

ACID SOILS FOR CRANBERRY CROP

Extension Workers Discuss Advantages and Drawbacks of Industry in United States.

PREPARATION IS EXPENSIVE

All Trees and Roots Must Be Removed From Marsh and Burned, and the Fields Graded, Ditched, Diked and Sanded.

(Prepared by the United States Department of Agriculture.) Cranberry culture is recommended as a profitable industry under suitable conditions and in certain climates by specialists of the United States Department of Agriculture. At a recent conference of extension workers the possibilities, advantages and drawbacks in cranberry growing were discussed.

The bulk of the present cranberry crop is grown on the acid soils and peat bogs of Massachusetts, parts of New Jersey, and New York, Wisconsin, Michigan, and near the mouth of the Columbia river in Washington and Oregon. Some cranberries are also grown in the mountain districts in Virginia and West Virginia.

Preparation Expensive Process. Preparation of the land for cranberry growing is an expensive process. All trees and roots have to be removed from the marsh and burned, and the fields graded, ditched, dyked and sanded. Before the war, swamp land could thus be cleared and prepared for about \$300 to \$700 per acre. At present prices of labor and materials, this work will cost anywhere from \$600 to \$1,200.

The ground must be suitably located and prepared carefully because it is important to have a good water supply and good drainage facilities. The water is also used for controlling insect enemies. It is necessary to have a reservoir from which the bog can be flooded. In New Jersey some growers say that leaving some weeds in the bog is not objectionable as they supply shade for the plants. In Wisconsin Indians from the reservation pick the berries. In New Jersey thousands of Italians come out to do the picking. In Massachusetts Portuguese do most of the work.

Ward Off Pests and Diseases. It is essential that the cranberry grower be prepared to ward off insects and diseases, both of which are very destructive. In New Jersey, where conditions are favorable for the development of certain fungus diseases, proper spraying with bordeaux mixture was found to control the disease and is generally practiced.

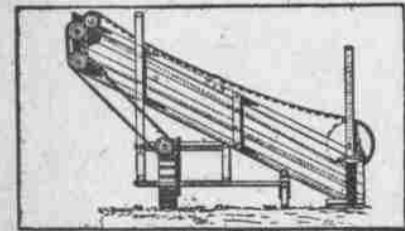
Ordinarily, the price of cranberries per barrel is from \$8 to \$10, although during the past year as much as \$40 per barrel was obtained for small lots. The number of barrels produced per acre ranges anywhere from 15 or 20 to 100 or sometimes 200. A reasonable expectation under good conditions and management, however, would be from 35 to 40 barrels per acre.

ELEVATOR FOR HAY OR GRAIN

Invention of Idaho Man Intended to Take Product From Rack and Deliver to Wagon.

The Scientific American in illustrating and describing a hay elevator, the invention of J. J. Huston of Huston, Idaho, says:

An object of the invention is to provide a side-delivering hay elevator in which the hay or grain is taken from a side delivery rack device and delivered



A Rear Elevation of the Device. ered without waste to a wagon. Another object is to provide an elevator in which a pair of endless drapers are used to take and convey the load laterally in direction of travel and dump the same into a delivery wagon or receptacle.

KEEP YOUNG FOWL GROWING

Profits Depend Largely on Correct Supply of Material—Standard Missouri Ration.

Feeding the growing chick correctly is absolutely essential, both to the improvement of the laying flock and to the profitable growth of the cockerels for sale as broilers. The necessity for liberal quantities of animal protein in the ration is urgent, says T. S. Townsley of the Missouri College of Agriculture, because the growing chicks are developing muscle and feathers which require large quantities of animal protein.

The standard Missouri ration for growing chicks includes the same mash as for laying hens; that is, a mixture of 100 pounds bran, 100 pounds shorts and 50 pounds of tankage. In addition to this the growing chick should receive cracked corn and whole wheat or kafir, both the grain and the mash being provided in self-feeding hoppers.

ADVANTAGES OF CULTIVATION

It Helps to Keep Weeds Down and Conserves Moisture Necessary for Vegetables.

Keep the hand cultivator going to preserve a dust mulch and to kill weeds. Either pull or hoe the weeds out of the vegetable rows. The best time to kill weeds is when they have just pushed through the top of the ground. Frequent shallow cultivation will do this as well as conserve moisture.

HABITS OF STARLING BENEFICIAL TO MAN

Biological Survey Has Made Extensive Study of Bird.

In State of Maine They Are Given Protection While Not Destroying Crops—Two Ways of Breaking Up Their Roosts.

