# WCTFA NEWSLETTER



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## SUMMER 1985

Fruit Show Moving Right Along

by Helen Zuelow

Planning for 1985 All About Fruit Show is in the hot popcorn stage. Ideas previously discussed are becoming schedules, outlines, and immediate goals. WCTFA consponsors the fruit show with Washington State University.

We have contributed substantially to the fun and enery of past shows. The theme of this year; s show is "eduation" with emphasis on offering new and prosepctive fruit growers information that will spark, inspire and encourage them to action. Our part to play involves the following projects:

- 1. Develop educational displays (example: the 10 best apples for western Washington)
- Develop and judge contests (example: Biggest Apple, Ugliest Apple)
  - 3. Provide host/hostesses
  - 4. Distribute fruit show literature prior to the show

None of these projects is difficult. In fact, we have fewer large scale projects than in past years, but more straightaway fun ones. We need helpers, doers, and thinkers to start on projects now, and also a crew of ready and willing folks to help on show days for free admission. No one need fear getting stranded with a big job to do alone. There will always be back up and sharing. Call or write me with your offer of help and the project you prefer to work on—Helen Zuelow, 13631 NE 102nd, Kirkland 98033; 827-2939.

DON'T FORGET THE ALL ABOUT FRUIT SHOW NOV. 2&3 TACOMA DOME

## New Reotstock Surveyed

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 that 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. Not 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-26, 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 susceptable 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 susceptable 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 F-2, F-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 sone 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

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. biggest attribute of these clonal selections is the uniform and consistant 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. Compatiblity 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 seedling: GM 9-35/40%, GM 61/1 - 50/55%, and GM 79 - 75%. Patent pending on all. Limited availablilty in 1986.

#### PLUMS

PIXIE 35% of standard seedling size. Hardier than St. Julian A or X. Disease resistance unknown. Frecocious. 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.

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 described 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. D. Box 9219, Yakima, WA. 98909.

## WCTFA Officers and Board

Helen Zuelow, President (1986) 13631 NE 102nd, Kirkland 98033; 827-2939

Robert A. Norton, Vice President (1986) 1468 Memorial Hwy, Mt. Vernon 98273; 424-6121

Nancy Cushman, Secretary (1988) 9210 131st NE, Lk. Stevens 98258; 659-6087

Tom Berry, Treasurer (1987) 23305 39th Av SE, Bothell 98011; 483-8654

Dave Battey (1988) 40404 SE 70th Dr., Snoqualmie 98065; 888-2504

Ben LaLonde (1987) 491 Lotzgesell Rd, Sequim 98382; 683-4055

Les Merritt (1986) 898 Bayview-Edison, Mt. Vernon 98273; 766-6264

John Parker (1986) 60 Tala Shore Dr, Port Ludlow 98365; 437-2313

Ed Lewis (ex-president) 9615 NE 14th, Bellevue 98004; 454-3615

Dave Battey, Emory Leland and Nancy Cushman were elected to the Board of Directors by the general membership at the Spring Meeting. After the meeting, the Board of Directors met and elected officers for the current year (a repeat of last year's sucessful team!).

The next meeting of the Board of Directors will be Saturday, June 8th 10 am at the Snohomish County Extension Office, 600 128th SE, Everett. WCTFA members are welcome to attend.

## Ordering Rootstock

We need to get some idea very soon as to what kinds of rootstocks our members would like to have at our rootstock sale next year, and in what quantities. We should place our order for some items in August.

Would anyone be interested in pear rootstock? It might be possible to get some Service Berry. Those of you who heard Porter Lombard talk about pears at Mount Vernon 2 or 3 years ago will remember that he said Service Berry is the most dwarfing of the pear rootstocks. Quince and Old Home x Farmingdale series (possibly) could also be ordered.

So would you please give us an estimate of the number of each rootstock listed below you would like to buy next spring. Please understand that you are not placing an order. We won't expect you to take the number you indicate...if you should change your mind. But this should give some idea of how many to procure. Remember also, that any profit we make from these sales is donated to the fund for tree fruit research at Mount Vernon.

