



SAMPLER NEWSLETTER

THE PLANT WIZARD OF PUGET SOUND

DOES ANYONE HAVE ADDITIONAL INFORMATION ON THE PERSON KNOWN AS THE PLANT WIZARD OF PUGET SOUND?

John Bennet was born in Glasgow Scotland in 1818. He came to America with his parents after traveling in the pursuit of "botanical knowledge" to Africa, Asia, New Zealand, Australia, Europe, and America. John came to Sehome (now Bellingham) in 1858 in search of employment after prospecting for gold. John worked in the mines (probably coal), and when he had saved enough money (1860), invested in the "Compton claim, just beyond the Eldridge homestead". He brought to his land a chest of roots and seeds that he had gathered from "his wanderings over the world as a naturalist".

Several "choice" varieties of fruit were originated by John on his Whatcom county farm, which was beautifully landscaped. The Bennett pear, Bennett's Champion plum, and several varieties of apples, as well as many "varieties" of flowers were created by John "for the beauty and welfare of the Puget Sound region." To quote someone who learned from him as a little girl, and loved his scottish brogue, "Mr. Bennett's nursery has contributed to the betterment of orchards all through Washington and even into Oregon, and Vancouver Island. Should I visit the most beautiful grounds in the world, I will never experience the joy I have had at this spot." (when last noted in 1938, his land was owned by a cement company and his house was gone). Further, she said, "Though unknown to fame or fortune, he had the instincts and understanding of a Burbank."

A novel was also mentioned as being inspired by John Bennett's life. The name is Journal of a Recluse, and the author is not mentioned. My source for this information on John Bennett is Volume III of Told by the Pioneers, 1938, published by the State of Washington under WPA (Works Progress Administration) sponsorship. The author of the article was Lottie Tuttle Roeder Roth.

Anyone knowing more about John Bennett, where his farm was, any of the fruit that he "created", or the whereabouts of a copy of the novel based on his life, please contact Dave Battey on (206) 888-2504, or at Monte Vista Farm, 40404 SE 70th Drive, Snoqualmie, Washington - 98065. Thank you.

NORTHERN SPY

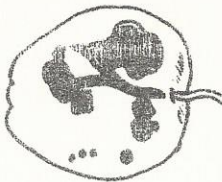
Northern Spy originated as a seedling in the East Bloomfield New York orchard of Heman Chapán, from seed brought from Salisbury Connecticut in the year 1800. It is a sibling of Early Joe and Melon. It is unique that three named apples from the same planting are available 180+ years later. I have propagated Early Joe, but have not yet located Melon. Northern Spy began migrating to other areas about 1840, and was listed by the American Pomological Society as both a new variety of promise and, at the same time, a variety worthy of general cultivation, in 1852. In 1905, Northern Spy was the third most successful commercial apple in New York, surpassed only by Baldwin and Rhode Island Greening. Spy is a slow bearing variety, taking up to eleven years to bear on standard seedling rootstock. Using special methods to facilitate early bearing, the cleft graft on a 2 1/2 inch diameter volunteer seedling done at Monte Vista in the spring of 1978, bore fruit for the first time in 1983. Andrew Jackson Downing says of Northern Spy in the 1854 edition of his Fruit and Fruit Trees of America, "This beautiful new American fruit is one of the most delicious, fragrant, and sprightly of all late dessert apples." Spy is multipurpose, and is just as good for cooking as for eating. Northern Spy is usually a biennial bearer, and matures too late for some sections west of the Cascades. An apple once sold locally as Northern Spy matures earlier. I have obtained original Spy wood from the New York Fruit Testing Association at Geneva N. Y., and the local variety and will compare the two when they fruit at Monte Vista Farm and share the results with you.

