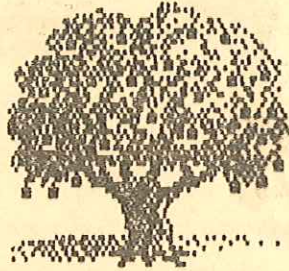




WCTFA



rcd 2-14-87
SPRING 1987

SPRING MEETINGS SET FOR MARCH 7th & 28th

The annual scionwood and rootstock sale will be March 7th, 10 am at the Snohomish County Extension Education Center. Rootstock should be preordered (see the last page of the newsletter). Members are requested to bring scionwood to be sold as a fund raiser for WCTFA. It should be free of insects and disease, not patented and true to name. Keep scionwood refrigerated in a plastic bag until the sale.

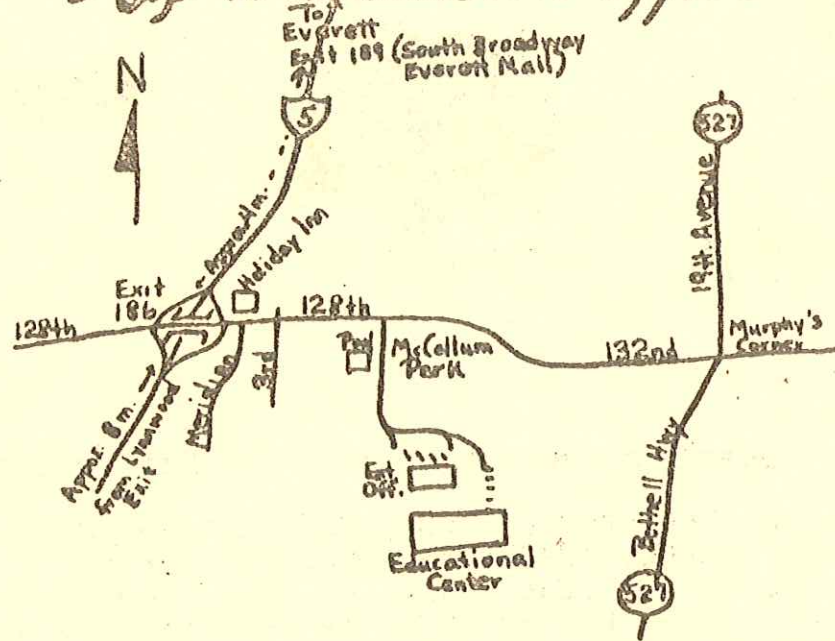
Tom Perkins will be doing the grafting lecture covering everything from a simple whip graft to top working older trees. Bring your grafting knife as we'll have time for some hands on work. Tom will start his lecture at 10 am and we will be selling rootstock and scionwood from about 11:30 to 1 pm. Bring a brown bag lunch, we'll supply the coffee.

At 1 pm, Rick Reisinger, Skagit County Horticultural Agent, will give a talk on pruning for approximately an hour. Then we will carpool to the orchard pruning site near Marysville. (Maps will be provided.) Rick will be showing how to revitalize older trees that have been neglected for a few years.

MARCH 28TH MEETING

- 9 am Business meeting--election of new board members, voting on amendments to bylaws (see fall newsletter) and life memberships
- 10 am coffee break
- 10:30 Dr. Norton will discuss new apple varieties he saw during his recent trips to Europe and Japan
- noon brown bag lunch
- 1:15 pm Dr. Byther, disease specialist at Western Washington Research and Extension Unit, will give a program on tree fruit diseases
- 2:45 pm Sharon Collman, entomologist and Snohomish County Horticultural Agent, will discuss pest management in fruit trees.

Map to Extension Office



The Snohomish County office is just east of I-5 on 128th Street (2 exits north of the I-5/405 interchange and south of Everett). Proceed east for approximately $\frac{1}{4}$ mile to McCollum/Pioneer Park. We are at the back beyond the swimming pool and park work area.

REMINDER THAT DUES ARE DUE

by Walt Lyon

In the last newsletter we urged members to please send in dues before the spring meeting. A few have done so, but only a small portion of the total membership. Send a \$10 check made out to WCTFA to Walt Lyon, 19717 80th NE, Bothell, WA 98011.

Also, those who wish to make donations to the Mt. Vernon Research Station for tree fruit research should make checks payable to the Northwest Agricultural Foundation, Inc. and mail them to the foundation at 1468 Memorial Highway, Mt. Vernon, WA 98273.

CHAPTER NEWS . . .

The Seattle Tree Fruit Society was founded in January 1985 in a meeting at Marlene Falkenbury's home with over forty persons present. They begin their third year with over 110 members. Contact Emory Leland, 7014 29th AV NE, Seattle 98115, 523-6363, for further information.

The North Olympic Chapter has changed its meeting time from the third Thursday of the month to the first Thursday. Contact John Parker, 60 Tala Shore Dr, Port Ludlow 98365, 437-2313 for further information.

