ALASKA PIONEER FRUIT GROWERS' NEWSLETTER

A Publication of the Alaska Chapter, North American Fruit Explorers (NAFEX)

March 1992 Volume 7/Number 3

President: **Erik Simpson**, 7225 Blackberry Street, Anchorage, AK 99502. Phone 243-3058
Vice President: **Bob Boyer**, P.O. Box 9-1376, Anchorage, AK 99509.
Secretary: **Pam Neiswanger Warner**, 7000 Viburnum Drive, Anchorage, AK 99507.
Treasurer: **Del Simpson**, 7225 Blackberry Street, Anchorage, AK 99502. Phone 243-3058
Fifth Board Member: **River Bean**, HC 04, Box 9043, Palmer, AK 99645. Phone 746-1087.
Editor: **Pam Neiswanger Warner**, 7000 Viburnum Drive, Anchorage, AK 99507.
Phone 344-9749

UPCOMING MEETINGS

March 19, 1992, 7:00 p.m., at the Dimond Greenhouses, 1050 West Dimond Boulevard (between Arctic Boulevard and Minnesota Drive), Anchorage. One of our newest members, **Kim Kuk**, will present a program on growing raspberries. Please join us there!

April 16, 1992, same time/same place. Grafting workshop!

Please mark your calendars ahead so we can share your company on meeting nights! Hope to see you there!

STEM BANDING ENHANCES ROOTING OF APPLE ROOTSTOCK CUTTINGS

By **Pat Holloway**

"Softwood shoots of M.9 and MM.106 were banded with Velcro for up to 20 days before cuttings were propagated. Banding 10-20 days increased percent rooting and number of roots/cutting and the longer the banding the greater the effect. In M.9, banding resulted in a higher survival rate and increased new shoot growth of transplanted cuttings. Percent budbreak and new shoot growth were highly correlated with the number of roots per cutting of both rootstocks. From Sun and Bassak. *HortScience* 26:1368-1370."

NOTE: I have received several inquiries about vegetative propagation of apples. Many apples are difficult

Your Board of Directors Wants *YOU!*

In order to serve you better, we are actively soliciting your wants and needs for meeting programs and newsletter articles! Give one of us a call, drop a note in the mail, or collar us in person-- we're here for you, the member!

to root from cuttings. Timing of cutting collection is very important. The above excerpt identifies one method that has been used to help improve rooting success and promote growth on rooted cuttings.

Banding is the process of excluding light from the base of the cutting while it is still attached to the mother plant. Choose young, actively growing shoot tips (softwood cuttings), and about 6" from the tip, wrap the stem with some type of light-excluding material. Originally, people used tape, especially electricians' tape, but tape is sticky and messy. More recently, people have been using strips of Velcro (2-4" wide) that are wrapped around the stem. Whatever is used, the purpose is to exclude light.

The reason you want to exclude light is to build up concentrations of a hormone, auxin, in the plant tissues. Auxins are the most important hormones involved in rooting and, therefore, high concentrations should produce greater rooting percentages. Auxins are destroyed by light, so if you can exclude light, you increase the level of auxins in the plant. The article quoted above recommends covering the base of the shoot up to 20 days before the cutting is made. The shoot continues to grow on the plant, and auxins build up beneath the Velcro. Cuttings are made by snapping off the shoot just below the Velcro and rooting them like you would any other softwood cutting.

This practice is certainly not new; the use of Velcro is. A similar practice has been used for years to get stem cuttings of difficult-to-root plants, such as lilacs, to produce roots. Etiolation is a more elaborate method used to exclude light from the entire cutting. Entire branches or plants are cut back in spring to encourage shoot growth. A black bag encloses the entire branch or plant, and shoots grow in complete darkness. The resulting shoots are long, spindly, and usually a whitish-yellow color. These shoots are snapped off and rooted as normal softwood cuttings. They are very tender and susceptible to sunburn, but if handled properly, rooting successes can be high. Both methods are worth trying if you want to root your own apple or crabapple cuttings.