Dave Battey

Editor's Note: Many of us who are very interested in fruit do not have access to historical books on pomology, and the interesting data on apple variety origins contained in them. Dave Battey of Monte Vista Farm at Snoqualmie (725 feet above sea level in the Cascade foothills) has several of the older books and will share his information with us periodically. Dave will not include detailed varietal descriptions since most of them are keyed to the eastern states. If you have a special old West of the Cascades apple you would like featured, please write to him at 40404 S. E. 70th Drive, Snoqualmie, 98065.

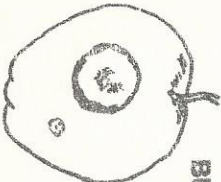
Pests of Apple Fruit Of Bugs & Blights

by Sharon J. Collman
Washington State University
Cooperative Extension
in King County



APPLE SCAB*

- fungus lesions with zones
- small to large, roughly circular spots coalesce
- cracking occurs in severe infections



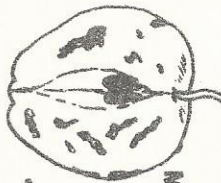
BULL'S EYE ROT

- margin darker than surrounding tissue
- brown spongy tissue beneath spot



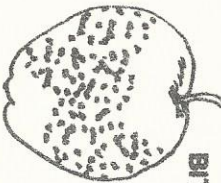
RUSSETTING*

- smooth russetting at calyx end may be due to rust mite



APPLE MAGGOT

- maggot without a definite head capsule
- shallow mines on apple surface
- "worm" tunnels through fleshy portion, brownish rot follows



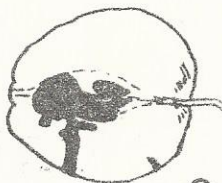
BITTER PIT*

- physiological disorder caused by localized calcium deficiency
- pits are only surface deep & don't penetrate fruit
- some varieties more susceptible



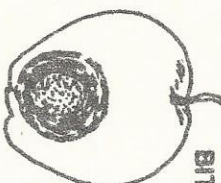
SAN JOSE SCALE*

- gray-white scale in slight depression
- reddish discoloration on skin
- watch for scales on bark of twigs and branches



CODDLING MOTH*

- caterpillar with definite head capsule
- frass on outside of fruit
- "worm" heads for center of fruit



BITTER ROT

- fungus infection



LEAF ROLLERS OR CUTWORMS*

- external injury includes deep holes and/or bumps or craters of callused old injury
- reduces grade



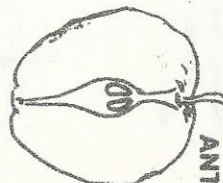
FRUIT DROP

- lack of pollination due to:
 - lack of cross-pollinizer
 - spring frost
 - lack of bees to carry pollen
 - too cold for bees to fly
- no seed inside shriveled fruit



ROSY APPLE APHID*

- small distorted fruit
- accompanying leaves may be curled, distorted or yellow
- confined to fruit spur



APPLE ANTHRACNOSE*

- small circular light brown areas with spongy brown tissue beneath; slowly enlarge in storage
- small bumps (spores) may form in the center



PANDEMIS LEAF ROLLER

- tiny pinholes
- some webbing may remain



BIRD INJURY

- deep or shallow gouges in fruit
- beak marks often visible



VIRUS OR BORON DEFICIENCY

- small fruit with irregular sunken "scars"



BUCKSKIN = SUNBURN

- bronzed area on young fruit due to too much sun on fruit
- usually on surface which is at right angle to sun
- lowers grade



OYSTERHELL SCALE

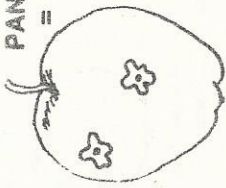
- minor damage to fruit
- reduces grade
- watch for clusters at branch nodes on bark trunk



BRUISED

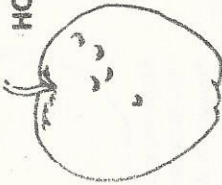
- bruises occur when fruit drops from tree or when packed roughly

PANSY SPOT = THRIPS



- caused by egg puncture of a thrip
- faintly discolored area around egg
- reduces grade

