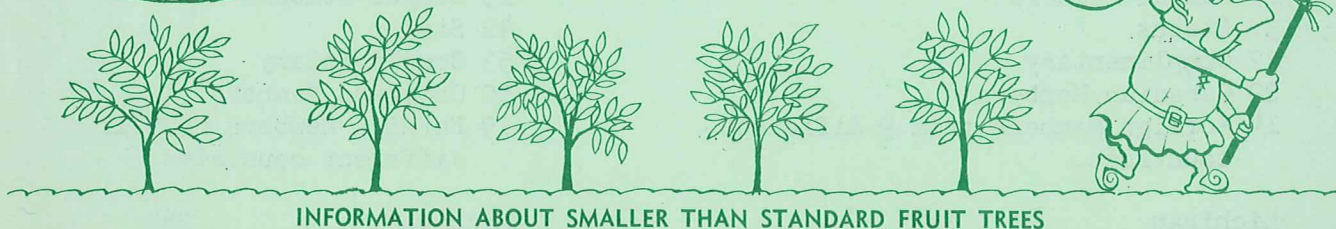


DWARF FRUIT TREE ASSOCIATION NEWS LETTER



INFORMATION ABOUT SMALLER THAN STANDARD FRUIT TREES

No. 35

May, 1964

Edited by R. F. Carlson

SPECIAL ISSUE

EDUCATIONAL TOURS SPONSORED BY DWARF FRUIT TREE ASSOCIATION - This is the last invitation and call to reserve space to visit the fruit growing industry and horticultural stations in England, Holland, Italy and France. The total cost including travel, lodging and meals is \$720. This will be an opportunity to learn more about rootstocks, tree training and intensified fruit production. Special sight-seeing and shopping tours in London, Venice, Paris, Amsterdam, etc. are arranged for the ladies.

Tour No. 1: June 10 to June 29. Contact College Travel Office, 130 W. Grand River, East Lansing, Michigan. Reservation date ends May 15th.

Tour No. 2: July 14 to August 4. Contact Goli Travel Service, 318 Main Street, LaCrosse, Wisconsin. Reservation date ends June 1st.

Full details on these tours will be sent to you upon request. This is your chance to see Europe. Fruit growers, horticulturists, their wives and grown sons and daughters are cordially invited to join either one of these interesting tours.

THE EIGHTH ANNUAL CONFERENCE

Dwarf Fruit Tree Association

March 8 and 9, 1965

The conference will be held on Monday and Tuesday instead of Tuesday and Wednesday to accommodate persons coming long distances. Tentative conference location is Michigan State University, East Lansing, Michigan. Subject matter and speaker suggestions are solicited.

PLEASE NOTE: The Newsletters are now mailed by the addressograph method. If by chance you should receive more than one, or if you do not receive a letter, please let us know so that we can correct any and all errors. Due to the large mailing list and expenses involved, the treasurer has asked that members who have not paid their 1963 and 1964 dues mail them in soon. This will be the last mailing to members not paid for 1963. The dues (\$3.00) should be mailed to: Treasurer Dwarf Fruit Tree Association, P.O. Box 143, Hartford, Michigan.

DWARF FRUIT TREE ASSOCIATION
MEMBERSHIP BREAKDOWN

March, 1963

15 Campus Members
37 States
37 Complimentary
22 Canadian Members
14 Foreign Members from 9 different countries.

Michigan	158
Pennsylvania	24
Indiana	19
New York	18
Virginia	18
Illinois	16
Minnesota	16
Iowa	12
Ohio	12
Wisconsin	12
Maine	9
Missouri	8
Washington	8
Kansas	8
Massachusetts	6
Kentucky	6
W. Virginia	6
Oregon	5
California	4
Tennessee	3
N. Carolina	3
Georgia	3
New Jersey	3
New Hampshire	2
Mississippi	2
S. Carolina	2
Texas	2
Colorado	2
Alabama	1
Arkansas	1
Delaware	1
Idaho	1
Maryland	1
Nebraska	1
Oklahoma	1
Rhode Island	1
Washington, D.C.	1
Canada	22
TOTAL	<u>418</u>

