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HOW TO FORECAST FROSTS

J. B. REYNOLDS, O. A. C., GUELPH, ONT.

IN districts where the cultivation of fruit, flowers, or vegetables, is highly specialized, it becomes important to possess means of forecasting frost at critical times during the growing season and of preventing injury from low temperatures. This article is written with the object of giving some practical suggestions on these matters.

TOPOGRAPHIC.

Land, bordering on the water front is less liable to extremes and to low dips of temperature during the growing season than inland districts. This is one of the reasons that the best fruit sections are found by the water. Apart from the steadying influence of the water in lessening the chance of damage, frost is essentially a question in air drainage.

In a given district, the spot where night frosts are most likely to occur is the one with the lowest elevation. There is a case in point along Lake Ontario east of Stony Creek. From the lake back to the mountain there is a belt of land with a topogra-

fully grown. From the foot of the mountain the ground slopes gradually as at B. There grapes and peaches are grown. At C is a depression, from which the ground rises both toward the lake and toward the mountain. Experience has shown that fruit growing is much more precarious at C than at A or B. The reason is found in the topography in spite of the greater nearness of C to the water. At night, the cold, heavy air drains away from the mountain side toward C. If there were no rise of ground as at D, the air would drain to the lake, and C would be as immune from frost as A or B. But on account of the peculiar slope of the ground the cold air from the mountain side lodges at C, and here the lowest night temperatures are likely to be found.

ATMOSPHERIC.

It is frequently possible to forecast frost from the appearance and condition of the atmosphere toward the afternoon. After a north wind has been blowing, with a clear or clearing sky, there is likely to be a considerable fall of temperature. Specifically, a clear sky, and a still, dry air, are favorable to frost. Conversely, if the sky is cloudy, or the wind high, there is less chance of a fall of temperature.

Given a still air and a clear sky, the humidity of the air, the amount of moisture in it, is the chief factor in controlling the night temperature. The temperature will

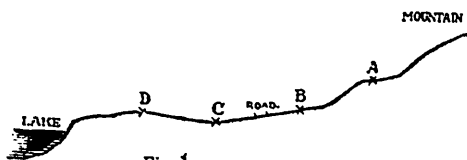


Fig 1

phy similar to the illustration, Fig. 1. On the side of the mountain there is a terrace, at A, where plums and pears are success-