HONEYDEW DROPS



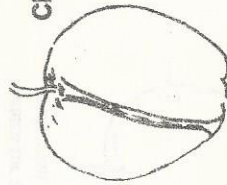
- droplets of sticky honeydew produced by woolly apple aphid or other sucking insects

SMALL SIZE



- small size on an otherwise perfect fruit may be due to lack of water at critical growth phase or need for thinning to one or two apples per spur

CRACKING



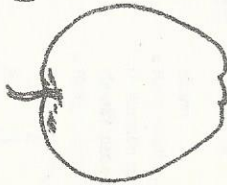
- sudden growth after a period of slow growth that allowed skin to toughen such as sudden abundant water after a long dry spell

RUSSETTING*



- spidery corky tissue
- causes include weather, sprays, powdery mildew (may also cause cracking), honeydew, etc.
- some varieties russet more easily than others

HEALTHY FRUIT



- size color and shape typical for the variety
- lack of blemishes and perfection of fruit qualifies it for fancy and thus top price (such is the marketplace)

* Denotes fairly common problems in Washington State. There may be considerable variation in local regions.

Northwestern Washington Research & Extension Unit
 WASHINGTON STATE UNIVERSITY
 1468 Memorial Highway
 Mount Vernon, WA 98273

Tree Fruit Scionwood and Grape Cuttings
 Available Spring 1986

ORDER MUST BE RECEIVED BY JANUARY 20, 1986
 (Minimum Order is \$7.50)

<u>Quantity</u>	<u>Scionwood</u>	<u>Grape Cuttings</u>
1 - 4	\$ 1.50	\$.75
5 - 9	1.25	.65
10 - 20	1.00	.50
20 & Up	.75	.30

<u>Quantity Desired</u>	<u>Scionwood Tree Fruit (10" stick)</u>	<u>Grapes Cuttings (3 buds)</u>
_____	_____	_____
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Total amount of order _____

25% of total order for postage & handling _____

Tree Fruit Cultivars for Western Washington (EB0937 @ \$.50 ea.) _____

Amount Enclosed (Payment required with order) _____

NAME _____ TELEPHONE () _____

ADDRESS _____

Please make checks payable to NORTHWEST AGRICULTURAL RESEARCH FOUNDATION

Siftonwood

<u>Apple</u>	<u>Apple (con't)</u>	<u>Apple (con't)</u>
Akane	Kent	Tompkins King
Ashmead's Kernel	King (Clow)	Wealthy, Red
Baldwin	Laxton's Superb	Westfield Seek-No-Further
Blue Pearmain	Liberty	Whitney Crab
Bramley's Seedling	Lodi	Winston
Brown Russet	Lord Lamburne	Wolf River
Burgundy (NY 161)	Macoun	
Centennial Crab	Magnolia Gold	<u>Cider Apples</u>
Chehalis	Maigold	
Cherry Cox	Melon	Anere de Berthcourt
Chestnut Crab	Melrose	Angvile Grise
Corrland	Merton Russet	Bedan
Cox Orange Pippin	Monroe	Bellflower
Davies	Mott Pink	Brown's Apple
Discovery	Mutsu	Bulmer's Norman
Duchess of Oldenburg	Newtown Spitzenberg	Chisel Jersey
Early Northern Spy	Nova Easygro	Cimitiere
Egremont Russet	Opalescent	Cow Jersey
Empire	Oriole	Dabinett
Fortune	Ortley	Feuillard
Freyberg	Porter	Geeveston Fanny
Gravenstein	Red Gravenstein	Harry Master's Jersey
Harvey	Red June	Kingston Black
Hawaii	Red Wealthy	Marachel
Hawkins	Rhode Island Greening	Marin Oufroy
Holly	Sinta (CDA 8c-4-5)	Michelin
Holstein	Spartan	Muscat de Berney
Horse Apple	State Fair (Minn 1639)	Muscat de Lense
Hubbardston	Stearns	Peau de Vache
Hudson's Golden Gem	Summer Rambo	Pomme Gris
Idared	Summerred	Porter's Perfection
Joangold	Sutton	Reine des Pommes
Jonagold	Sweet Alford	Sweet Coppin
Jonamac	Sweet Sixteen	Tremblott's Bitter