(Prepared by the United States Department of Agriculture.)

Contrary to popular opinion, the starling is not an undesirable bird alien, according to the biological survey of the United States Department of Agriculture. Most of its food habits have been demonstrated to be either beneficial to man or of a neutral character. The time the bird spends destroying cherries or molesting other birds is short compared with the endless hours it spends searching for insects or feeding on wild fruits.

To determine what should be the attitude of the public toward the starling, in respect to protective legislation, the biological survey has made an extensive study of it. The starling secures less than 6 per cent of its yearly food from cultivated crops.



The Starling Secures Less Than 6 Per Cent of Its Food From Cultivated Crops.

The bluebird and the flicker suffer most at the breeding season from the starling's attacks on their nests.

In most states where starlings are present, even in moderate numbers, they have been placed on the list of exceptions to protection. In Maine they are given protection subject to a provision whereby they may be killed when destroying crops. The department recommends this type of law in justice to the farmer whose crops are threatened by a local overabundance of these birds. Roosts of starlings may be broken up by frightening the birds with the persistent use of firearms or Roman candles, but vigilance is necessary to prevent the re-establishment of roosts by removal to other places where they would be equally objectionable.

POISON KILLS GRASSHOPPERS Paris Green or Arsenic Added to Wheat Bran Will Destroy Large Number of Them.

A very effective grasshopper poison is made as follows: To 25 pounds of wheat bran add one pound of Paris green or arsenic, six oranges or lemons finely chopped; two quarts of low grade molasses and from two to four gallons of water.

If this is thoroughly mixed and then scattered over grasshopper infested areas, it will dispose of large numbers of them. The mixture may be scattered in the morning; unless it is very dry when it should be put out in the evening. It may be scattered through a regular oats seeder, set to sow about three bushels of oats per acre.

ADJUST HARNESS ON HORSES

Practically No Trouble From Sore Necks If Hames Fit Animals' Necks Properly.

If the hames fit the horses and they are properly adjusted there will be practically no trouble from sore necks, collar boils and galled shoulders during the summer season when horses do their hardest work. The most important part of the harness is the collar. A broad-faced collar is one to be preferred. It should fit snug or almost tight when new. The same collar should be used on the same horse from day to day. The next item is the regulation of the hame string both at the top and the bottom to fit the collar snug. Any variation will pinch the neck or bruise the shoulder.

LITTLE WORMS KILL CHICKS

Gapes Destroy or Stunt Thousands of Young Birds Every Season—Hard to Dislodge.

Thousands of promising little chicks are stunted or killed by the ravages of gapes every season. Such chicks mope around, frequently gape for breath and cough or sneeze in an effort to dislodge the gapeworms which have attached themselves to the chick's windpipe and irritate it.

Gapeworms are so small that one or two of them might not harm a chick much, but they are rapid multipliers and soon the windpipe becomes filled with them and the lining becomes inflamed and breathing difficult.

FREE RANGE OF IMPORTANCE

Chicks Confined Continually in Brooder Do Not Secure Proper Amount of Exercise.

Healthy chicks are very active. Chicks that are confined in a brooder house continually are not apt to have sufficient exercise, which frequently gives rise to toe picking, feather pulling and other brooder evils. Free range gives them something to do and keeps them healthy.

REMEDY AGAINST LAWN ANTS

Entomologists Recommend Drenching Nests With Boiling Water or Using Kerosene.

To get rid of lawn ants entomologists of the United States Department of Agriculture suggest drenching the nests with boiling water or pouring in a small quantity of kerosene oil. Simple treatment may be applied to nests between or beneath paving stones. Spraying the lawn with kerosene emulsion or with very strong soap wash is also recommended. For large ant nests disulphid of carbon injected into the nest by means of an oil can or small syringe is recommended to kill the ants. The fumes of disulphid of carbon have a very disagreeable odor and are inflammable, but they are not injurious to higher animals in the open air.

PROVIDE RIGHT VENTILATION

Leave Opening on South Side of House to Equal One-Tenth of Total Floor Space.

In providing ventilation, enough space should be left open in the south side of poultry houses so that the open front will equal one-tenth of the total floor space. This open screen ought to be near the bottom of the south side rather than at the top, so that the warm air from the roosts will not flow up and out of the open space.

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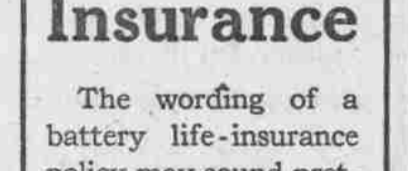
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