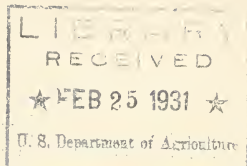


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PUTTING WEATHER REPORTS TO WORK

A radio talk by Arthur J. DeMars, meteorologist, Weather Bureau, delivered through WRC and 39 other radio stations associated with the National Broadcasting Company, February 11, 1931.

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Next to frost, freezes and other weather occurrences, plant diseases and insect pests cause the greatest risk in fruit production. One of the functions of the Weather Bureau is to furnish special forecasts and advices as a guidance in spraying operations. Fruit spraying in the apple orchards of the Northeastern United States usually begins early in April and extends to the latter part of June. During this time county agents and representatives of various farm bureaus are supplied with specialized information as to the coming of rains. Loss due to scab, codling moths and other forms of pests and diseases is an almost ever present menace. Fungus spores come into activity when moistened, as this scab cannot discharge its spores except when very moist. Two or three days are required to spray the larger orchards and at least three applications are made in a season. The problem in this connection is to spray the orchards just before rains, or a prolonged period of moist, misty weather, because the poisons must be present when the spores start to grow. Spraying at the proper time saves needless expense and insures a high quality of fruit.

Plant pathologists and entomologists are on duty in apple growing counties of some sections during the spraying season for the purpose of guiding these spraying activities. The spores must be sprayed before they become wet by the first rain after maturity. It is in this connection that the Weather Bureau issues special forecasts for two or three days in advance during the critical periods of the apple growing season.

Forecasts of temperatures are of great value in timing sprays, regardless of scab control, and forecasts of wind direction and velocity help determine the proper time for dusting the orchards.

The Harvest-weather service, like the Fruit-spray service, is conducted only in a few states in cooperation with county agents who handle the forecasts to the best advantage. While this service may not be so spectacular as the Fruit-spray service, the benefit derived from it reaches a greater number of individuals, and the economic returns in prevention of losses is much greater. The problem in this service is to let the farmers know when good harvesting weather is expected. He then plans his activities for two or three days ahead, and takes advantage of several days of dry weather to cut and store his hay, oats, grain, and other crops likely to be damaged by rain after it has been cut. The Harvest-weather forecasts are given for a period as far ahead as the forecaster feels that he can give reasonably reliable information. For the most part, these fore-

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casts are for two and sometimes for three days ahead. They are telegraphed from the Weather Bureau office issuing them to distributors selected by the county agents to give the information to the farmers in the most efficient way. The distribution of the daily forecasts, by radio now reaches everyone who cares to listen for them. Especially at night, the farmers of the country can always receive a reasonably reliable forecast for two days in advance with which to plan their work.

In districts where various kinds of fruit are grown and put on the markets as a dried product such as raisins, apricots, and other fruits, the forecasts of rain are of great value. These crops while drying are extremely susceptible to injury from rain. Raisins are dried in trays placed in the open air. When rain is expected, the fruit growers are notified and the trays are stacked and covered in time to prevent the crop from being injured by wet weather.

In my next talk I shall tell you about Fruit-frost warnings and the methods used by the fruit growers to insure production of a good crop of high quality fruit.

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