vine, in place of a non-producing male, when the dark fruiting varieties are preferred.

Topsail is thought to be the best of the new varieties introduced by the North Carolina Experiment Station. The vines are vigorous and foliage relatively resistant to disease. The large, bronze fruit has a medium tough skin, but soft, sweet, crisp pulp. The fruit ripens about the same time as Scuppernong, and is considered a superior table grape.

Cape Fear is productive, vigorous and relatively resistant to disease. The large, light-colored berries are borne in medium size clusters. The fruit ripens late.

Creswell produces a medium reddish-purple fruit of good quality and starts to ripen a few days later than the Hunt. It is recommended for home use.

Wallace produces a vigorous vine growth, but the foliage is somewhat susceptible to leaf diseases. The fruit, borne in large clusters, is white, smaller than Scuppernong, and is late in ripening. It is a self-fertile variety and is used as a pollinating vine when the light fruiting varieties are preferred.

The Hunt, Thomas, Creek, and Scuppernong are generally recommended for commercial purposes.

Winter Injury to Cultivated Blueberry Varities

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The 1947 growing season was a very peculiar one. The spring was cold and wet. Blueberries blossomed almost a month later than normal. July and August were dry and the latter was the hottest August on record in southwestern Michigan. Rains in early September were followed by a severe freeze on the 26th that froze many peaches on the trees. October was the warmest on record, and the weather continued mild until Thanksgiving when winter set in with a cold blizzard. The temperature reached at least −25°F. in some plantations at times during the winter.

Severe Injury Experienced

About March it was realized that blueberry plants had been injured in many plantations. The full extent of the injury was not apparent until some time later. In some plantations the injury was confined to the tips of fast

Infra-red heaters may help combat spring frost but they are not a practical means of combating winter injury which occurred in a blueberry planting in a low bog as illustrated in this picture. An elevated site which provides for good air drainage is desirable for all types of fruit.

growing shoots and to fruit buds on such shoots. In others heavy killing of large stems was experienced, often killing the larger stems nearly to the ground.

The amount of injury was much greater on plants growing on peat than on those growing on sand soils. No doubt this was due to the later and more succulent growth made by plants growing on peat.

Injury Varied Among Varieties

There was considerable difference in the amount of injury sustained by different varieties. Pioneer suffered the greatest amount of injury, bushes sometimes being killed nearly to the ground. Adams was probably next in severity of injury. On peat soils, Rubel experienced a great amount of bud killing. Stanley showed injury in some fields and not in others. Jersey was injured considerably on peat soils but otherwise showed much greater bud hardiness than Rubel.

Blueberries have been grown at the South Haven Experiment Station for twenty-five years, and winter injury has been a minor factor during this period except on occasional very cold sites located many miles inland and having peat soils. It is unlikely that such an unusual growing season as was experienced in 1947 will occur again very soon. Probably not much could be done to prevent winter injury under such a rare combination of circumstances. However, there is a warning involved against carrying on any cultural practices that will encourage growth too late in the fall. To do so might invite disaster any year.