March, 1964

15 Campus Members
42 States
53 Complimentary
50 Canadian Members
19 Foreign Members from 11 different countries.

Michigan	284
Pennsylvania	41
New York	41
Illinois	32
Virginia	32
Indiana	29
Wisconsin	29
Ohio	25
Minnesota	23
Missouri	19
Iowa	17
Washington	17
Maine	13
W. Virginia	11
Kansas	10
Kentucky	10
Oregon	9
Massachusetts	8
New Jersey	6
Colorado	5
Georgia	5
Maryland	5
California	4
New Hampshire	4
N. Carolina	4
S. Carolina	4
Tennessee	4
Texas	3
Connecticut	2
Delaware	2
Mississippi	2
Nebraska	2
Utah	2
Vermont	2
Washington, D.C.	2
Alabama	1
Arizona	1
Arkansas	1
Idaho	1
N. Mexico	1
Oklahoma	1
Rhode Island	1
Canada	50
TOTAL	<u>765</u>

Department of Horticulture, M.S.U.
East Lansing, Michigan

DWARF FRUIT TREE ASSOCIATION NEWS LETTER



INFORMATION ABOUT SMALLER THAN STANDARD FRUIT TREES

No. 37

October, 1964

Edited by R. F. Carlson

Woolly Aphis on Malling Mertons

D. T. Kilpatrick, Horticulturist at Adelaide South Australia, reports in a letter to Paul Stark, Jr., Stark Bros. Nursery, Louisiana, Mo., that some of the Malling Merton rootstocks are not resistant to the Woolly Aphis in Australia. The following is a quote from his letter: "Imagine our surprise when we found the whole of our wide range of layered stocks at our Blackwood Research Station simply drenched with Woolly Aphis this year. We expected this on the East Malling stocks, but were surprised to find the whole range of our MM stock also badly affected. To date, MM 101, 103, 104, 105, 106, 109, 110, 111, 113, 115, 116, and 829 are all heavily infested. MM 102, 108, and 114 are only lightly infested and the only one unaffected is MM 112."

Ed. Note: The non-resistance of these clones to Woolly Aphis in Australia is not known; but it may be due to climate, soil, and/or different strains. To our knowledge, this is the first report of lack of resistance of the released MM 104, 106, 109 and 111 stocks to this pest. At East Lansing, we have had these resistant to Woolly Aphis in our stoolbeds for the past 10 years. Em 26 (not classified as resistant) is not resistant to Woolly Aphis in our plantings. The Woolly Aphis can be controlled in the layering beds by the use of chlordane, lindane, and other insecticides, by drenching the soil at the base of the stool-plants. It is also advisable to soak the roots of rooted "layers" in an insecticide solutions prior to lining out in the nursery.

Lee Strachan of Empire Orchards, Ionia, Michigan, writes,

"The August newsletter of the association was very interesting, particularly, the item about the apple scion/rootstock combination.

Last winter we grafted Gallia Beauty, Idared and spur type Red Delicious on EM II. The percentage of bud take of the Idared was excellent. The Gallia Beauty was good, but the spur type Red Delicious was very, very bad, and only a few grew.

We had two sizes of roots, in 1-year layers. The 8-12 mm we grafted early in the winter to Gallia Beauty and spur type Red Delicious. Either size roots or time of grafting did make any difference in the take of the spur-type Red Delicious.

Can you offer us any suggestions?"

Ed. Note: We have encountered similar results with the spur-type Red Delicious in that they do not take the bud as well as other varieties. This makes one wonder if some of the spur-types are carrying some virus disorder which prevents the bud from uniting with the stock.