Pat Holloway also sent this note along: I recently received a request from the below-named individual for scionwood of 'Norson', "Norcue", "Norda", and "Breakey" apples. I do not have scionwood available at this time because of marauding moose, but perhaps you could publish this individual's request in the next newsletter to see if other members can help. This person is a member of the national NAFEX organization:

V. O. Virkau
313 Fifth Street
Downer's Grove, IL 60515

(**Editor's note:** Hopefully, some of our members will respond to this person's request. Thanks for the contributions, Pat!)

Next up, **Leslie Toombs**' apple classic for this month, the Duchess of Oldenburg.

Skin smooth, somewhat glossy, attractive bright yellow often with a faint orange or pinkish blush. *Dots* whitish, submerged, sometimes russet or areolar with russet point.

Calyx tube short, rather wide above, cone-shape or approaching truncate funnel-form. *Stamens* basal or nearly so.

Core small, usually axile; cells symmetrical, closed or partly open; core lines clasping. *Carpels* broadly roundish, approaching elliptical, but slightly emarginate if at all, mucronate, slightly tufted. *Seeds* numerous, light colored, rather small, very plump, obtuse.

Flesh whitish or tinged with yellow, firm, fine, tender, crisp, moderately juicy, mild subacid becoming mildly sweet, good.

OKABENA.

REFERENCES. 1. *Am. Pom. Soc. Rpt.*, 1887:132. 2. *Ib., Cat.*, 1899:19. 3. Macoun, *Can. Dept. Agr. Rpt.*, 1901:97. 4. Hansen, *S. D. Sta. Bul.*, 76:78. 1902. *fig.* 5. Dickens and Greene, *Kan. Sta. Bul.*, 106:54. 1902. 6. Munson, *Me. Sta. An. Rpt.*, 18:84. 1902. 7. Budd-Hansen, 1903:141. *fig.*

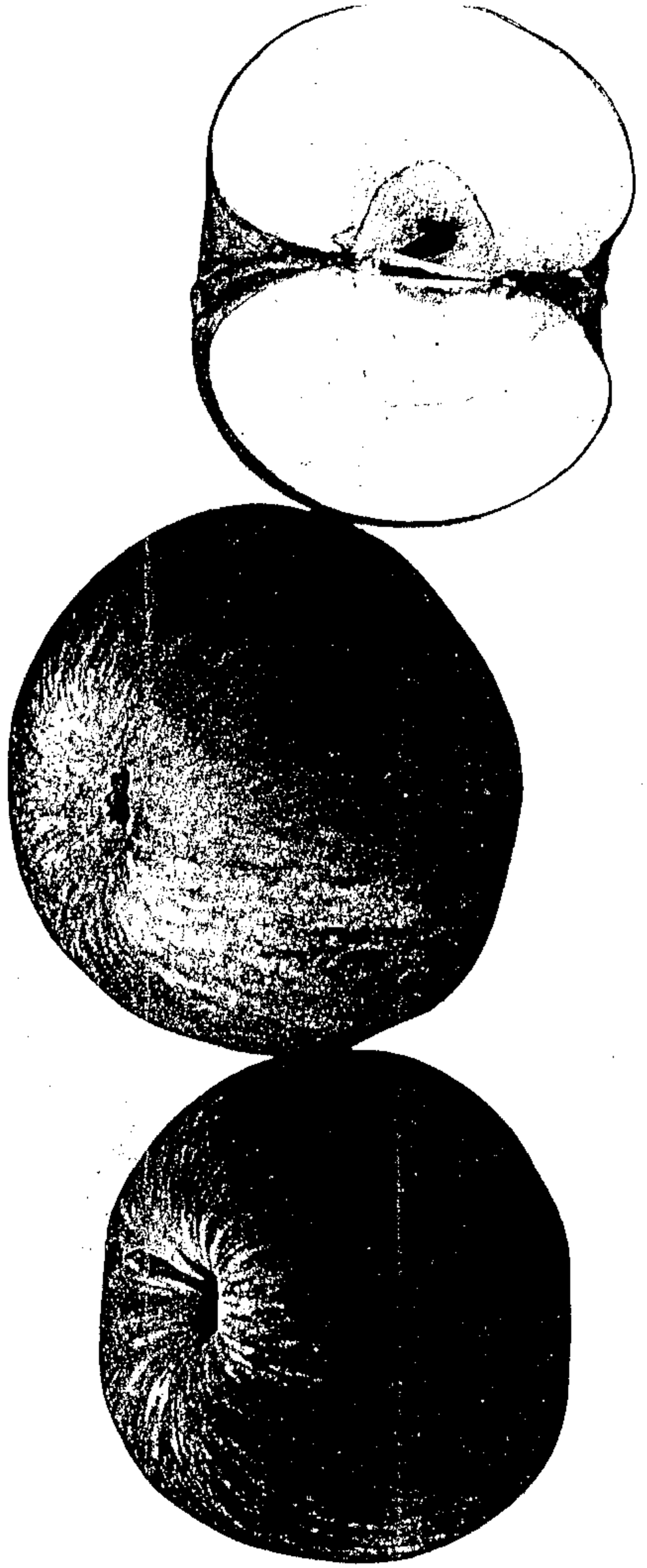
SYNONYMS. OKABENA (1, 2, 3, 4, 5, 7). OKOBENA (6).