Cider Apples (con't)

Vagnon Flocher

Pear

Atlantic Queen

Aurora

Bartlett

Bosc

Comice

Conference

El Dorado

Flemish Beauty

Highland (NY 10274)

Magness

Moonglow

Old Home (Interstem)

Orcas

Reimer Red

Santa Maria

Seckel

Sierra

Sirrine

Surecrop

Oriental Pear

Chojuro

Nijisseiki (20th Century)

Shinseiki

Cherries

Angela

Cherries (con't)

Bada

Bergie

Bing

Buttner's Spate Rote

Knorpelkirsche

Corum

Early Burlat

Emperor Francis

English Morello

Hardy Giant

Hudson

Kansas Sweet

Lambert

Merton Bigarreau

Moreau

North Star

Rainier

Sam

Schatten Morelle

Stella

Summit

Ulster

Van

Vogue

Plums

Abundance

Beauty

Burbank

California Blue

Date

DeMontfort

Earlblue Prune

Early Golden

Plums (con't)

Italian Prune

Early Italian

Elephant Heart

Explorer

Frontier

Green Gage

Laroda

Methley

Mirabelle

Ozark Premier

Peach Plum

Pershore (Yellow Egg)

Richards Early Italian

Santa Rosa

Satsuma

Seneca

Shiro

Shropshire Damson

Stanley

Superior

Sweetheart

Verity

Apricots

Alfred

Blenril

Goldcot

Harcot

Hargrand

Harlayne

Harogem

Katy

NY 544

<u>Apricots (con't)</u>	Buffalo	Madeleine Angevine
	Canadice	Marechal Joffre
Perfection	Castel 19637	Madeleine Sylvaner
Rival	Cayuga White	Muller-Thurgau
Skaha	Chasselas D'Or	New York Muscat
Sunglo	Edelweiss	Okanagan Riesling
Tilton	Elizabeth	Price
Veecot	Festivee	Siegerrebe
	Interlaken Seedless	Suffolk Red
<u>Grape Cuttings</u>	Leon Millot (Kuh 194-2)	SV 5247

What's The Best Pie Apple?

by Nancy Cushman

Two or three years ago during a cold, rainy spell I decided to taste test apple pies from all the different apple varieties I could get ahold of. Official taste testers were a 10 year old who prefers blueberry pie, a 13 year old who eats anything, a husband who rarely eats pie and the pie maker who likes any pie as long as its apple (or so I thought).

The results--Gravenstein is still the best pie apple. We're not talking about mushy processed Gravensteins, but fresh off the tree, slightly green Gravensteins. Unbeatable! Unfortunately, it's in season for less than a month. But one pleasant surprise was that Davey is almost as good as Gravenstein and it does keep--until February or March in the garage.

The official results:

1. Gravenstein
2. Davey
3. King--very good, stores until April or May
4. Northern Spy--very good, great flavor and texture, stores well
5. Jonagold--good, doesn't mush, flavorful
6. Hawaii Gold--good, doesn't mush, not too juicy
7. Idared--good, doesn't mush
8. Esopus Spitzenburg
9. Yellow Bellflower--ok, lemony taste
10. Ashmead's Kernel--ok, chewy, different taste
11. Cortland--ok
12. Grimes Golden--ok, little bit too dry
13. Belle de Boskoop--tangy, astringent, doesn't mush
14. Red, Red Rome--bit bland, slight Rome taste
15. Wolf River--ok, some Wolf River taste
16. Wagener--perfumey
17. Gala--so-so, watery
18. Opalescent--bland, mushy
19. Russeted Spy type--inedible, not even the teenager would eat this one

Not tested, but suggested as good pie apples were Bramley's Seedling, Melrose and Paulared.