BETH'S IDARED CAKE

Editor's Note: This cake was served at LaLonde's on last fall's orchard tour. It is printed here by popular demand.

1 cup oil	1 tsp. salt
1 1/2 cups sugar	1/2 to 1 cup chopped walnuts
2 cups sifted flour	1 tsp. vanilla
1 tsp. baking soda	3 eggs
1 tsp. cinnamon	3 cups sliced apples about 3/4 x 3/4 inches

1. Mix the oil and sugar.
2. Beat eggs well and mix with oil and sugar.
3. Sift together flour, baking soda, cinnamon and salt. Add to oil, sugar and egg mixture. Mix.
4. Mix in the vanilla.
5. Fold in the sliced apples and chopped walnuts.
6. Pour (scrape) into a 9 x 13 well greased pan.
7. Top with mix of 1/4 tsp. cinnamon, 2 tbl. chopped walnut and 2 tbl. sugar.
8. Bake in a 350 degree oven for 45-50 minutes or until done.

Beth uses 1/2 white flour and 1/2 whole wheat flour. Pecans can be combined with walnuts. She prefers Idared apples for this cake.

NEW ROOTSTOCK BEING TESTED IN EUROPE AND NEW ZEALAND

By L. D. Tukey, PENN STATE HORTICULTURAL REVIEWS

Two new apple dwarfing rootstocks are available from France. They are Pajam 1 (Lancep) and Pajam 2 (Cepiland). These are clonal selections from Paradis-Jaune-de-Metz (also origin of M-9), which are reported to be more congenial with grafted cultivars, are slightly more vigorous than M-9 (10-20%), and have improved production (10-30%).

Pajam 1 and 2 propagate easily, and are free from known viral and microplasma like diseases. These patented rootstocks are a result of a cooperative program conducted by C.T.I.F.L., and C.E.P. Further information can be obtained by writing C.T.I.F.L., Centre de Lanxade, Prignonrieux, 24130 La Force, France.

Aotea 106 is an apple rootstock developed and being evaluated in New Zealand. It was selected for its likely resistance to phytophthora and peniophthera root diseases that have killed up to 30% of some

orchard blocks in the Nelson region, especially on Moutera clay soils (poor orchard land). On this soil, trees have shown a 50% increase in yield as compared to the conventionally used rootstock, Merton 793.

Aotea 106 has been producing a semi-dwarf to vigorous tree, but further testing is needed, according to Dennis Cassidy, DSIR Appleby Research Orchard. On better soils in the region, the rootstock has not done well. (*The Orchardist of New Zealand* 59(7):249. 1986)

CLONAL ROOTSTOCK EXPLAINED

by L. D. Tukey, PENN STATE HORTICULTURAL REVIEWS

A clonally developed apple tree is a complex multi-genetic system. Two or more cultivars of different genotypes are united by budding or grafting to form a new individual, the rootstock, the scion, and in certain situations, an intermediate stempiece. The resulting system is called a stion.

The construction of multi-genetic systems is the basis for present day commercial apple production, and is a perfect example of biotechnology at work. In many respects, this use of biotechnology is unique in agriculture.

Rootstock genotypes differ in their adaptability to soils and moisture conditions, in the degree of plant size control on the scion, and in their influence on stionic flowering and fruiting. The scion genotype, conversely, can influence the vigor and amount of growth and development in the rootstock. An intermediate stempiece can be used as a genotype to circumvent an incompatibility or poor congeniality between a particular rootstock genotype and a scion genotype, or to introduce into the system disease resistance, cold hardiness, increased trunk strength or dwarfing characteristics from a particular genotype.

The development of new rootstocks with specific genetic characteristics is increasing the application of biotechnology research in pomology. Penn State has an active research program in multi-genetic systems.

JONAGOLD GAINS POPULARITY IN EUROPE

by L. D. Tukey, PENN STATE HORTICULTURAL REVIEWS

The apple cultivar Jonagold in Europe yields as well and is almost as easy to grow as Golden Delicious, but is more attractive and has far better flavor, according to Brian Lovelidge, correspondent for the Grower (UK).

In the next 5 years or so, Jonagold may become the predominant apple cultivar, replacing Golden Delicious. The only exception would be in Southern France and Italy where Golden Delicious does especially well. At present, Jonagold accounts for about 4% of European production, but could reach 50% in the years to come.

Although Jonagold's disadvantage is color (not red enough), a dozen or more new color sports, including New Jonagold and Jonagold Red, should correct the problem in the next 5 to 6 years.

Stions of Jonagold are with M-9 and M-27, and are trained as a slender

spindle which includes central leader support. The cultivar should be pruned very lightly, summer pruned when the orchard is established, and even treated with Alar for growth control. Most are being handled in 2 or 3 row beds at 3 to 5.5 ft. between trees, and, in a few cases, in single rows.

