O. A. C. Expert Advises Careful Inspection Before Shipping Vegetables

PLANT DISEASES GREAT CAUSE OF SHIPPING LOSSES

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During the course of the recent war when the food problem became so acute, the federal bureau of markets and plant industry undertook a new line of investigation looking ultimately to the prevention of the many heavy losses which annually occur in connection with the shipping and marketing of vegetables.

These losses, coming as they do after the crop has been grown, harvested, stored, packed and transported, sometimes over long distances to market, are particularly expensive since they entail the loss of so much labor.

The active work up to the present time has consisted largely of inspections of shipments of vegetables at a number of large market centers for a determination of the causes and extent of losses. These inspections are made only on request from the consignee or the shipper and are often the basis of claims for settlement of losses.

A report of the condition of the shipments as shown by the inspections has been sent back to the localities from which the products were shipped. In this way an attempt has been made to inform the shipper as well as the consignee just what the tangible cause of his losses were and why he had to figure in a greater or less amount for excessive shrinkage.

NOT A NECESSARY EVIL

It is no longer necessary for shipment losses to be taken for granted or as a necessary evil that consequently must be endured.

The findings of the bureau of markets indicate that plant diseases of two general types are the greatest factors in shipping losses. These types are first, those which originate in the field, are harvested together with the vegetables and during shipment develop, at times, to an alarming extent, and second, those which develop in the stored products, gaining entrance to the plant tissues through mechanical wounds and through disintegrating portions of tissue caused by poor ventilation, high humidity, unfavorable temperature and other causes. Thus there are evidently two ways in which steps can be taken to avoid these losses—first by the growing of more nearly disease-free products, and second, by surrounding these products with conditions favorable to their more or less extended storage.

COOPERATION ESSENTIAL

Cooperation between grower, shipper and consignee is essential.

In order, then, for better results to be obtained in the shipment of vegetables, the grower must first know what diseases and conditions of his crops are likely to cause trouble after harvest, which, as far as possible, must be eliminated.

The shipper also must be cognizant of these diseases in the harvested crops, so that he may reject at once a product which is bound to develop "excessive shrinkage" in shipment and give absolutely no gain.

As an example of the influence of some field diseases, the loss during the last shipping season from watermelon field diseases developed under transit conditions, from four Southern states alone was 2500 cars, valued at $1,250,000.

The shipper must further know the effects of unfavorable transit conditions on sound and healthy products, and must insist that his shipment be surrounded by conditions that are up to standard.

LOSSES MAY BE AVOIDED

The consignee should inform the shipper of the diseases and conditions in the shipment as he finds them which caused the loss in transit in order that a duplication of these losses may be avoided in the future.

In all cases of damaged shipments advantage should be taken where possible of the impartial inspections given on request by the bureau of markets to aid in determining the exact conditions of any shipment. The losses now suffered by the state of Oregon and by the nation as a whole from market diseases of vegetables are enormous and all parties concerned—producer, shipper, transportation company, consignee and consumer—may well work together with mutual advantage in reducing these losses which to a very large extent will probably prove on investigation to be preventable.

It is hardly short of neglect or lack of due appreciation of some factors only one half, two thirds, three fourths, or even nine tenths of the vegetable products which by its industry it is able to produce from the soil.

LOSSES SPECIFIED

As examples of specific losses reported by the market inspection service in 1919 shipments of vegetables from Oregon the following may be mentioned:

Cabbage—One car 10-15 per cent watery soft rot.

Carrots—One car practically an entire loss from watery soft rot.

Onions—One car 12 per cent bad decay from botrytis, four cars an average of 3 per cent loss from neck rot, two cars 2 per cent soft rot, one car 3 per cent decay, three cars average of 30 per cent slimy soft rot sometimes following old freezing injury to outer scales, two cars 55 per cent old freezing injury mainly on outer scales and three cars average of 6 per cent sprouted, sprouts one half to three inches long.

Potatoes—Twelve cars average 10 per cent fusarium rot, generally dry, though sometimes soft, depending on conditions; six cars 5 per cent soft and dry rot, four cars 5 per cent decay, three cars 5 per cent late blight rot, three cars 4 per cent scab, few other cars slight scab, two cars some slimy soft rot, one car 4 per cent fusarium stem-end rot, three cars 10 per cent defects, generally second growth, growth cracks, cuts and bruises, and one car 33 per cent hollow heart confined to potatoes weighing one and one half pounds or more.

Turnips—One car 80 per cent decay probably following frost injury.