Reports from Members of the European Tour
(continued from Newsletter No. 36)

These are the comments by R. P. Longley, Research Station, Kentville, Nova Scotia.

YIELDS - The orchards visited were practically all planted since World War II. Probably, half of them were less than 10 years old. Reported yields of 400 bushels per acre the fourth year and 600-800 the sixth year were common. Yields of 1500 and more bushels per acre were reported for both pears and apples. In Holland, in the North East Polder, they planted 45 hectares in 1954. Their production in 1963 was 715,000 bushels. By 1964, they had planted 1030 hectares or 2470 acres. Fifty percent of the trees in this polder are under five years old.

One grower suggested he would remove the trees at 20 years. I have no idea when orchards reach peak production. Pear trees observed trained on a building at East Malling were probably over 40 years old and these had retained good vigor.

GENERAL INFORMATION - The European farms were a delight to behold. Apparently, only near perfection is accepted. The straight, clean, well-trimmed drainage ditches of Holland and the irrigation ditches of southern France were impressive. The excellent crops of weed-free grass, alfalfa, wheat, oats, sugar beets, broad beans, peas, corn, potatoes, mustard and flax on the large and old fields of Europe indicated good farmers. The neatness of the orchards, the lovely flower gardens of England and the neat and good vegetable gardens of Italy were things that were often noticed. Uniform care in hand cutting and tying the sheaves of grain from the edges of the fields to make possible reaping without damaging the grain was impressive.

Apparently, in Italy and southern France, no cattle are pastured, whereas, in northern France, some are pastured. In Holland, they appeared to be on pasture. It was a bit surprising to see the lack of uniformity in cattle in Europe. They were of many colors.

There would be some problems in adapting an European system of orcharding in the United States. The high cost of establishing an orchard would be a problem for many. The lack of knowledge would increase this cost. Our present machines for spraying, cultivating, and harvesting would require changes. It seems possible that the snow problem would be serious in hedge type orchards in the Mid-west, and northeastern United States and eastern Canada. Probably, the labor cost would be a burden.

The large yields would assist in balancing the accounts. Possibly, certain ideas could be used to improve our methods.

The trip was one to be remembered for what remains of a lifetime. There was a wealth of interesting things besides apples, pears, and peaches. We had a conducted bus tour of London and Paris. We had a gondola trip on the Grand Canal of Venice, as well as a conducted walking tour of Venice. We crossed the Bridge of Sighs and returned. A lovely garden of Normandy was a delight. I missed a sight-seeing tour of Holland, as I return to the States one day before the others.

One morning as we toured an orchard, northeast of Paris at La Ferte, Milon, the grower mentioned that for 30 years he had rented the top soil to grow an orchard and that underneath was an abandoned stone quarry which had been purchased for

mushroom production. Some of the group expressed a desire to see the quarry and the mushrooms. After a delightful lunch as guests of the grower, he did invite us to visit the quarry and see the mushrooms. It was interesting. On my return trip out of the quarry, I paced the distance and we had traveled approximately 1/3 mile underground.

A strike in the control towers at the Paris Airport made necessary a bus trip from Paris across northern France and Belgium, to The Hague in Holland. We left Paris at 8:50 p.m. and arrived at The Hague in time for breakfast next morning, before leaving on a scheduled tour in Holland.

Good company, good weather, and a wealth of interesting things to see contributed to a very enjoyable and valuable trip.

Albert A. Ten Eyck of Brodhead, Wisconsin writes as follows:

In spite of its vigor, Europeans are using rootstock EM II for very close plantings. EM IX is well liked where the climate and soil favors vigorous growth. Golden Delicious is the coming variety in France, Italy and in Holland, but not so much in England where it is not of good quality. Weed killers are used in the tree row with excellent results. Orchards are mowed a dozen times a year - my lawn should have so much care. Wherever possible, irrigation is practiced. Labor costs are about half what we pay but wages are going up about 10 per cent per year and some growers are a bit worried about the future. (They should be because pruning and thinning requirements on these closely planted trees are positively frightening to an American).