Cider Apples (con't)

Vagnon Flocher

Pear

Atlantic Queen

Aurora

Bartlett

Bosc

Comice

Conference

El Dorado

Flemish Beauty

Highland (NY 10274)

Magness

Moonglow

Old Home (Interstem)

Orcas

Reimer Red

Santa Maria

Seckel

Sierra

Sirrine

Surecrop

Oriental Pear

Chojuro

Nijisseiki (20th Century)

Shinseiki

Cherries

Angela

Cherries (con't)

Bada

Bergie

Bing

Buttner's Spate Rote

Knorpelkirsche

Corum

Early Burlat

Emperor Francis

English Morello

Hardy Giant

Hudson

Kansas Sweet

Lambert

Merton Bigarreau

Moreau

North Star

Rainier

Sam

Schatten Morelle

Stella

Summit

Ulster

Van

Vogue

Plums

Abundance

Beauty

Burbank

California Blue

Date

DeMontfort

Earlblue Prune

Early Golden

Plums (con't)

Italian Prune

Early Italian

Elephant Heart

Explorer

Frontier

Green Gage

Laroda

Methley

Mirabelle

Ozark Premier

Peach Plum

Pershore (Yellow Egg)

Richards Early Italian

Santa Rosa

Satsuma

Seneca

Shiro

Shropshire Damson

Stanley

Superior

Sweetheart

Verity

Apricots

Alfred

Blenril

Goldcot

Harcot

Hargrand

Harlayne

Harogem

Katy

NY 544

New Rootstock Surveyed

by Mike Michel

This report is aimed primarily at the backyard or small commercial grower who does not have ready access to research publications and commercial trade journals. It presents brief descriptions of various rootstocks, domestic and imported, which are being made available to the public. In selecting a rootstock, consider the vigor of the scion, as well as soil, cold hardiness, and disease resistance. It is expected that revisions will be made as more domestic experience is gained under the various climatic and soil regions of the U.S.

A note on abbreviations: EMLA refers to rootstocks developed at East Malling and Long Ashton, England. P refers to the Polish Apple Breeding Program. Bud refers to Dr. Budagowski, who was the most successful rootstock breeder in the Soviet Union. GM refers to the Fruit and Vegetable Research Station in Gembloux, Belgium.

APPLES

Generally it can be stated that apple rootstocks induce many of their qualities into the grafted scion. For example, if the rootstock is disease resistant, the grafted scion takes on this resistance.

EMLA-27 Approximately 20% of seedling size (smaller than EMLA-9). Not as hardy as originally thought. Suitable for most temperate regions (i.e., most areas west of the Cascades). Not resistant to crown rot. Very precocious, that is, bears when very young. Needs support. Best suited for pot culture or small intensive gardens. Available now.

MARK (Originally called MAC-9) Approximately 40% of seedling size (slightly smaller than EMLA-26). Hardy for most areas of U.S. Collar rot resistant. Shows some blight resistance. Free standing. Precocious. Sold out for 1985. Available in 1986. Patented. MARK shows great promise.

P-2 Approximately 30% of seedling size (between EMLA-9 and EMLA-26). Very hardy (similar to Alnarp 2). May be selected over MARK for areas of extreme cold until MARK has more history. Resistant to collar rot. Slightly susceptible to scab and mildew. Shows resistance to European canker, perennial canker, silver leaf and crown gall. Requires a rich soil and can be used for high density trellis planting. A few available in 1985. Available 1986.

P-14 Approximately 45% of seedling size (between EMLA-26 and EMLA-7). As hardy as EMLA-26. Resistant to apple scab, powdery mildew, collar rot and crown gall. Precocious like EMLA-106. May require some support. Available 1987.

P-16 Approximately 25% of seedling size (about EMLA-9). Hardiness slightly less than EMLA-9. High level of resistance to apple scab, collar rot, powdery mildew and crown gall. About the same resistance as EMLA-9 to fire blight. Precocious. Requires support.

