

Project No.: 13K-3455-5664

Title: Commercial Production Methods for Bosc Pear

Reporting Period: 2001

Personnel:

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Accomplishments

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 2001 are shown in the tables included as Appendix A. Overall yield in this planting was above that of 2000, with trees planted in 1994 at mature productivity, but yields of Bosc were variable on the different rootstocks. On OH XF 217 yield was higher than in 2000, but for trees on Provence Quince yields were generally lower (Table 1). Average fruit box size was in the range from 70-100 most in demand for markets, though overall average fruit size was slightly smaller than in 2000 (Table 2).

Production on trees of Quince A and C at the closer 4' spacing on the V-trellis increased slightly compared to 2000, whereas freestanding trees on Quince A and C decreased in yields. These trees are approximately 18-24 months behind the other plots, due to having been topworked as interstems. Freestanding trees on Provence Quince and OHXF 217 planted at 4' spacing also increased in yields and appear to be stabilizing at productive levels (Table 3).

In 2001, yield of Conference/Quince C increased dramatically over 2000 (145%). For Concorde/Quince C the yield increased by 135% over last year. Both of these varieties are highly productive with good quality fruit. Trees of Comice, which set heavily in 2000, yielded only 242 lbs/plot this year, compared with 389 lbs/plot in 2000. Trees of Starkrimson, which began to produce in 1999, were very productive this year.

Young trees of Taylor's Gold Comice, a russeted sport planted in 1998, had sufficient fruit for preliminary evaluation this year and look very promising.

Publications

None.

Appendix

Table 1. Yield data for Bosc test plot, harvest 2001.

Cv./Rootstock	Spacing	No. of Trees	Pick Date	Lbs/Tree	Lbs/Plot
Bosc /P Quince	8'	6	9/28	53.2	319
Bosc /P Quince	4'	60	9/28	23.5	282
Bosc /OHXF 217	8'	30	9/28	76.0	456
Bosc /OHXF 217	4'	12	9/28	32.4	389
Concorde/Quince C	8'	24	9/17	72.3	434
Conference/Quince C	8'	24	9/27	91.7	550
Comice/Quince A	8'	6	9/21	40.3	242
Starkrimson	8'	8	8/31	77.1	463

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

Rootstock	Spacing	No. of Trees	Avg. Fruit (lbs)	Avg. Box Size*	Lbs /Tree	Lbs /Plot
OHXF 217	8'	30	0.48	90	76.0	456
OHXF 217	4'	12	0.48	90	32.4	389
OH/Provence Quince	8'	6	0.48	90	53.2	319
OH/Provence Quince	4'	60	0.58	75	23.5	282
Quince A	4'	36	0.59	75	7.8	93

Quince A - V Trellis	4'	36	0.52	85	24.7	296
Quince C	4'	36	0.58	75	13.7	164
Quince C - V Trellis	4'	36	0.43	100	24.7	296

. *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 th leaf	5 th leaf	6 th leaf	7 th leaf
Provence Quince	freestanding	12.3	12.5	22.2	23.5
OH x F 217	freestanding	10.0	6.8	20.2	32.4
Quince A	freestanding	4.0	12.1	7.8	-----
Quince C	freestanding	8.9	16.2	13.7	-----
Quince A	V trellis	6.5	22.3	24.7	-----
Quince C	V trellis	9.3	21.5	24.7	-----