The best growing method to an American seems to be what the English and Dutch call the Spindle Bush. The tree is tied to a seven-foot treated post (no wires) and not allowed to grow more than about eight feet tall. The top of the tree is pruned quite heavily and the lower portion much less, so that light gets to the lower branches. Practically all of the fruit is less than six feet from the ground. Planting distances for the Spindle Bush are as close as 6.5' to 9' in the row and 9' to 12' between rows. Machinery is smaller and more sensible than ours. Chandler and Dunn in England had a Ferguson "35" about the size of a Cub. Windbreaks are a must in England and Holland, being planted about 250 feet apart right through the orchard. Dr. Preston favors a closely planted row on the outside of the orchard composed of apple trees only. The wind drops off to a safe degree by the third row and does not curve down into the orchard as it does beyond a high windbreak.

In Italy, a very modern packing plant employed 85 women and 3 men. They were packing peaches in a "shrink tube," automatically, and shipping them in a single layer flat.

Everywhere land is very high priced - from \$600.00 to \$900.00 per acre in England, and up to \$1700.00 per acre elsewhere.

The private garden of Sir Thomas Neams in England was beautiful to behold - and required at least two full time men for care taking.

The National Fruit Trials Station at Brogdale, England, is unique. Hundreds of varieties are on trial and true foundation stock is no problem for the English.

At East Malling, we saw root growth studies in the underground tunnel; propagation of clonal rootstocks by hardwood cuttings; 45 years old trees on EM IX less than head high; all rootstocks growing unworked; the experimental garden, with such things as a three-foot hedge of 17-year-old pear trees, etc.

My thoughts keep coming back to a statement made by one of the Dutch "Extension" men in answer to my question regarding the percentage of fancy fruit. He said, "Our growers will average 85 per cent Extra Fancy fruit." Here, it seems to me, is the answer to the apple growers problems in the United States - not 50 per cent more acres, but 50 per cent better quality.

Larry Mainland of Oakland Orchard, Milford, Michigan, writes: "As a Michigander it was gratifying to hear recognition of M.S.U. leadership frequently expressed by horticultural leaders on the other side of the Atlantic. The tour itself, as an educational instrument, seemed to us to be in keeping with this leadership tradition. The results, in our judgment, should surpass any reasoned expectations. Time does not permit a review of all the many benefits resulting from everything which we saw and heard. However, in a field where there is obviously much yet to be learned, the enlargement of one's individual capacity to inquire and assess intelligently with respect to the basic considerations involved in plans and practices was a major dividend of lasting benefit."

Important Fruit Meetings in Michigan

December 1, 2, and 3, 1964 - Michigan State Horticultural Society,
Pantlind Hotel, Grand Rapids.

February 8, 9, and 10, 1965 - National Peach Council, Pantlind Hotel,
Grand Rapids.

March 8 and 9, 1965 - Eighth Annual Conference, Dwarf Fruit Tree Association,
Lawrence, Michigan.

Tentative Program of the Dwarf Fruit Tree Association

1. Fruit Growing in Europe and How It Compares to Ours
 - (a) Participants of the Dwarf Fruit Tree European Tours will be asked to discuss and show color slides of what they saw and learned.
 - (b) Panel - Can any of the European growing techniques be applied to the American fruit industry?

2. Discussions of problems and solutions currently appearing, with emphasis on variety/rootstock combinations for:
 - (a) Stonefruits (peaches, plums, cherries and apricots)
 - (b) Pome fruits (apples and pears)

3. Banquet followed by informal discussions of trends in various states pertaining to varieties, rootstocks and new problems.

Note: The meeting dates have been moved up from Tuesday and Wednesday to Monday and Tuesday to accommodate traveling for out-of-state persons.

Department of Horticulture
Michigan State University
East Lansing, Michigan