P-18 Approximately 75% of seedling size (vigorous, similar to

EMLA-111). Very winter hardy, more so than seedling. Main value will be as a winter hardy base for interstems. Resistant to most diseases. Moderately resistant to fire blight. Induces precocity slightly lower than EMLA-106. Free standing. Can be used on wet or sandy soils. Available 1986.

P-22 Approximately 20% of seedling size (slightly larger than EMLA-27, more dwarfing than EMLA-9). Exceptionally winter hardiness resistant to collar rot, perennial canker, European canker and silver leaf. High level of resistance to apple scab, powdery mildew and crown gall. About the same resistance to fire blight as EMLA-9. No resistant to woolly apple aphids. Induces early fruiting. Crops like EMLA-9. Has all the good traits except not self supporting. A few available in 1985. Available 1986.

BUD-9 Approximately 30% of seedling size (between EMLA-9 and EMLA-2 about MARK size). Very hardy. Very resistant to collar rot. Moderately resistant to powdery mildew and apple scab. As susceptible to fire blight as EMLA-9. Requires support. Available 1986.

BUD-118 Approximately 75% of seedling size (vigorous, as EMLA-111). Resistant to collar rot and apple scab. Slightly susceptible to crown gall and powdery mildew. Resistance to fire blight not known. Comparable to M-111 in yields. Free standing. Useful on dry sandy soils or as interstem base on rich soils. Available 1986.

BUD-490 Approximately 55-60% of seedling size (near EMLA-106). Very winter hardy. Medium resistance to collar rot. Moderately susceptible to fire blight. Precocious as EMLA-106. A possible successor to EMLA-106. Self supporting. Available 1986.

BUD-491 Approximately 20% of seedling size (between EMLA-27 and EMLA-9). Very winter hardy. Susceptible to collar rot. As susceptible to fire blight as EMLA-9. Very precocious and induces heavy fruiting. Needs some support under heavy loads. A few available in 1985. Available 1986.

APPLE INTERSTEMS P-2, P-22, BUD-9 all make strong unions, are hardy and dwarfing.

PEARS

Selections of dwarfing rootstocks for pears are much more limited than those available for apples. To date, choices of dwarfing rootstocks have been limited to various clones of quince and those from the series of Old Home x Farmindale. We hear some new introductions may be available for Western and Eastern European countries in a few years.

QUINCES In general these are precocious, high yielding, resistant to most diseases and susceptible to fire blight. The quinces are not cold hardy and can be used only in temperate areas such as the Willamette Valley. They do not do well on wet soils. Due to incompatibility with many pear varieties, an interstem such as Old Home, Hardy or Comice, must be used. In the past Quince A has been used extensively. It is about 65% of seedling size. The newer

SOURCES OF SUPPLY Except where noted, write Oregon Rootstock, Inc., 10906 Monitor-McKee Rd. N.E., Woodburn, Or. 97071, for price and quantities available. Minimum order, 100, with a minimum of 50 of each item.

SUMMARY It is apparent from this condensed review that many new introductions are now available or will soon be offered to the general public. No one rootstock can be expected to fulfill all the requirements of any one locality. Some of these and other rootstocks may "fall by the wayside", while some selections may ultimately display better qualities than known now. Many introductions have only a limited number of years of trial; more information must be collected from hobbyist, research and commercial growers. For more detailed information on these rootstocks and many others not describe in this article, some of the trade journals offer a series of wide ranging articles. One excellent edition is Vol. 35, No. 21, Dec. 1, 1984, issue of "The Goodfruit Grower", P. O. Box 9219, Yakima, WA. 98909.

EUROPEAN CANKER MOVING IN by Rick Reisinger

This past winter and spring brought more than its fair share of problems for fruit growers west of the Cascades. The record setting cold snap in December and unusual wet spring have resulted in unusual and severe disease developments. We all know what a mess scab, mildew and brown rot have been this year (not to mention a terrible pollination year) but this spring also saw increasing development of a rather uncommon fungus disease called European Canker.

