AGRICULTURAL EXTENSION SERVICE UNIVERSITY OF MINNESOTA

FRUIT GROWERS' LETTER

By Leonard B. Hertz, Extension Horticulturist November 1969

UM DEVELOPS NEW APPLE VARIETIES FOR 1970

Two hardy new apple varieties developed by University of Minnesota horticulturists will be available for spring 1970 planting.

The two varieties, Honeygold and Red Baron, were originally selected in the 1940's by W. H. Alderman to provide apple growers with varieties well-adapted to short summers and cold winters.

Honeygold is a late season apple that produces medium to large, golden to yellow-green fruit, with a bronze to bright-red blush. The apple skin is smooth, thick, and tender. Its yellow flesh is crisp and juicy, and its flavor resembles Golden Delicious.

Though Honeygold is susceptible to fire blight, its fine dessert and cooking qualities, as well as its hardiness, should make it popular where Golden Delicious is only marginally adapted.

Red Baron is an attractive cherry-red apple that matures in late summer or early fall, at approximately the same time as Wealthy. The tree grows well, produces strong limbs, and has shown moderate resistance to fire blight infection. Red Baron yields medium size fruit. Apples have a bright, glossy, medium thick and tough skin. Their flesh is crisp, juicy, and pleasantly acid.

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USDA RELEASES NAS-NRC REPORT ON PERSISTENT PESTICIDES

On June 4, 1969, Secretary of Agriculture Clifford M. Hardin released the report requested by the USDA and prepared by a committee of the National Academy of Sciences -- National Research Council concerning persistent pesticides and their effect on man, agriculture, and the environment.

The report pointed to adequate protection of man's food and health under the present system of controls, but recommended expanded research leading to the development of new pesticidal chemicals and use techniques, and recommended the strengthening of the regulation and monitoring of persistent pesticides to provide long-range protection for wildlife and the overall environment.

The following are the conclusions and recommendations of the committee, based on the testimonies of 83 witnesses from scientific and conservation organizations, industry, universities, and government agencies.

Conclusions

1. Persistent pesticides are contributing to the health, food supply, and comfort of mankind, but, in the absence of adequate information on their behavior in nature, prudence dictates that such long-lived chemicals should not be needlessly released into the biosphere.

2. Although persistent pesticides have been replaced in some uses and are replaceable in others, they are at present essential in certain situations.

3. No decrease in the use of pesticides is expected in the foreseeable future. On a world basis, increased use is probable.

4. Although the use of DDT has decreased substantially, there was no important change in the use of other organochlorine insecticides in the United States during the 10-year period ending June 30, 1967.

5. Available evidence does not indicate that present levels of pesticide residues in man's food and environment produce an adverse effect on his health.

6. Registration requirements for persistent pesticides appear to provide adequate safeguards for human health, but continuing attention must be given to accommodating new knowledge and insuring against subtle long-term effects.

7. Residues of certain persistent pesticides in the environment have an adverse effect on some species of wild animals, and threaten the existence of others.

8. The availability and low cost of effective persistent pesticides have slowed the development and adoption of alternative methods of control.

9. Work on nonchemical methods as alternatives to persistent pesticides has been emphasized in recent years, and continued support for this work is needed.

10. Inadequate attention and support are being given to developing pesticidal chemicals and to improving techniques for using them.

11. Persistent pesticides are of special concern when their residues possess -- in addition to persistence -- toxicity, mobility in the environment, and a tendency toward storage in the biota.

12. A few organochlorine insecticides and their metabolites have become widely distributed in the biosphere, appearing in the biota at points far from their places of application.

13. The biosphere has a large capacity for storage of persistent pesticides in the soil, water, air, and biota, but little is known concerning amounts of persistent pesticides and of their degradation products that are stored in the biosphere.

14. Knowledge is incomplete concerning the fate and degradation of persistent pesticides in the environment, their behavior in the environment, the toxicity of the degradation products, and the interaction of these products with other chemicals.

15. Present methods of regulating the marketing and use of persistent pesticides appear to accomplish the objectives of providing the user with a properly labeled product and holding the amounts of residue in man and his food at a low level. However, they do not appear to insure the prevention of environmental contamination.

16. Public demand for attractiveness in fruit and vegetables and statutory limits on the presence of insect parts in processed foods have invited excessive use of pesticides.

17. The National Pesticide Monitoring Program provides adequate information about residues in man and his food, but it does not provide adequate information about the environment generally, because it can detect changes in residues only in selected parts of the biosphere.

18. Contamination of the biosphere resulting from the use of persistent pesticides is an international problem. Changes in techniques for using these pesticides and the substitution of alternatives here and abroad are questions of immediate concern to all mankind.

Recommendations

The Committee recommends --

1. That further and more effective steps be taken to reduce the needless or inadvertent release of persistent pesticides into the environment.

2. That, in the public interest, action be increased at international, national, and local levels to minimize environmental contamination where the use of persistent pesticides remains advisable.

3. That studies of the possible long-term effects of low levels of persistent pesticides on man and other mammals be intensified.

4. That efforts to assess the behavior of persistent pesticides and their ecological implications in the environment be expanded and intensified.

5. That public funds for research on chemical methods of pest control be increased without sacrifice of effort on nonchemical methods.

6. That the present system of regulation, inspection, and monitoring to protect man and his food supply from pesticide contamination be continued.

7. That the objectives and procedures of the National Pesticide Monitoring Program be reviewed and that the feasibility of obtaining data on quantities of persistent pesticides in the biosphere be studied. (From Looking Ahead, Federal Extension Service.)

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MINNESOTA AND WISCONSIN APPLE GROWERS TO MEET IN ST. PAUL

The Minnesota Fruit Growers Association and the Wisconsin Apple and Horticultural Council will hold its annual winter meeting Thursday and Friday, December 11 and 12, at the St. Paul Hilton Hotel.

Dr. A. G. Howitt, an entomologist from Michigan State University, will be the featured speaker and will discuss ultra low volume (ULV) and low volume (LV) spraying for control of fruit pests. Dr. Howitt initiated this research several years ago using radically new pesticide dispensers to control spray droplet size, a technique which permits smaller quantities of sprays for each sprayed acre. Also, Dr. Howitt will review his findings from studies for control of mites in Michigan orchards.

Also included in the program will be discussions by members of the Horticultural Department at the University of Wisconsin on dwarfing rootstocks and midwest fruit production problems.

Other topics include marketing apples at the local and national level, labor organizations and their effect on the fruit industry, and orchard taxation.

Plan to attend and be part of this outstanding program.

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Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U. S. Department of Agriculture. Roland H. Abraham, Director of Agricultural Extension Service, University of Minnesota, St. Paul, Minnesota 55101.