An autumn apple not particularly attractive in appearance, nor more than moderately good in quality. Not recommended for planting in New York.

Historical. Originated in 1871 near Worthington, Minn., from seed of Oldenburg said to be fertilized by Wealthy (7). Received for testing at this Station in 1892, from the Jewel Nursery Company which introduced this variety. In 1899 it was given a place on the list of the American Pomological Society as a variety of value in the Upper Mississippi valley (2). So far as we can learn it has been grown in the East only in an experimental way.

OLDENBURG.

REFERENCES. 1. *London Hort. Soc. Cat.*, 1831:No. 341. 2. Kenrick, 1832:64. 3. Manning, 1838:52. 4. Ives, *Mag. Hort.*, 6:125. 1840. 5. Manning, *Ib.*, 7:44. 1841. 6. Downing, 1845:82. 7. Cole, 1849:102. 8. Thomas, 1849:147. 9. Hovey, *Mag. Hort.*, 16:495. 1850. *fig.* 10. Emmons, *Nat. Hist. N. Y.*, 3:34. 1851. 11. Barry, 1851:283. 12. Waring, 1851:28. 13. Elliott, 1854:131. 14. Hooper, 1857:30. 15. Gregg, 1857:42. 16. *Am. Pom. Soc. Cat.*, 1862. 17. Barry, *Horticulturist*, 22:148. 1867. 18. Warder, 1867:431. 19. Todd, 1871:186. *fig.* 20. Leroy, 1873:148. *fig.* 21. *Montreal Hort. Soc. Rpt.*, 1876:6. 22. *Ib.*, 6:97. 1880. 23. *Am. Pom. Soc. Cat.*, 1883:12. 24. Hogg, 1884:64. 25. *Can. Hort.* 11:221. 1888. 26. Hoskins, *Rural N. Y.*, 47:646. 1888. 27. Dunlap, *Ill. Hort. Soc. Rpt.*, 1889:23. 28. *Can. Hort.*, 12:75, 110. 1889. 29. *Montreal Hort. Soc. Rpt.*, 15:26. 1890. 30. Lyon, *Mich. Hort. Soc. Rpt.*, 1890:294. 31. Bailey, *An. Hort.*, 1892:237. 32. *Am. Gard.*, 14:519. 1893. 33. *Can. Hort.*, 17:291. 1894. 34. *Rural N. Y.*, 53:28. 1894. 35. *Am. Gard.*, 17:519. 1896. 36. Bunyard, *Jour. Roy. Hort. Soc.*, 1898:354. 37. Woolverton, *Ont. Fr. Stas. An. Rpt.*, 6:8. 1899. *figs.* 38. Craig, *Cyc. of Hort.*, 1901:1404. 39. Van Deman, *Rural N. Y.*, 60:248. 1901. 40. Alwood, *Va. Sta. Bul.*, 130:121. 1901. 41. Waugh, *Vt.*



OLDENBURG (Reduced Size).