Yields reported by growers have been 574 boxes/acre in the third year, 969 boxes/acre in the fifth year, or 850 boxes/acre on the average. Pollinators being used are James Grieve, Gloster, Oregon Spur or Idared. (*Grower (UK) 106(2):27-29.*)

TREE FRUIT DISEASES SIMPLIFIED

by Sharon Collman

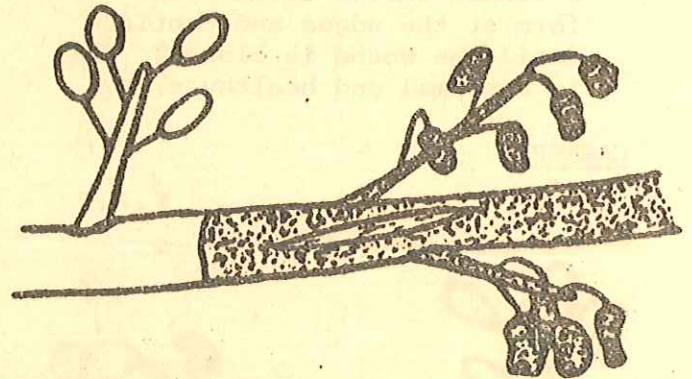
BRANCH, TWIG AND TRUNK DISEASES OF FRUIT TREES

Winter is an excellent time to inspect fruit trees for evidence of branch, twig and trunk injury. Nursery stock, which may have been checked as it left the grower, can be checked again as it arrives at the retailer and yet again by the purchaser. It is easy to miss a canker in a rush of loading, so checks along the way will catch the oversights and reduce the chance of the purchaser planting a diseased tree (or trees) that will need replacing (and worse, replanting!!!).

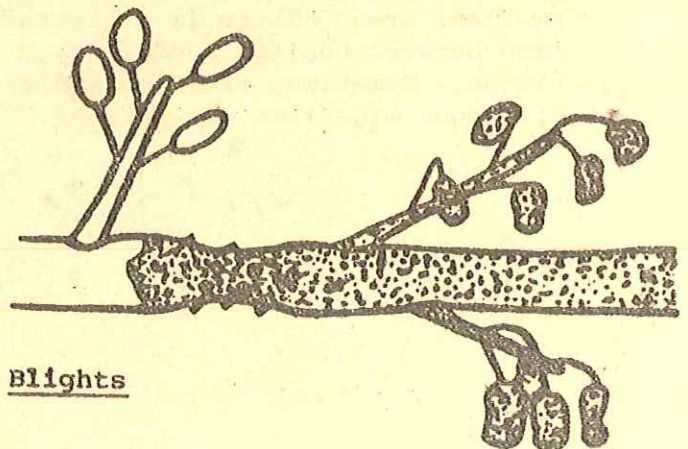
The drawings, symptoms and cause are included to facilitate your diagnosing a potential disease before it mushrooms into a "Problem!" Check the Plant Disease Handbook and Washington State University fact sheets for other details such as life cycle, photos of damage and disease management information. In case of a serious problem, verify your diagnosis with your county agent.

Many thanks to the authors of publications from which I unabashedly "lifted" the information: Dr. Roy Davidson (drawings), Dr. Ralph Byther and Dr. Otis Maloy.

GENERAL SYMPTOMS



Shoot Dieback - Sudden dying back of a shoot usually indicates climatic or chemical cause rather than parasitic disease. If line between affected and healthy bark is sharp, suspect a soil chemical. If dieback is somewhat more gradual and there is cracking of the bark and wood, suspect winter injury.

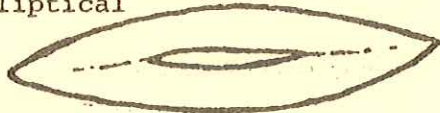


Shoot Blights

Shoot Blights - Gradual decline of shoots and retention of dead leaves may indicate a parasitic disease. The margin between affected and healthy tissue is often irregular and sunken. There may be small pinlike projections or bumps over the surface of dead bark. These are spore producing structures of disease organisms.

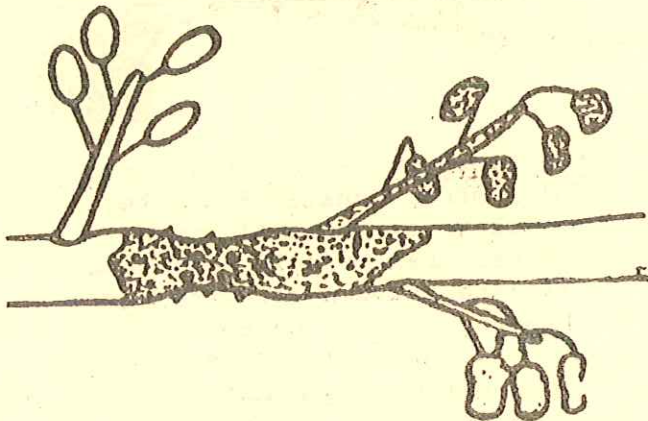
WOUNDS

There are often wounds or places where branches rub together that form elliptical



lesions on the branch. Usually a single callus tissue will form at the edges and continue until the wound is closed. This is a normal and healthy sign.

