit size per plot, measured as weight of 25 fruit.

### **Results**

Yield data for 2000 are shown in the tables included as Appendix A. Overall yield in this planting was above that of 1999, as the trees enter full bearing (Table 1.) The second year of production in the V-trellis continued the trend of higher yields from trees on the trellis compared to free standing trees, both in Bosc/Quince A and Bosc/Quince C. Average fruit box size was in the range from 70–100 most in demand for markets, with most plots averaging box size 80 (Table 2.)

Production on trees of Quince A and C increased dramatically over 1999. These trees are approximately 18–24 months behind the other plots, due to having been topworked as interstems. The comparison to yields on other rootstocks at the same age shows the yield of freestanding trees on Quince A and C to be roughly comparable, and yields of Quince A and C on V-trellis to be considerably higher (Table 3.) Data from the concluding year, 2001, may give an indication of the productivity in mature trees.

Trees of Conference and Concorde grafted on Quince C produced fruit in the first year after planting, and have continued to be productive. In 2000, yield of Conference/Quince C was lower than in 1999 (84%) but fruit size was good. For Concorde/Quince C the yield was only slightly higher (105%) than in 1999. Trees of Comice, which had a low 83 lbs/plot in 1999, set heavily this year and yielded 389 lbs/plot. Trees of Starkrimson, which began to produce in 1999, increased in yield this year.

### **Publications**

None.

## **Appendix**

**Table 1. Yield data for Bosc test plot, harvest 2000.**

<b>Cv./Rootstock</b>	<b>Spacing</b>	<b>No. of Trees</b>	<b>Pick Date</b>	<b>Lbs/Tree</b>	<b>Lbs /Plot</b>
Bosc /P Quince	8'	6	9/25	71.7	430.1
Bosc /P Quince	4'	60	9/25	32.0	384.3
Bosc /OHXF 217	8'	30	9/25	56.2	337.4
Bosc /OHXF 217	4'	12	9/25	28.9	346.5
Concorde/Quince C	8'	24	9/12	53.5	321.0
Conference/Quince C	8'	24	9/21	63.1	378.8
Comice /Quince A	8'	6	9/21	64.8	389.0
Starkrimson	8'	8	8/28	56.8	340.5

**Table 2. Yield and size of Bosc pear on selected rootstocks**

<b>Rootstock</b>	<b>Spacing</b>	<b>No. of Trees</b>	<b>Avg. Fruit (lbs)</b>	<b>Avg. Box Size*</b>	<b>Lbs/Tree</b>	<b>Lbs/Plot</b>
OHXF 217	8'	30	0.55	80	56.2	337.4
OHXF 217	4'	12	0.50	90	28.9	346.5
OH/Provence Quince	8'	6	0.56	80	71.7	430.1
OH/Provence Quince	4'	60	0.54	80	32.0	384.3

Quince A	4'	36	0.46	100	12.1	145.1
Quince A - V Trellis	4'	36	0.55	80	22.3	267.6
Quince C	4'	36	0.51	90	16.2	194.6
Quince C - V Trellis	4'	36	0.50	90	21.5	257.6

\*calculated by number of fruits per 44-lb. box.

**Table 3. Comparison of yields for Bosc pear on selected rootstocks (yield in lbs/tree)**

- Spacing is 4' between trees
- Trees on OHXF 217 and Provence Quince established in 1994
- Trees on Quince A and Quince C established in 1996

Rootstock	Training	4 <sup>th</sup> leaf	5 <sup>th</sup> leaf	6 <sup>th</sup> leaf
Provence Quince	freestanding	12.3	12.5	22.2
OH x F 217	freestanding	10.0	6.8	20.2
Quince A	freestanding	4.0	12.1	-----
Quince C	freestanding	8.9	16.2	-----
Quince A	V trellis	6.5	22.3	-----
Quince C	V trellis	9.3	21.5	-----