

FUMIGATION INCENTIVES IN POTATO CONTRACTS

by
 Del Read
 Field Manager-Lamb Weston, Inc., Quincy

A steadily increasing percentage of the nation's potato crop is now coming from the Columbia Basin of Washington where the production has grown at a rapid pace. A healthy fresh and processing market has been generated here during the past 15 years.

All was going well, for the most part, in our ideal potato growing climate, new land, plenty of water and industrious and enthusiastic growers. In the fall of 1967 we encountered many fields with heavy Nematode infestation, that caused severe loss, sometimes total loss, to the grower. Many of our growers and the company felt the impact. The company and the grower realized that we had to find the answer or we would be out of business. At this date fumigation had been tried on a very limited basis in the Quincy Basin.

As a result of the concern of processors and growers, we started a dedicated investigation with a group of our growers. We consulted with Washington State University, Oregon State University, and our own research staff and went into the fields to check research in both states. We found that most, if not in all cases, the fumigation was being applied by the Shankin method. This presents some problems with trash, loss of moisture and other field related difficulties. We also found that the state of Utah experiments, though limited, had proved satisfactory using a Plow down method. This plan seemed very practical to our cultural practices in the basin. Looking back now, I think this was the turning point and the answer to our control of root knot nematode.

One of our leading growers, in cooperation with a Quincy chemical dealer, started construction of a plow down rig. It was extremely successful and in a short time most of our growers were using this method to apply the several kinds of fumigant into the soil.

All of this, the machinery, the cost of the fumigant, and extra time, all costs money. The company realized that if we were going to ask or expect the growers to fumigate on a large scale, in order to insure us a near nematode free raw product, we needed to help with some incentive program that would pay some of the increased costs.

We pay on a premium endorsement that is also part of the contract:

1. The grower is paid an additional \$1.00 per ton excluding the culls.
2. Growers must apply a recognized root knot nematode control fumigant manufactured by reputable chemical company, in accordance with label specifications and recommendations of the Grant County Extension office.
3. Growers, as an aid to such fumigation, must establish conditions of soil, soil temperatures, soil moisture, crop residues and exposure period to fumigants as are recommended by the Grant County Extension office and by the chemical company supplying the fumigant.
4. Grower will notify buyer of grower's intention to fumigate prior to the application of the materials and following fumigation, present proof of satisfactory application from the applicator doing the fumigation and from the chemical company supplying the fumigant.

This plan pays in most cases half, or more, of the costs to the grower. Our growers are convinced that their quality has improved on the potato crop for the current year as well as increased production on beets and other crops following potatoes. The weed control benefits, especially the excellent control or elimination of Canadian thistle, really pays dividends. There is also a built-in incentive in that only a 5% cullage is allowed for potatoes grown in non-fumigated ground, but a 15% tolerance for those on fumigated ground. With such a small investment, most growers do not take

the risk of losing the entire crop. The result has been an almost complete acceptance of the fumigation incentive program by Lamb-Weston's contract growers.

The grower and company losses have been held to a minimum in the last few years. Even though it has cost the company several hundred thousand dollars, we have eliminated a major problem that would have put us out of business.

The chemical industry personnel have been most helpful over the past years in research and field time. The grower is resting easier, knowing he has control. As a company, we are confident that the fields will reach our expected tonnage of top quality potatoes. The fumigation incentive program has helped us solve a major problem that seven years ago threatened to wipe out a growing industry.