Sta. An. Rpt., 14:302. 1901. 42. Hansen, *S. D. Sta. Bul.*, 76:46. 1902. 43. Ib., 76:79. 1902. *fig.* 44. Dickens and Greene, *Kan. Sta. Bul.*, 106:52. 1902. 45. Bruner, *N. C. Sta. Bul.*, 182:21. 1903. 46. Farrand, *Mich. Sta. Bul.*, 205:45. 1903. 47. Budd-Hansen, 1903:141. *fig.* 48. Powell and Fulton, *U. S. B. P. I. Bul.*, 48:51. 1903. 49. Beach and Clark, *N. Y. Sta. Bul.*, 248:136. 1904.

SYNONYMS. *Baroveski* (20). *Barowiski* (20). *Borovitsky* (20, 37, 38). BOROWICKI (20). *Borowitski* (24). *Borowitsky* (43). *Charlamowiski* (24). *Charlamowski d'Automne* (20). *Charlamowskircher Nalleoid* (20). *Charlamowsky* (43). DUCHESS (27, 29, 32, 35, 37, 38, 43). DUCHESS OF OLDENBURG (3, 4, 11, 12, 16, 17, 19, 21, 22, 24, 25, 28, 31, 33, 36, 44). *Duchess of Oldenburg* (23, 41, 48, 49). DUCHESS OF OLDENBURGH (1, 2, 5, 9, 10, 14, 18). *Duchesse d'Oldenbourg* (20). DUTCHESS (13). DUTCHESS OF OLDENBERG (15). DUTCHESS OF OLDENBURGH (6, 7, 8). *Dutchess of Oldenburgh* (13). *New Brunswick* (34). OLDENBURG (23, 26, 39, 45, 48, 49). *Oldenburg* (35, 37). OLDENBURGH (30, 34). OLDENBURG, *Duchess of* (40, 42, 46, 47).

This Russian apple is known throughout the West either by the name Duchess, or by the full name Duchess of Oldenburg; the American Pomological Society has abbreviated the full name to Oldenburg, but this has not been generally accepted by Western fruit growers. In European nurseries it is propagated under the names of Charlamowsky and Borowitsky. It was early imported into the West, coming to this country by the way of England and it was the extreme hardiness of this variety in the early test winters that kept up the hopes of prairie orchardists in time of great discouragement and led to the importations of more varieties from Russia (42).

Oldenburg is one of the most valuable of the Russian apples thus far introduced into this country. It is of good size and attractive appearance. It is generally highly esteemed for home use on account of its excellent culinary qualities and with some fruit growers it has proved a very profitable variety for the commercial orchard. When properly grown and carefully handled it stands shipment pretty well and sells well for a variety of its season. In some few localities in Western New York it is grown in sufficient quantities so that it can be shipped in car lots to distant markets, but in very many places it is produced in greater quantities than the local markets can absorb and yet not in quantities large enough so that it can be economically shipped to distant markets. Since the fruit is quite perishable it does not stand heat well before shipment

and goes down rather quickly, particularly if the weather is unfavorable. When sent to distant markets it should be shipped under ice. The fruit ripens in succession so that several pickings are required in order to secure the crop in prime marketable condition. It is in season during late August and September, but it may be used for culinary purposes before it is fully ripe. The tree is highly valued because of its great hardiness. It is vigorous when young but with age it becomes a rather moderate or slow grower. It is only moderately long-lived, but is a reliable cropper, yielding good crops biennially, often with lighter crops alternating. Generally speaking, the trees require good cultivation, thorough fertilizing and careful spraying in order to secure the best commercial results. The fruit hangs fairly well to the tree till it is ripe. It is quite uniform in size and quality, with but a small percentage of loss from unmarketable fruit.

