

PAPER BY C. L. LEWIS, JR., BEAVER BROOK, WISCONSIN

Mrs. Whittlesey has asked me to present to the association a review of crop conditions in the northern section of the state and to present any other points that may be on my mind.

We have five companies of growers in our vicinity: The Burnett Cranberry Co. at Shell Lake, The Lewis Cranberry Co. at Minong, The Cameron Cranberry Co. at Cameron, and James Z. Colton at Spring Brook and Badger Cranberry Co. at Beaver Brook. If weather conditions will permit the maturing of an abnormally late crop I should judge that Minong would produce 1,000 to 1,200 barrels, the Burnett Cranberry Co. 500 to 1,000, Cameron 100 barrels and the Badger Cranberry Co. 500 barrels.

Spring Brook has not reached the producing stage yet but Mr. Colton's bog looked very pretty when I visited it early this summer and he will be heard from in earnest next year. Our own property did not come into full bloom this year until the last week in July and it is a question whether the latest bloom will mature. It certainly will require a warm September and harvesting will be delayed until about October 1st. Our season all through has been decidedly cold. All farm crops in our country are two or three weeks late and the possibility of ripe corn is very slight. I merely mention these other crops to show that cranberries are not an exception in being so backward.

As to the problems of the day in the cranberry business; it is hard for one to put his finger on any definite ones that trouble all growers alike. One grower is troubled by lack of drainage and its resulting difficulties, another by lack of water, one by weeds, another by insects or fungus, one by the labor question and another by poor quality of fruit. It is at these meetings that we should earnestly endeavor to help straighten out each others problems. In the midst of our troubles we are threatened with the loss of our Experiment Station, and loss of interest by the state authorities. Are we going to permit this decline through lack of cooperation?

The purpose of this association as I understand it is to promote cooperation among the growers. Wisconsin raises about 10 per cent of the annual cranberry crop. From the state's viewpoint we are entitled to state aid in proportion to the value of the crop produced and to the possibilities of production within the state. Suppose we can produce in Wisconsin 300,000 barrels of cranberries on lands which are unfitted for other crops. We should then command a very respectable recognition by the state authorities. This is in my opinion at least, entirely possible. Now if we can convince the state of the possibilities in this industry, we should have no trouble in obtaining these possibilities.

These must be realized in two ways; by more intensive cultivation and by extension. Our industry is both extremely scientific and ex-

tremely practical. We should receive aid from the state on the problems of insects, fungi, weeds, weather conditions and fertilizers, receiving the benefit of the knowledge of those men employed by the state and United States government who have specialized in entomology, pathology, botany, soils and meteorology. It is much easier for these men to apply their knowledge to the needs of our business than for each of us to struggle independently and blindly with these problems.

From the practical point of view we need a balance wheel, a man who can aid us by his suggestions. Such a man must have had practical experience in cranberry growing and must have proven his success by the only real proof, financial success. His counsel would prove invaluable to the growers.

An Experiment Station is valuable for a limited number of purposes. For propagation of new varieties it is essential and perhaps for a few other reasons. The bogs in this state are built under widely different conditions. Deep and shallow peat, various stages of decomposition, variations in subsoil and varying opportunities for sand do not permit of the formation of any code of rules for cranberry growing. Results obtained at an Experiment Station might not be applicable to many bogs. Fertilizer experiments can be especially misleading. There are many problems which each individual grower must work out on his own bog. Under these conditions, I believe a traveling adviser would be of more service than an Experiment Station. This man should cooperate with the state men who handle the scientific end. Their conclusions should be presented to the association at its meetings and perhaps monthly through some publication.

I do not mean to say that I am opposed to an Experiment Station but in the present state of development in this state, I think more benefit would be obtained by the suggestions outlined above. These are but my own ideas and may not be shared by others. I confine these remarks to this state because many problems already solved in the east are still unsettled here. We argue the question of sand culture in Wisconsin, they settled that question in Massachusetts 30 years ago.

I am going to mention a few of my own experiences with the Badger Cranberry Company. As many of you know I started a cranberry proposition in Washburn county six years ago. I prepared for it in Massachusetts and came to Wisconsin very enthusiastic over eastern methods. I copied them as nearly as possible in my work here. You are undoubtedly interested to know how I am progressing. On the whole, well, but not without my troubles. In planting my vines 14 inches apart each way I made a serious mistake. I am convinced that we must plant closer together here than they do in the east. Due to thin planting and slow growth, numerous weeds gained foothold and I have often been discouraged at their persistency. But by certain methods of combatting them, they appear to be thinning out and I fully expect to rid our bog of them entirely in a few years. Thin planting has also kept our production far below what it should have been the first few years. Aside from the manner of planting I am as yet unconvinced by my own experience at least, that I have adopted any other eastern methods that have not proven very satisfactory.

Speaking of weeds; I have worried myself sick at times over weeds that really amounted to very little. I have had to learn their characteristics by experience alone when a few words by some authority a few years ago would have saved us a great deal in worry and money. I fought with the horsetail weed and found none in this state who could give me advice. I have worried over many another weed only to work out my own solutions as best I could. I believe I could write a book on the subject of weeds on a cranberry bog. Although experience is our best source of knowledge, the subject of weeds is one with which we should not have to struggle. Each plant has its peculiar habitat, method of growth, special root system and means of propagation. Each and every one can be conquered if we find the proper weapon. The roots of one, the seeds of another, the amount of moisture required by a third, the length of life of a fourth, and so on, are the points of attack. Without problems the cranberry business would lose much of its interest and there would be an over production. We still have great improvements to make in the marketing end, in more intensive cultivation and in better cooperation. Personally I am an enthusiast. The opportunities appear unlimited. My seven years experience in the business is just enough to make me feel happy that I have about 40 years experience ahead of me.

SPOILAGE OF CRANBERRIES AFTER PICKING

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All cranberry growers are familiar from observation or experience, or both, with the large losses of fruit which frequently occur after picking, and it is in response to the urgent appeals of the Cranberry Growers' Association that the Department of Agriculture has undertaken, in cooperation with the Massachusetts Agricultural Experiment Station and some of the cranberry growers, investigations to determine the exact causes of these losses-and if possible, to devise practical means of preventing them. More or less work bearing on these problems has been carried on by Dr. Franklin and myself for several seasons past. Last season we also had the assistance of Dr. Stevens on the Cape and Mr. Wilcox in New Jersey, where we are also carrying on similar work. The present season, with increased funds and facilities, we hope to obtain sufficient data for the solution of some of these problems.

Spoilage of cranberries excluding insect injury is due in general to one of three causes, or combination of these causes, freezing, fungous rots or premature death of the fruit caused by rapid ripening or suffocation. It is not necessary here to discuss freezing, as its cause and prevention are understood by all.