MARK		P-2	P-22	M	-26		M-7a	
2	bette store trees upda stora suca suod	builty marts based broad entiry gather prints	Apert Apole make make halfs	profit wipod	steel state over case here to	ut Armin	101	ik kepir sama antris koma diatu gumb
EMLA	27	M-9					*	25
	Single popular more storing davids Storin	Mind store done your door to	or tools					

Please use this space to list any other rootstocks you may be interested in obtaining. If there is enough demand, we'll try to get them.

Your name, address amd phone #

Please mail to Walter L. Lyon, 19717 80th N.E., Bothell, WA. 98011; Phone 483-5574.

## Upcoming Events

WCTFA is considering sponsoring a bus trip to the research station at Summerland, B.C. in late September. This will be similar to the trip undertaken by NOFC last fall. See the last newsletter for details of their trip

Forty-five seats will be available on the bus on a first come, first serve basis. Write to Helen Zuelow, 13631 N.E. 102nd, Kirkland, WA. 98033, to-make a tentative reservation. If enough interest is shown, more definite arrangements will be made.

HOS-WCTFA members who are considering going to the HOS picnic on Aug. 11th, should contact Helen Zuelow by mid July. If enough interest is shown, Helen would like to arrange a mini-tour of some Oregon orchards for that weekend.

A late September—early October tour of Vashon Island orchards has been scheduled. The date will depend on the timing of the Summerland tour.

## Chapter News

The Seattle Tree Fruit Society chapter of WCTFA under the direction of Emory Leland holds monthly meetings on the last Saturday of the month. Current projects include a monthly newsletter and name badges. The purpose of the society is to promote and stimulate interest in growing tree fruit in urban areas. For further information, contact Emory, 523-6363.

This year marks the third anniversary of the North Olympic Fruit Club chapter of WCTFA. Their goal is to serve the needs of their members and to participate in fruit shows. The NOFC has been involved in group purchasing of mulches, orchard ladders and grafting knives. They have also held their own fruit show and sponsored a highly successful tour of the Sumberland, B.C. research station. Meetings are held the third Thursday of the month in Port Gardiner and feature speakers on appropriate topics. Contact John Parker, 437-2313, for more information.

The Piper Homestead Chapter has been very busy with pruning this spring. Many volunteers have been involved in getting some of the older trees down to manageable dimensions. They are also on target toward replanting some of the "holes" left in the old orchard by 100 years of attrition. Ed Lewis negotiated with a rootstock wholesaler to buy sturdy M-111 rootstock for the replanting, and the dealer was so interested in the project that he donated the rootstock. They have been planted at Dave Battey's farm near Snoqualmie, where chapter members will graft them over to representative historical varieties. Anyone interested in joining the Piper chapter of WCTFA, or in helping with the work parties, can contact Daphne Lewis, 323-5834, or Paul Donaldson, 364-0161.

#### RESEARCH UPDATE FROM NORTHWESTERN WASHINGTON RESEARCH UNIT

- Leaf Curl may be less this year due to the extremely dry winter. We have an experiment on Harken peaches which should be ready for reading in a week or two. Dr. Ralph Byther is preparing label change recommendations which put less emphasis on the December spray and more on the mid January spray plus a second spray three weeks later. Either the copper or sulfur sprays have been effective, along with Ziram. Difolatan is registered in Canada and we understand there is an effort to get it cleared here as well.
- Field Days We have scheduled two Open House events for 1985: July 12 and September 6. Both are on a Friday. The July 12 session will run from 1:30 8:00 PM to allow for people who are working or coming from a distance. The September Open House will run from 9:00 AM 4:00 PM. As in the past, we will have a combination of tours and "sit-down" sessions. Details will be available from County Extension offices about a month prior to each Open House. We don't have the July 12 program firmed up as yet but it will emphasize berries, container culture and early tree fruit (cherries, cots, etc.)
- Commercial Tree Fruit A comparison of the 1982 and 1978 census of agriculture shows an increase in apple acreage in western Washington from 633 to 1,443 acres. I am amazed at these figures since a recent poll through County Extension offices revealed only about 350 acres in 1984. At any rate, it appears that interest in fruit production is increasing to say the least. Perhaps a commercial chapter of WCTFA is needed to serve this growing segment. Any volunteers to get something going?
- Western Washington apples and apple products made a hit at the recent IACS convention. Betsy Sestrap and R. A. Norton recently participated in the annual convention of the International Association of Cooking Schools. This is the group that runs cooking schools or writes and talks about cooking all over the country and internationally. Julia Child was very much in evidence.