European canker showed up in commercial and backyard plantings of apples throughout Western Washington this year. The cankers, perennial in nature (they continue to enlarge year after year if left unchecked) have been an important disease in European orchards for years infecting both apples and pears.

Cankers usually develop at a pruning cut, leaf scar or where a young twig or branch has broken off. Cankers can appear on new wood where they may encircle small branches causing the branch to "die-back" from the canker out. This type of canker is reddish, water soaked and may develop white fungus spores on its surface.

First year cankers can also develop on large stems on the main trunk. These are reddish, elliptical in shape, and develop a sunken appearance. The edge of the canker appears dead and flaky.

Older cankers develop either an "open" or "closed" appearance. Open cankers appear sunken with a series of concentric calluses, a callus being added each year. A "hole" develops in the center of this canker. Closed cankers are covered with dead bark and appear swollen.

Apple varieties with Macintosh in their parentage (i.e., Spartan, Jonamac, Macoun, Tydeman's Red) seem to be particularly susceptible although cankers have been reported this year in Jonagold and Bartlett pears.

Control of this disease is difficult due to the ability of this fungus to disseminate spores nearly every month of the year. Control centers on prompt removal of suspicious cankers being careful to make clean cuts. Sterilize tools between cuts with rubbing alcohol. These prunings should be disposed of or destroyed.

Provence Quince (Le Page series C) and Provence Quince (BA 29-C) are approximately 60% of seedling size, precocious, very high yielding and more winter hardy than Quince A. The newest introduction is EMLA Quince C. This clone is more dwarfing, about 30% seedling size. Reports indicate varieties on this clone produce heavier yields with greater fruit size than varieties on Quince A. Its winter hardiness is not reported yet.

OLD HOME x FARMINGDALE. This series has been under tests for years with rights assigned to Carlton Plants. All these clones are hardier than quince. #51 is the least hardy and the only one that should not be used in the Midwest. Furthermore, it is not as productive as the other clones. All are adapted to wet soils with the possible exception of #97. All clones are resistant to fire blight and pear decline, but it is not known if there is any influence in imparting resistance to the scion variety. Clones are resistant to collar rot. Yields and precociousness are better than Bartlett seedling. The biggest attribute of these clonal selections is the uniform and consistent size and qualities versus the variables so evident in seedling rootstocks. #51 is the smallest and most difficult to propagate. It is followed in size by #333, #217, #97 and other selections. All are well anchored and compatible with all known pear varieties. Many of the clonal selections are now available in limited quantities. Write to Carlton Plants, P.O. Box 398, Dayton, Ore. 97114, for price and availability.

CHERRIES

EMLA COLT. 80% of Mazzard (seedling size). Moderately cold hardy, though not known if it is as hardy as Mazzard. Colt has shown resistance to bacterial canker, crown gall and cherry replant disease. It adapts to wet soils better than Mazzard and Mahaleb. Fruits earlier than Mazzard. Compatible with most known sweet and sour varieties. Patented. Available now.

GM SERIES. This series from Belgium are all more hardy than Mazzard or Colt. Compatibility is good. No adverse reports at this time in regards to wet soils or disease resistance. GM 9, GM 61/1, and GM 79 are reported to show improvements in fruit size, color and yield over Mazzard. All three are precocious. Size compared to seedlings: GM 9 - 35/40%, GM 61/1 - 50/55%, and GM 79 - 75%. Patent pending on all. Limited availability in 1986.

PLUMS

FIXIE. 35% of standard seedling size. Hardier than St. Julian A or X. Disease resistance unknown. Precocious. Not compatible with peaches. Does well with all plum varieties. Limited availability in 1986.

CITATION. 50% of standard seedling size. Compatible with peaches and plums. May be available in commercial lots only. Contact Dave Wilson Nursery, Hughson, Ca. 95326, for further information.

PEACHES

AMANDIER. A new peach x almond cross which eliminates the replant problem. For information, contact Hilltop Orchards and Nursery, Inc., Rt. 2, Hartford, MI. 49057.