CANKERS



A canker is a sunken (or occasionally swollen) area. There is a distinct line between healthy and diseased tissue. Sometimes fruiting bodies of fungus organisms are present.

CROWN GALL

Cause: *Agrobacterium tumefaciens*, a bacterium. This organism may live over for several years in the soil, often being spread from diseased nursery stock. It may also be moved about by irrigation water and to some extent when grafting or by cultivation equipment.

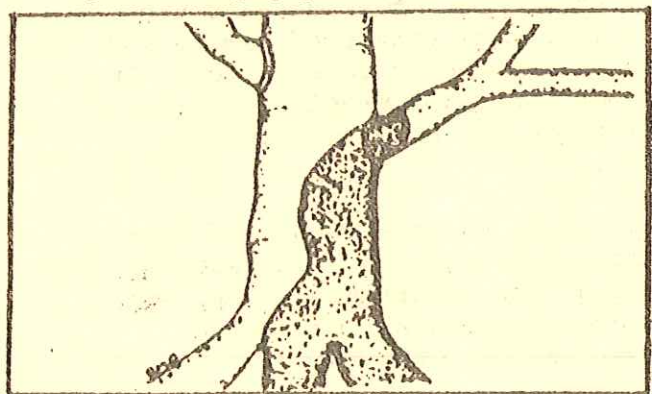
Symptoms: On young nursery trees, soft spongy or wart-like galls develop on the crown or on the roots. Galls range in size from a fraction of an inch to several inches across when occurring on mature trees. The gall tissues are irregular and of no definite growth pattern, suggestive of wild type cellular development. Where the galls completely encircle the trunk, young trees may be girdled and die.

POWDERY MILDEW

Although most common on leaves this disease can invade twigs at the tips and cause them to shrivel up.

CROWN (COLLAR) ROT

Symptoms: Premature bronzing, purpling or yellowing of foliage in late summer or early fall is the first evidence of crown rot. There is a reduction in growth and leaf size. Trees may decline over several years. Severely affected trees may leaf out in spring, and then die suddenly as if girdled by gophers.



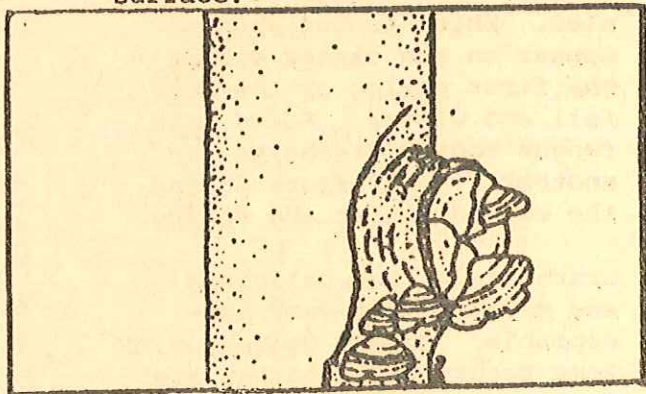
Apple Collar Rot

The bark at the root collar appears watersoaked and rotted. The wood under the affected bark is dead and brown in color in contrast to the white color of healthy tissue.

Cause: *Phytophthora coctorum* a soil-borne fungus, can infect a variety of fruit trees including apple, pear, and stone fruits. In Washington, it is most serious on apples. On pears and peaches, and possibly on other fruits, the fungus can be spread to the fruit where it causes a fruit rot that is often referred to as sprinkler rot.

WOOD DECAY

Symptoms: Wood decay often is noticed when sporophores of the decay fungus develop on pruning wounds, branch stubs, or dead faces on trunks and branches. These fruiting bodies are leathery shelflike structures several inches across. They may be single or in clusters and vary from white to black in color. Some have distinct concentric rings on the upper surface.



Wood Decay

The wood decay itself may not be apparent until a branch breaks off. The wood in the center of the affected area may be soft and crumbly with mats of fungus tissue embedded in the wood. Around the outside of the affected area may be one or more dark zone lines. Outside of

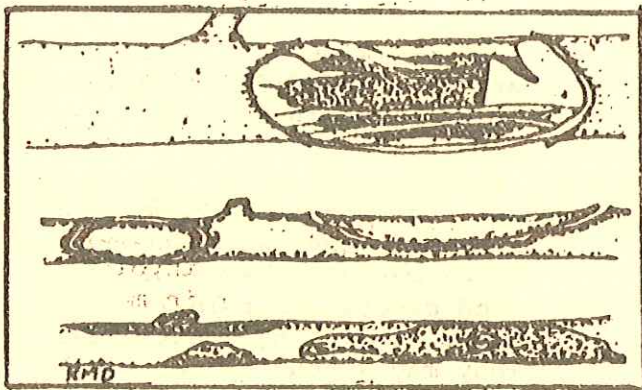
the zone line, the wood is hard and firm and differs only from normal wood in color.