Historical. This is one of the four pioneers among Russian apples in America, the other three being Alexander, Tetofsky and Red Astrachan (38). These four varieties were imported by the Massachusetts Horticultural Society from the London, England, Horticultural Society about 1835. Oldenburg was brought to England from Russia about twenty years prior to that date. It was tested by Robert Manning, Superintendent of the Test Garden of the Massachusetts Horticultural Society at Salem who published the following description in 1838 (3): "A valuable and handsome apple said to be of Russian origin. The size is middling, form round and rather flat; skin of a beautiful yellow, striped with red; flavor very pleasant and good. It bears well and ripens in September and October." In 1850 Hovey wrote, "Mr. Manning, we believe, first proved the Duchess of Oldenburg and gave a brief account of it in his Book of Fruits. Since then it has been considerably disseminated, and though yet far from being common is to be found in many fine collections of fruit" (9). Later it became disseminated throughout the Middle West and Northwest where it proved to be much superior in hardiness to Baldwin, Rhode Island *Greening*, Northern Spy and other varieties which have been commonly cultivated in this state. Its ability to withstand severe climates encouraged the importation of other Russian sorts some of which have proved valuable in the northern portion of the apple belt. Oldenburg is commonly listed by nurserymen (31) and its planting both in home orchards and in commercial orchards is increasing in this state.

TREE.

Tree medium in size. *Form* at first upright spreading but eventually roundish. *Twigs* moderately long, curved, slender; internodes long. *Bark* dark brown, lightly mottled with scarf-skin; slightly pubescent. *Lenticels*

scattering, small to medium, oblong, not raised. *Buds* medium size, plump, free, slightly pubescent.

FRUIT.

Fruit medium to large, averaging above medium, uniform in size and shape. *Form* roundish oblate to oblate, regular, symmetrical. *Stem* short to sometimes medium, moderately slender. *Cavity* acute to acuminate, deep, broad, usually partly covered with greenish-russet. *Calyx* medium to rather large, usually closed; lobes rather broad, acute. *Basin* moderately deep to deep, wide, abrupt, smooth or with small mammiform protuberances.

Skin moderately thick, tender, smooth, pale greenish-yellow or pale yellow, almost covered with irregular splashes and stripes of bright red mottled and shaded with crimson. *Dots* scattering, small, light colored. *Prevailing effect* red striped; attractive.

Calyx tube moderately long, rather wide, funnel-shape with broad truncate cylinder or approaching urn-shape. *Stamens* median.

Core medium to rather large, axile; cells symmetrical, closed or slightly open; core lines clasping. *Carpels* broadly ovate, slightly emarginate. *Seeds* medium to rather large, wide, obtuse to acute, moderately plump, dark brown.

Flesh tinged with yellow, rather firm, moderately fine, crisp, tender, juicy, sprightly subacid, aromatic, good to very good for culinary purposes. It has too much acidity for a good dessert apple.

Season late August and September.

(**Editor's note:** This is the third installment of Leslie's article, Apples for Alaska: Don't Forget the Classics, which began in the January 1992 issue of our newsletter. Leslie photocopied these pages from *The Apples of New York* for inclusion here.)

If you weren't able to make it to last month's meeting, you certainly missed a promise of good things to come! **Patrick Wright** presented a great slide show of tomatoes he has grown outside (in Anchorage) without the benefit of a greenhouse–and, boy, did they look wonderful!! I noticed I wasn't the only one taking extensive notes! And **Kent Carlson** brought some beautiful photographs of his home garden/orchard. At this time of year, it's hard to believe it was ever that GREEN here! The excitement is building; I can hardly wait–how about you??

1991 INDEX OF ARTICLES