This disease is notorious for entering the plant through leaf scars so a spray at leaf fall with bordeaux 8-8-100 or fixed coppers or ziram 76 WP should be beneficial. Earlier fall sprays for anthracnose control should also be of benefit. Because entrance is also gained through pruning wounds great care should be taken to make clean cuts with sharp tools.

Take a look at your trees. Suspicious cankers should be diagnosed by your county Extension staff.

APPLE MAGGOT QUARANTINE by Rick Reisinger, Snohomish County Extension Agent

The apple maggot, *Rhagoletis pomonella*, is a major pest of apples in the northeastern U.S. and western Canada. In 1979, the apple maggot was first discovered in the Pacific Northwest in the Portland, Oregon area. Since then apple maggot adults have been found in Skamania, Klickitat, Lewis, Pacific, Cowlitz, and Clark counties in western Washington. In Eastern Washington, flies were caught in a 7 mile square area in Spokane. To date, neither apple maggot flies, maggots, nor fruit damaged by them have been detected in commercial orchards in Washington state.

The Washington State Department of Agriculture has developed an extensive statewide survey for the apple maggot. Traps designed to catch apple maggot flies, and a few closely related flies, are set up throughout much of the state and concentrated in areas where flies have been previously caught. These traps are set up in late June and are monitored through September. This program is expected to continue for several years and will monitor the distribution of the apple maggot. Control programs for apple maggot are currently under way in Skamania, Klickitat and Spokane counties.

Apples are the main host for the apple maggot. Other hosts include hawthorne and crabapple. Early cultivars (varieties) of apples are particularly susceptible to early damage by the apple maggot.

Eggs are laid just below the skin of the fruit and cause a "dimpling" on the fruit's surface. Maggots develop in the fruit to a size of about 3/8" long. Brownish tunnels are evident in fruit with internal rot developing later. The adult fly is 1/4-3/8" long and has a black abdomen. Females have 4 white bands on the abdomen, males have 3. Wings are clear and have black bands.

An apple maggot quarantine is now being enforced by the Washington State Department of Agriculture. This quarantine effectively prohibits the movement of apples anywhere in western Washington without a permit (unless the fruit has been grown and packaged by a commercial grower using standard pest control practices).

DONATIONS FOR RESEARCH

As most of you probably know, one of the aims of our association is to furnish such financial support as is possible to the Northwestern Washington Research And Extension Unit, Washington State University, Mt. Vernon, Washington for tree fruit research. It has been our practice in the past to donate any money in the treasury at the end of the year, over and above what we estimate it will take to run the club during the ensuing year. Last year we donated \$1,000. This year the Board of Directors has again voted to donate \$1,000. In the spring newsletter we usually remind members that donations from individuals for this purpose will be greatly appreciated by Dr. Norton. Somehow this reminder was omitted from the spring newsletter this year, and not many donations were received. It is still not too late to contribute something to the fund. Just make your check out to the association. Specify that the money is to be used for research at Mt. Vernon and mail it to the treasurer. Remember, all such donations are deductible for income tax purposes.



Membership Application

WESTERN CASCADE TREE FRUIT ASSOCIATION

Purpose: Shall be to bring together persons interested in growing fruit and nuts west of the Cascade Mountains for the purposes of disseminating information.

Shall be to aid financially to tree fruit research in the Northwestern Washington Research and Extension Unit, Mt. Vernon, WA.

Membership Activities: Spring - one day seminar, Fall - orchard or facilities tour and fruit show. Four issues of Newsletter - spring, summer, fall and winter.

NAME _____ Phone _____

ADDRESS _____

CITY _____ ZIP _____

DUES: \$10.00 annually. NEW _____ RENEWAL _____

_____ Interest in forming local chapter _____
(area)

Your fruit speciality or interest _____

_____ Willing to help out with _____
(List committee or work)

Mail to: Tom Berry, 23305 39th Ave. S.E., Bothell, WA 98011

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