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MEETING DATES

Oct 6. 7 p.m. NBA lunchroom. Apple tasting party. Bring any apples you want identified or would like to share with the group.

Nov. 10. 7 p.m. NBA Lunchroom. Slide presentation- Bob Purvis "Fruits in Alaska" (last chance to see all of Bob's slides).

SO YOU COULDN'T READ THE SEPTEMBER ISSUE EITHER?

You weren't alone. Many apologies, but there's not much that can be done when technology fails, and the printer dies. I had a choice of sending the newsletter a week late, and thus noone would have attended the September meeting, or hope that everyone could muddle through poor printing for one issue. Anyone who wishes a readable copy of last month's issue is welcome to send me a post card request or give me a call.

One nice thing about this mishap-- it's nice to know the Newsletter is well read. I received lots of complaints. Now if I could only get that big of a response when I ask all you readers to contribute to this newsletter, I would never have the perennial monthly worry of where the next article is coming from. The most rewarding part of this newsletter for me is to read what is happening all over Alaska. I can't do that, though unless you write to me. You don't have to submit a fancy article, just write me a letter. Let me know what's happening in your part of the world. I will put it into a format for the Newsletter. Contributions are on the increase, and I thank all of you who have written. I have received lost of favorable comments about your contributions so far. Just keep up the good work!

-Pat Holloway

A FEW COMMENTS ON HALF HIGH BLUEBERRIES

In August, I had the opportunity to attend the International Society for Horticultural Science's symposium on Vaccinium culture. The meeting was attended by researchers from all over the world including Dave Wildung from the North Central Experiment Station, Grand Rapids Minnesota. The half high blueberries, 'Northblue', 'Northsky' and 'Northcountry' were developed at the U of MN Fruit Breeding farm near Minneapolis, but they have become commercially important mostly in the northern part of the state. These cultivars are now under extensive tests in many parts of Alaska.

Dave Wildung is responsible for conducting all cultural experiments with these half highs, and he reported on some of his research at the symposium. One study looked at the effect of snow depth on winter survival and productivity of these half highs. He found that at least 30 cm (11.7 inches) of snow was necessary to ensure good fruit productivity in 'Northblue' (see table below) . Depths of less than 15 cm (5.8 inches) can result in total crop loss. Winter-damaged plants often showed the same total yield as undamaged plants because what was lost in berry number was compensated in berry size. In otherwords, damaged plants produced fewer fruit, but each individual fruit was larger.

snow depth	fruit per plant	berry size (grams per berry)
0-15 cm	500	2.2
15-30	1200	1.6
30-45	1500	1.3
45-60	1700	1.1

Dave also looked at the effects of different row covers on winter survival of 'Northblue'. Plants were covered with one of 7 different kinds of row covers: 0.3 cm mesh polyethylene netting (like bird netting, but used to trap snow); 1.5 mil clear polyethylene; mounded snow; Reemay spun polyester cover; mounded straw; burlap; and natural snow cover. This experiment was conducted over two winters where the snow depth was 45 cm (17.6 inches) one year and 24 cm (9.4 inches) the next. Air temperature beneath the coverings was measured at a height of 9 cm (3.5 inches) above the soil. The minimum winter temperatures are listed below.

cover	45 cm snow	24 cm snow
poly net	-4	-18
Reemay	-10	-11
1.5 mil poly	-7	-16
Snow mound	-13	-12
Natural snow	-13	-21
Straw	-9	-24
Burlap	-13	-34
Air	-35	-37

The yield in grams per plant for each row covering are listed below

cover	45 cm	24 cm
poly net	1095	1209
Reemay	1221	876
1.5 mil poly	819	817
Mound snow	927	837
Natural snow	1113	483
Straw	1020	459
Burlap	801	114

This study reiterated the necessity of snow cover for good fruit production. In adequate snow years, the row covers did not really help. In fact, mounding snow slightly decreased yields, probably because mounded, compact snow doesn't have as good insulating capacity as natural snow. In low snow years, plants definitely benefited from the poly net row cover that helped trap additional snow around the plant.