Cause: *Polyporus versicolor*, a fungus. Other wood decay fungi may also be involved. Wood decays occur in most trees, including fruit trees. They may appear in relatively young trees but are especially common in older trees. They may weaken large branches which results in breakage from wind, snow or ice, or a heavy crop. Wood decay may be one cause of early decline of trees in some areas.

APPLE (*Malus sylvestris*)

ANTHRACNOSE

Symptoms: Cankers are most abundant on the smaller branches, those less than two inches in diameter. The cankers are elliptical, varying in size from one to ten inches long and two to three inches wide. The first evidence of infection is a small round, reddish brown spot on the bark which extends into the underlying tissues. These initial cankers do not develop during winter months but become active in early spring and the canker extends rapidly up and down the branch. By the time growth occurs in the tree, the cankers cease to develop and a well-defined crack forms around the edge of the canker. The surface of the canker becomes shriveled and the tissue disintegrates and falls out. Strips of dead bark may extend across the canker creating a "fiddle string" appearance.



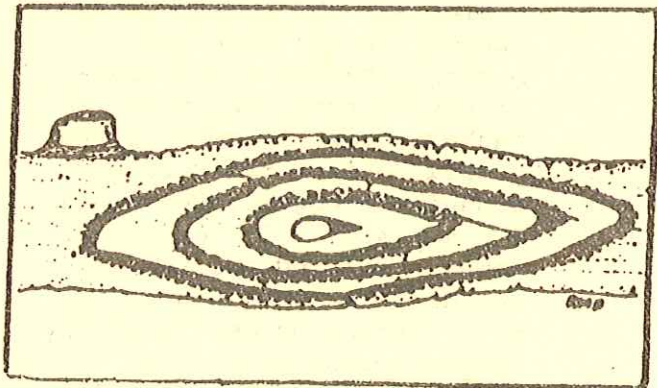
Apple Anthracnose

Cause: *Neofabraea malicorticis*, a fungus. The disease is severe only in Western Washington (west of the Cascades). The fungus causes cankers on twigs and branches and a fruit rot similar to bull's eye rot. Fall rains wash fungus spores from branch cankers to maturing fruit and to young limbs and twigs. Fruit rot usually appears late in the season at harvest, or in storage.

Note: Bruises resulting from lifting and shipping may mimic anthracnose symptoms. Bruises usually have raggedy edges.

BULL'S EYE ROT AND PERENNIAL CANKER

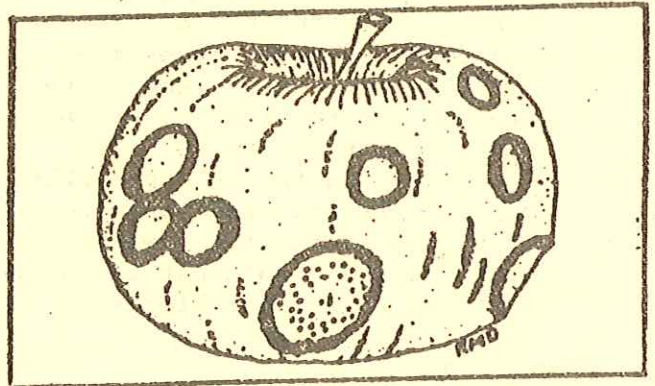
Symptoms: Concentric rings of dead wood around a sunken center is the characteristic symptom of perennial canker. Each ring indicates the progress of the disease for one year.



Apple Perennial Canker

Apple Perennial Canker

Spots on the fruit are light brown with a dark brown margin. There may be several concentric rings giving a "target spot" or "bull's-eye" effect. The tissue under these spots is brown in color and spongy in texture.



Apple Bull's Eye Rot

Cause: *Neofabraea perrenans*, a fungus. The fungus is related to that causing anthracnose and the diseases are similar.

APPLE (PEAR) - EUROPEAN CANKER

Cause: *Nectna galligena*, a fungus. The fungus is perennial. White fungus spores appear on the canker either the first spring or the next fall and winter. Round, red fungus bodies discharge another type of spore during the second winter and spring.

Gravenstein, Red Delicious and McIntosh are very susceptible. Golden Delicious, Rome Beauty and Jonathan are less susceptible.

Symptoms: Infection occurs during the autumn rains at wounds, usually leaf scars, but often at a pruning cut or where a young twig or branch has been broken off. There are two types of cankers, "open" and "closed".

Open cankers - a series of concentric calluses, one of which grows in the healthy tissue at the extreme margin of the canker each year. The next year, the new callus of the previous year is invaded and killed by the fungus. The outer ring of the canker is irregular and roughened by cracks in the bark.

Closed cankers - more irregular than the open canker and covered by dead bark.

Galls are the abnormal swelling or proliferation of tissue. On apple there are two causes.

*Wooley apple aphid causes bumpy knobby (rounded) swellings on branches and twigs; this aphid also feeds on the root of the apple. These are damaging and require management.

*Small to large swellings with masses of little buds often occur on apple. The cause is not fully understood; however, the presence of these galls does not seem to be harmful to the tree.