Betsy and I did a show and tell about apples and apple products from the fresh apple to the fermented products (apple wine and cider). We represented the entire Washington apple industry and had lots of help from Tree Top and from the Apple Commission. We also got in a plug for western Washington apples and products. The big question was - Where can I get these products in quantity? Again, this points to the commercial potential in fruit production and processing in this area.

## Update on Pellination

Ongoing research on apple pollination suggests that cross-pollination is achieved through bee-to-bee pollen transfer in the hive by bodily contact rather than the traditional concept of direct tree-to-tree pollen transfer.

Researchers at Michigan State University came to this conclusion after studying various aspects of bee behavior and apple pollination.

- Bees rarely visit more than one floral source (one to two trees) per trip.
- Pollen samplings on honeybees and on the stigmata of apple blossoms being pollinized showed a wide range of pollens.
- Non-apple pollens from a half mile away were found on apple stigmata.
- 4. Fruit set was not effected by the placement of pollenizers and cultivars in the orchard. With the traditional concept of tree-to-tree pollen transfer, cultivars closest to pollinators should show a significant difference in fruit set.

The in-hive, bee-to-bee pollen transfer concept could lead to radical changes in orchard management. Solid block apple plantings would be possible provided that:

- 1. high foraging bee populations are encouraged
- compatible pollen precedes the cultivar bloom by one to two days to ensure adequate mixing in the hive
- 3. an equal ratio of bee-attractive pollen between two compatible varieties is provided.

Michigan State University researchers have also been working on a computer model to predict fruit set, taking into account weather, site conditions, number of bees and adequate cross-pollination. Predicting fruit set at petal fall should lead to management practices designed to increase fruit set on poor years. MSU hopes to have its REDAPOL available for use on home computers eventually.

### What's The Dest 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, astrigent, 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--unedible, not even the teenager would eat this one

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

## FROM THE PRESIDENT ...

With many acivities and committments to fulfill this past WCTFA year, members of the Board of Directors have been tardy with proper acknowledgement of services rendered to the organization.

Adequate thank you was never offered to Linda Chace, Pete Kaiser and Tom Jenson for work done at the 1983 fruit show. Together the three of them produced the Fruit Show Directory, and Linda coordinated all aspects of booth organization—a pioneering project. In addition, Linda and Pete completed three year terms as Directors. We offer you a respectful, admiring "thank you".

Joe Dupre's contribution as former Secretary/Newsletter Editor deserves appreciative recongnition. Thanks, Joe.

Jim Anstis completed a three year term as a Director amd Treasurer. He continues to offer the organization creative enery. Good work, Jim.

Walt Lyon has coordinated the annual meeting's scion exchange/rootstock sale for several years. Walt - you are excellent!

John Parker's incredible, inspiring enery has provided positive direction since WCTFA began. How grateful we are for you, John.

Ed Lewis persistently persues opportunities to promote WCTFA and build membership. Thank you, Ed.

Many other members contribute valiantly to WCTFA, and we intend to be ongoing and consistent about expressing appreciation.

## 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 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. 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.

WESTERN CASCADE TREE FRUIT ASSOCIATION 9210 131st N.E.
Lake Stevens, WA 98258

Bulk Rate
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Permit No. 16



Address Correction Requested

MARILYN TILBURY 4916 52ND AVE S SEATTLE, WA - 98118 HAVE YOU PAID YEARLY DUES?

A "feedstore type" hat with a Funginex or a pesticide logo on it.

A new air conditioned pickup truck with pinstripes, automatic transmission, trailer hitch and a gun rack in the back window to hold a fishing pole and a pair of loppers.

A shovel, an orchard ladder, 3 old fruit boxes and a good 3 gallon hand sprayer (\$12.95 at Fred Meyer) in the back of the pickup.

A good pair of pruners (\$3.95) setting on the dash of the pickup.

A \$250, 30 year old tractor and a new \$1500 flail mower.

A rotten, rusty old (Circa 1927) combination apple shredder and cider press that "I'm going to restore someday" sitting in a corner of the garage.

At least 10 fruit trees, 6 of which are in the ground. Any others have been heeled in sawdust for the last 2 years. One cherry tree (a Bing), one peach, one pear—all the rest are triploid apples.

from the Valley Orchardist