AGRICULTURAL EXTENSION SERVICE (2)
UNIVERSITY OF MINNESOTA - U.S. DEPARTMENT OF AGRICULTURE
INSTITUTE OF AGRICULTURE ST. PAUL, MINNESOTA 55101

MINNESOTA FRUIT GROWERS NEWSLETTER (3)

March, 1968

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The fruit research program at the Research Center is varied and designed to meet the extremes of our Minnesota climate. Breeding, selecting, and testing new fruit varieties have a high priority. However, the cultural aspects of fruit production will also receive significant emphasis. In addition, research will continue on ornamentals and vegetable crops.

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Student Union, St. Paul Campus

Presiding, O. C. Turnquist

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9:30	Film	
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10:10	Should we thin?	L. B. Hertz, Dept. of Horticulture*
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11:30	New approaches in fruit insect control	L. K. Cutkomp, Dept. of Entomology*
12:00	Lunch	

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One of the main advantages of compact or spur types is that they can be grown on seedling rootstocks when a moderate degree of dwarfing is desired. Since seedling rootstocks are more winter hardy and generally thrive better than the clonal rootstocks, this system may have much merit for apple growing in Minnesota. The limitation to general adoption of spur types is their unavailability in certain varieties.

About ten years ago several research workers attempted to induce mutations in apples with ionizing radiation. More recently K. Lapins of the Summerland Research Station in British Columbia, Canada, developed several promising compact sweet cherry and apple mutants. Natural compact mutants occur very infrequently; however, Lapins was able to induce approximately 10 percent total vegetative mutation and approximately half of these, or 5 percent, were of the compact or spur types. Most of these produced fruit which was mishappen or which did not closely resemble the true variety. But, Lapins was able to select some which retained the original fruit type and which were also compact. These are presently being tested.

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Use of irradiation in fruit variety improvement is a relatively new way to develop desirable fruit characteristics. Although only a few new varieties have been developed by this method, it does hold some promise for developing specific characteristics such as compact, spur type apples. ---- Cecil Stushnoff, Fruit Breeder, Dept. of Horticulture.

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Route 1
Red Wing, 55066

Vice President ..... G. P. Yates
Box 933
LaCrescent, 55947

Executive Secretary ..... L. B. Hertz
Horticulture Department
University of Minnesota
St. Paul, 55101

Directors .....

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G. Harmes, G. Yates, A. W. Jacobson.
B. Nelson (alternate).

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Wisconsin Reports on Apple Varieties

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Gilbert noted:

1. McIntosh, Delicious, and Northwest Greening were the highest producing varieties.

2. Beacon produced approximately 1,500 bushels per acre less than the highest yielding variety.

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Gilbert reported that several apple varieties recommended in Minnesota have not proven satisfactory in Wisconsin. These included Minjon, Fireside, Haralson, Prairie Spry, Wealthy, Lakeland, and Redwell. These results were obtained at Wisconsin's Peninsula Experiment Station.

Herbicides Needed For Optimum Weed Control

The use of herbicides in both tree and small fruits is becoming increasingly necessary not only for optimum weed control but also for increased net return to the grower.

The 1968 recommendations, which will soon be available in Special Report 6, are summarized in this newsletter.

The status of certain herbicides registered with the USDA, however, is uncertain for the 1968 season. Growers should check the current status of the herbicide before using and read the label carefully.

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Weed control in apple orchards

Herbicide	Pounds active per acre	Time of application	Remarks
Simazine	4	Spring	Use only on trees that have been established 1 or more years.
Amitrole plus	1 1/3	Spring	Avoid contact with foliage or branches, good control of emerged weeds.
Dalapon	10	Spring, when grasses are 4-6 inches tall	Use only on trees 4 or more years old.
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Sinbar	3 1/4	Spring	For trial use only.

Weed control in raspberries

Simazine	2	Fall or early spring	Do not apply after bud break of raspberry canes.
Diuron	2	Early spring	Treat before raspberries leaf out.
CIPC	4-6	Early spring	During dormancy of crop or at time of planting.

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Herbicide	Pounds active per acre	Time of application	Remarks
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Dacthal	9	After planting but before weeds emerge.	Annual grasses and broadleaved weeds.
Sesone	3	After planting but before weeds emerge.	Don't apply when first runner plants are forming.
2,4-D(amine)	.5-1	When broadleaf weeds are a problem.	Use only in an emergency.
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