*Swelling at the graft union is a normal process.

PEAR

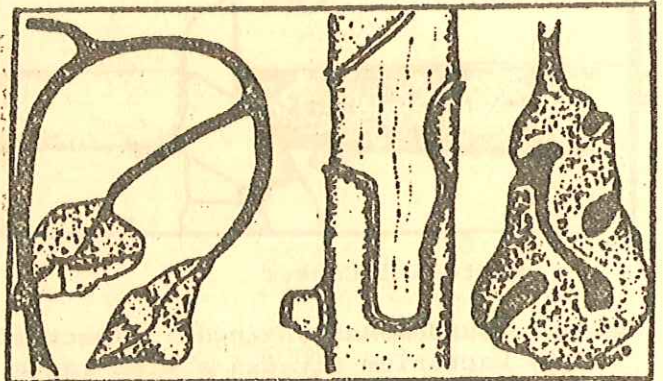
(*Pyrus communis*)

FIRE BLIGHT

Symptoms: Fire blight is usually seen as sudden blighting of twigs and branches. The dead leaves do not fall but remain on the tree through the dormant season.

Dark, slightly sunken cankers are formed on the larger branches. Infected fruit becomes water-soaked, turns brown, shrivels, and finally becomes black in color.

Under humid conditions, drops of light brown sticky liquid (bacterial ooze) may form on diseased plant parts, especially the fruit.



Pear Fire Blight

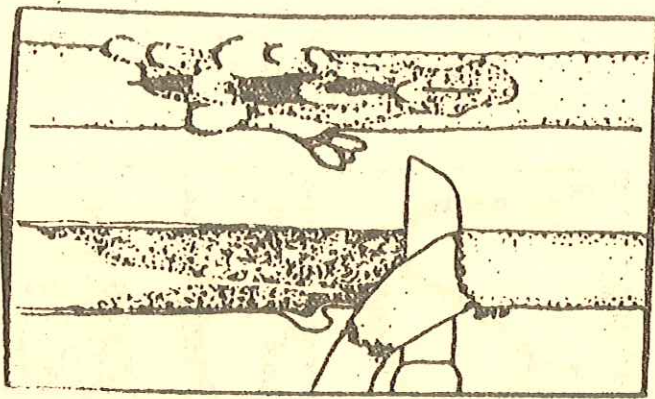
Cause: *Erwinia amylovora*, a bacterium. This is one of the most destructive diseases of pears in Washington. Although found throughout the state, it is most severe in commercial pear orchards in Central and Southeastern Washington. Fire blight also affects apples and quinces and several ornamental trees and shrubs.

CHERRY

(*Prunus avium*)

BACTERIAL CANKER

Symptoms: The most conspicuous symptoms are the cankers, the gumming, and the dying back of branches and twigs. Heavy gumming is associated with the cankers on branches and twigs; the gumming occurring at the margins of the cankers. The tissues under the bark on cankers is brown while healthy tissues are white or greenish white.



Bacterial Canker

Cause: *Pseudomonas syringae*, a bacterium. This bacterium attacks a wide range of plants and on tree fruits causes various diseases, such as dead bud of sweet cherries, gummosis of various stone fruits, and false fire blight of pear. Since the disease is difficult to diagnose and other problems may produce similar symptoms, the seriousness of this disease is uncertain.

CHERRY - GUMMING

Cause: Mechanical injury, winter injury, insect damage, fungus diseases or improper growing conditions. Gumming often follows brown rot, or *Coryneum* (peach, apricot) infection of the twigs. However, gumming may also be spontaneous, especially in trees that have made a forced growth, due to too much water or nitrogenous fertilizer, or both. Sweet cherry trees in wet or other unfavorable locations are particularly liable to gummosis.

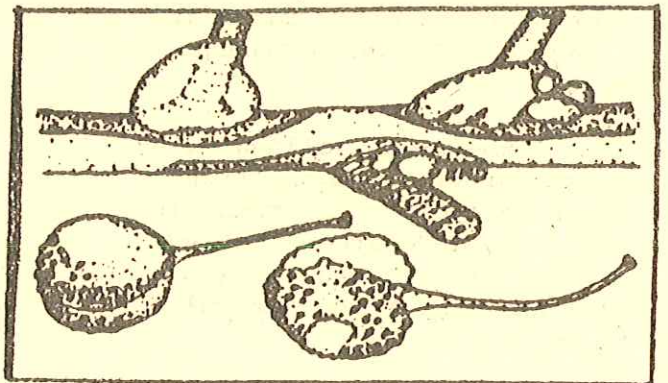
The disease bacterial canker, caused by *Pseudomonas syringae*, can also produce a severe gumming of sweet cherry trees and some other stone fruits. See Cherry - Bacterial Canker.

Symptoms: Gum exuding from buds, twigs, branches or trunks as a result of the before-mentioned injuries or adverse growing conditions.