In Fairbanks, the only part of the 'Northblue plant that survives and produces fruit is that which is snow covered. Plants usually remain below 30 cm (12 inches) in height and fruit is borne very close to the ground. These plants may benefit from some type of snow-trapping device so that plant size and fruiting potential is increased. -P. Holloway

LINGONBERRY CULTIVATION

Another group of individuals who attended the International Vaccinium symposium was an enthusiastic European contingent of lingonberry producers. The individuals from Finland were emphasizing wild stand enhancement rather than field cultivation because the wild stands were so abundant and productive, that the additional effort was unnecessary. Finns gather ample supplies for the fresh market and have plenty left over for export. German researchers, on the other hand, wholeheartedly embraced field cultivation and have made significant strides toward developing the lingonberry into a cultivated plant. Their desire to cultivate the lingonberry may be due, in part, to dwindling local supplies and reliance on substantial imports. Some people believe that with the destruction of the Black Forest from acid rain, the last remaining good berry stands will also be wiped out. The German growers showed some incredible pictures of acres of lingonberries in production. The plants are grown in single-plant rows about 4 ft apart, and they have two flowering and fruiting periods each year. The first fruit is ripe in July, but yields are insignificant and berries are not harvested. Flowering begins again in July, and the major harvest is in October. The main cultivar is 'Koralle', but others are being tested, including 'Erntekrone', 'Erntesegen', 'Erntedank, and 'Amalen', all from Germany. The German technology had developed to such a point that they now have a prototype berry harvester that is nothing more than a sophisticated berry rake on wheels.

Other lingonberry cultivars that have been developed worldwide include: 'Red Pearl'- an ornamental cultivar from Holland; and 'Masovia', from Poland. Several of these cultivars will be tested over the next few years in many parts of Alaska. I have already grown several seedling selections from Scandinavia in Fairbanks, but the plants do not seem to be as hardy as our native plants. They routinely decline over a period of about 5 years and aren't nearly as productive as some of our wild stands. -P. Holloway

HAVE ANY INFORMATION ON CULTIVATING WILD BLACK CURRANTS?

If you have any information on either row cultivation or management of wild stands of our wild black currant, Ribes hudsonianum, please send it to the editor. One NAFEX member has expressed an interest in improving fruit production on existing wild stands.

NEWS FROM A HALF-HIGH BLUEBERRY GROWER

I ordered about 200 plantlets of the half high blueberries from Mina-Viro, and they arrived May 1. To say I was shocked at their appearance would be no exaggeration. I had prepared two raised beds filled with about a 50-50 mix of top soil and peat moss with two or three bags of cow manure mixed in. I set the little plants in the beds as soon as I could and really despaired of their surviving. However, they have, and are sporting branches from four to eight inches long as of Sept 7.

A few plants have stayed the same as the day they arrived, but they appear healthy enough. The beds are covered with plastic-ventilated at each end- and have provided a warm humid atmosphere on days when the outside temperature was in the 70's.

They have been kept moist. Every 3-4 weeks, I've used a sprinkling can to feed them with liquid fertilizer. I've been using AGRO ALASKAN 10-35-20 dissolved in water.

When the ground freezes, the raised beds will lose their plastic covering and I'll cover the plants with a good covering of straw. Next May I hope to be able to pot the present collection and set out another 200 plantlets. I'm using all three cultivars-- 'Northblue', 'Northsky', and 'Northcountry'

Meanwhile the 150 plants that are growing in raised beds at my cabin in Talkeetna are doing just fine. This spring I replanted them to a 4 x 8 foot bed. They have sawdust mulch to hold the moisture. They have had a generous feeding of ammonium sulfate so the pH is now about 5. Most have doubled in size this year. So far no flower buds. Next spring before the snow is all gone I will put plastic covers over two or three beds to see if earlier warmth does anyting for them.

Work on the low bush cranberry is at a standstill. There must be some way of starting the seeds, gathering plants or otherwise propagating this berry. In conversations with folks who have lived in Scandinavia memories as to how the berries were raised are vague. Most seem to feel that they were grown in the wild. I find that hard to believe when you consider the tonnage reported.

A second berry I'm growing is the gooseberry. I'm considering a large planting to test the markets. This berry is very easy to produce-- but the devil to pick!

And then there is the European black currant. It spreads like wildfire-- is excellent for control of soil erosion. The nurseries have shown interest in this plant. They are getting some calls from folks who have emigrated to this country and are remembering favorite foods. I sold some of these plants last year and will have more this spring. An excellent jelly is made mixing black and red currant juice. -Phil Richardson, Anchorage

Editor's note: Every bit of the lowbush cranberry (lingonberry) that is produced in Scandinavia - many, many tons- is harvested from the wild. Seeds may be extracted by placing whole berries into a blender with water. Run the blender for 10-15 seconds, then allow the seeds to settle. The pulp and bad seeds rises to the top of the water, and the good seeds sink. Pour off about 1/3 of the water, and replace it with fresh water. Allow the seeds to sink again. Repeat this procedure until the water is clear. Dump out the seeds onto a paper towel. If the seeds are sown immediately from fresh or frozen berries, they will germinate right away. If the seeds are air dried, they germinate best after being stratified for 30 days at 40 F. Place the seeds between two sheets of moist paper, and put in the frig. Seeds will usually germinate in 10-14 days.