Pools or large deposits of gum beneath the bark at the crotch or on the larger branches or trunk. The gum eventually breaks through to the surface and runs down the bark. This type of gumming is sometimes caused by improper cultural or growing conditions.

BROWN ROT

Symptoms: Brown rot of blossoms appears as a sudden wilting and browning of flower parts. The disease first appears on the fruit as a small, circular, brown spot that rapidly increases in size and develops into a soft rot. If the air is moist, diseased flowers and fruit are soon covered with tufts of gray-brown spores. Diseased fruits may hang on the tree long after being completely rotted. The fruit becomes black and dries into a firm mummy.



Brown Rot (Peach, Apricot, Cherry, and Plum)

On twigs and smaller branches, brown rot cankers are oval, definite in outline, brown in color and usually sunken. The twig may be girdled and killed.

Cause: *Monilinia fructicola* and *M. laxa*, two closely related fungi, affect all stone fruits and are most serious in the cooler, wetter regions, particularly in Western Washington. Brown rot can destroy blossoms, fruits, and twigs. Greatest loss is from blossom blight and subsequent rot of fruit in the orchard, in transit and in storage.

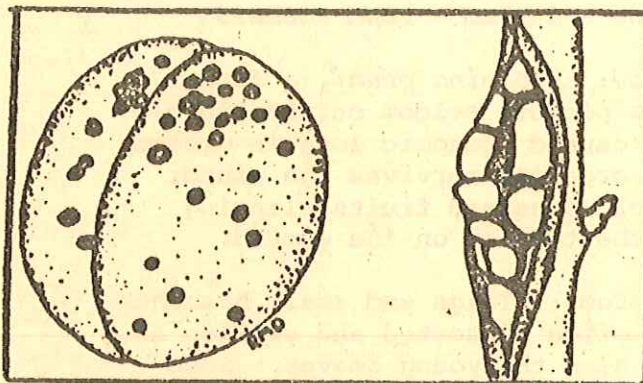
CHERRY - DEAD BUD

Cause: Considered to be a strain of the bacterium *Pseudomonas syringae*, the causal organism of bacterial canker.

Symptoms: The dead bud disease is first noticed as dying buds on spurs in the spring. Infected buds usually start to die in February. As the disease progresses within the tree, both leaf and flower become infected. Dead bud usually starts in the lower cherry limbs and moves up the tree and to adjacent trees in successive years. Often trees in the lower parts of the orchard where air drainage is poor are the first ones to become infected. If all the buds on a spur are killed, the spur will die back the following season. Cankers are very seldom formed, but a slight gumming may be produced by the diseased buds. Repeated death of buds may result in mal-shaped growth and sometimes fasciation. In several cases, 90 percent or more of the buds on a tree may be killed.

CORYNEUM BLIGHT

Symptoms: On apricots, the primary symptoms are small distinct circular spots with a bright red border and light-colored centers. Similar spots may also appear on the leaves, but the tissue eventually falls out of the spot giving a shot-hole effect. Buds may be killed and gumming occurs around the dead bud. Twig infections are not common on apricot but are on peaches. Small cankers with red borders are common on younger shoots.



Coryneum Blight (Peach and Apricot)

Cause: *Coryneum beijerinckii*, (= *Stigmina corpophilum*), a fungus that affects apricots, peaches, and sweet cherries.

CHERRY - VERTICILLIUM WILT

Cause: *Verticillium dahliae*, a fungus. The fungus is soil-borne and may remain viable for many years. The disease usually affects young trees coming into bearing, but may be found on older trees. Verticillium wilt affects numerous plants including raspberry, strawberry, potato, tomato, pepper, phlox, geranium, shepherd's purse, lamb's quarters, nightshade, peach and apricot.

Symptoms: Yellowing of some of the lower leaves, then later of the leaves higher in the tree, often accompanied by wilting and dying of twigs and branches. East of the Cascades, leaves may turn reddish-orange (Cal Skotland, July 29, 1976). Spurs and twigs may die so rapidly that the leaves remain attached. Leaves of current-season shoots and older wood may drop off or be less numerous than on healthy trees, giving trees an open or bare appearance. Discoloration (brown-red) occurs in the sapwood of some of the diseased twigs and branches.

Prune and Plum - PLUM POCKETS

Cause: *Taphrina pruni*, a fungus. Plum pockets seldom occurs and has not caused economic loss in Oregon. The organism survives the winter on old diseased fruits clinging to the tree or on the ground.

Symptoms: Twigs and small branches are often distorted and swollen as are also the young leaves. Some leaves may have a yellow or red cast. Infested fruit is particularly striking being swollen, bladder-like, often yellowish at first, and later becoming dark brown to black. Prior to drying and mummifying, it is soft and puffed up and somewhat hollow and spongy.

Fascination - is an unusual flattening and/or curling of branches or twigs. The cause is unknown and it is not a progressive disease.

CHERRY - WITCHES' BROOM AND LEAF CURL

Cause: *Taphrina cerasi*, a fungus. Ascospores from the diseased leaves fall on the buds and, on germinating, penetrate the branch stimulating it to abnormal growth year after year. Once a branch has become infected it will always remain so and the leaves on the "broom" will be diseased every year. In Oregon the disease occurs only on sweet cherry trees. The disease was severe in some Corum plantings in the spring of 1974.

Symptoms: Branches: Large broom-like tufts develop on the branches. They are easily distinguished at blossom-time because they have few flowers and become leafy earlier than normal branches. The brooms do not bear fruit. At the base of the witches' broom there is a common stem which may be much thicker than the branch to which it is attached. Long, slender branches grow out from this stem.

Leaves: Affected leaves resemble somewhat peach leaves affected by peach leaf curl - thick, reddish, with a white growth of fungus (asci) on the undersurface.

APPLES DISCOVERED BY "THE MEDIA"

It's exciting when our interests get national attention, and that is exactly what has happened recently for the apples that we in the Western Cascade Tree Fruit Association know and love. Writers are reporting on the movement toward more tasteful and pleasing fruit in periodicals for general readers.

Nestled in the September 1986 issue of the Smithsonian, was "Varieties Come and Go, But Apples Remain a Staple", by Daniel Jack Chasan. Dan mentions the vast options of the home orchard, along with the names of Lady, Black Gilliflower, Spanton, Jonagold, Northern Spy, Twenty Ounce, etc.. He even mentions

our old friend, The Apples of New York, that it was published in 1905, and quotes a history of Baldwin from its pages. He then talks of the venerable old apple trees of Fort Vancouver, and the story of an Englishman bringing over their seeds in his waistcoat pocket in 1825. He obtained this information from the Encyclopedia of Practical Horticulture, published in 1914. What he doesn't mention is that this encyclopedia was printed in Seattle on the press of Lowman and Hanford.

To be sure, Dan was unlucky enough to find a grower who loves the Rome apple - but even then, the truth came through, when the grower dishonestly presented them as "premier baking apples". Dan then speaks with a grower from Washington who is upset with the grocery chains for "making up the housewives mind for her", and forcing the Red Delicious on us without allowing for selection.

The article suggests that the Red Delicious may soon be overtaken, and then quotes from our own Bob Norton of the Northwestern Washington Research Station at Mount Vernon about his studies of new varieties. Dr. Norton says that Europeans are much more sophisticated than Americans about apple varieties - noticing distinct flavors, not just color, and that the pendulum is swinging toward American interest in good fruit.

Next was an article in Discover, the science magazine for the general public published monthly by Time, Incorporated. The February, 1987 issue, under a feature called "Light Elements", has an article titled "Wanted: Old Genetic Furniture From the Planet's Attic", which begins discussing Calville Blanc as being popular during the reign of Henry the VIII, and Esopus Spitzenberg as being a favorite of Thomas Jefferson. The Author, James Gorman, ordered samples of some of the older apple varieties to taste, so that he could decide which varieties to purchase for his home garden. Sound familiar?! But what I related to even more, was his unabashed exuberance over the catalog from Southmeadow Fruit Gardens of Lakeside Michigan - which he feels "throbs with historical romance". As many WCTFA members know, Dr. Nitschke, the founder of Southmeadow, and his wife, are annual contributors to our Seattle and Portland fruit shows - bringing an astounding collection of specimens with them each time. I credit the Southmeadow catalog with my initial involvement in growing apples for taste and historical interest.

It is impressive to see this type of national coverage on growing better tasting fruit and preserving older varieties. For the editors of national magazines to accept publication of articles expressing these ideals is gratifying - and shows us that those not directly involved in pomology now are beginning to recognize the truth in Dr. Norton's prediction that Americans are becoming more sophisticated about their selection of fruit varieties.

Dave Battey - Snoqualmie

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

Bulk Rate
U.S. POSTAGE PAID
Marysville, WA 98270
Permit No. 16



Address Correction Requested

DICK & MARILYN
TILBURY
4916 52ND AVE S
SEATTLE WA 98118
DEC87

ROOTSTOCK ORDERS FOR SPRING MEETING

by Walt Lyon

The news is not good for those who wanted M-9. I have not been able to find any. Everything else that was on the order blank published in our last newsletter, we should get. What we need now is more buyers. We still have quite a few left of each of the rootstocks listed. Any that aren't reserved before the meeting will be brought to the meeting for possible cash sales there.

ROOTSTOCK ORDER BLANK

PRICES: Apple - \$1.50 each, \$12 for 10, 25 or more \$1 each
Peach-plum and pear - \$2 each

	<u>No.</u>	<u>Cost</u>		<u>No.</u>	<u>Cost</u>	
MARK	___	___	M-26	___	___	Sub-total
P-22	<u>1</u>	___	CITATION	___	___	Tax (8 %)
			OHXF 333	___	___	Total

Please fill out the form and return with check (made out to WCTFA) which must include sales tax of 6 %. Mail to: Walter L. Lyon, 19717 60th NE, Bothell, WA 98011; 463-5574.