TRAPNESTING CHICKS IS BIG BUSINESS

Mrs. Butler of Jennings Lodge with 2350 baby chicks, hatched for the Watterson pullet farm at The Dalles.

MAY AND JUNE CHICKS, HATCHED A LITTLE LATE, THRIVE IF CARED FOR

By E. Butler

About this time each year inquiries begin coming in to the farm about May and June chicks. Each mail brings them by the dozens and it might not be inopportune to give our experience with late hatched chicks. Each year on the Butler farm we have made it a practice to hatch May chicks for ourselves and the past season we brought off a brood June 7.

We cannot see but that they are profitable. To be sure they are not so much so as stock that is brought off earlier in the season, but there are not enough hatcheries in the country to supply the demand for early chicks and some one must be satisfied with the late ones. Do not despair if your favorite breeder has informed you that he is sold out for March and April; write him in regard to his May and June bookings. Many a good layer has been hatched late, as evidenced by the fact that one of the recent winning pens in a laying contest were May chicks. Tancred hatches them and Robinson says that he does not want his winter layers hatched before May. For our part they have always returned us a neat profit and we shall continue to hatch late chicks as long as we are in the poultry business. At the time of the big storm last winter, our June and May pullets were laying us 54 per cent, and our trapnest records show that some of our best layers were hatched on the 27th of May.

LATE PULLETS HANDICAPED

In raising late pullets you must take into consideration the fact that they start life about the time that summer, with its dryness is beginning. The early bird catches the green stuff as well as the worm. Green food is a great thing with all chicks and late ones must have more than those hatched early. This green food is hard to produce during the summer months but it must be done if you are going to have the May hatched pullet laying in November. If there is no other way sprout oats. There is no better green food and they are easy to sprout. An old box will do. Soak them in water for 24 hours and then pour them into the box. After that sprinkle them occasionally and give them a stirring. You will be surprised what nice green food you will get.

Another thing that should not be overlooked in raising late chicks is buttermilk. It is a great food for poultry of any age, but on account of its forcing virtues it is of greater value in raising late chicks than any other food. If you cannot get the fresh buttermilk, get the semi-solid or condensed. While, perhaps, not as good as the manufacturers claim, it is nevertheless of great assistance to the poultryman.

SHADE IMPORTANT

While recognizing that the late chick needs special care in feeding do not forget the little matter of shade. All poultry requires more or less shade, but the late chick comes into the world when it is getting hot. It requires some protection from the rays of heat that beat down during July and August. If your yards do not have shade make some. Muslin or burlap or even old sacks can be placed on frames that will give the little fellows a chance to cool off, and I have even seen poultrymen cut fir brush and stand it up in the yard.

On the whole the question sums itself up as follows: There is a little less profit in the late chick, but still a good one at that; there is a little more work for the poultryman, but if he has been disappointed in getting his early stock it is worth it. So Mr. Poultryman, accept the word of one who has tried it several times and expects to try it again and take a chance. Get out your poultry magazine or turn to the classified columns of The Journal; look up the address of some good breeder and order your chicks. Remember the high price of eggs last winter.

EXPERT FEED MAN FOR ALBERS COMPANY

Professor Carter, an authority on feeds and feeding, graduate of Iowa Agricultural college, who has been retained by Albers Bros. to give expert advice to Northwestern farmers on feeds and feeding.

POULTRY NOTES

Unusual interest in systematic poultry improvement throughout the country is apparent from reports received by the United States Department of Agriculture in connection with the "Better Sires—Better Stock" campaign. Figures collected thus far indicate that more poultry is kept on farms in the United States than all other live stock combined, and that a greater proportion of the poultry is of pure blood than any other kind of live stock.

The records also refute the frequent assertion that most livestock raisers take little interest in feathered stock, leaving it largely to the women.

A Connecticut farmer, who recently enrolled in the "better sires" movement, is an example of the interest of men in improved poultry. He listed 30 cattle and 1,939 poultry—all of pure breeding. No other breeding stock was kept on the farm.

Holsteins Bring Top Prices at Sacramento

At the annual Holstein-Friesian guaranty sale at Sacramento, 73 dairy animals sold for $65,525, an average of $901, being just a little less than the record average established by the Holstein classic of a year ago.

The top price bull was Ensign Korndyke, from the herd of A. E. Smith, Sumas, Wash., purchased by H. H. Sisson of Willits for $2,050. The record female was the bred cow Ida Lotta Winifred Burke, bought by R. L. Holmes of Modesto from the consignment of W. J. Higdon of Tulare.

The 65 cows and heifers averaged $876 and the eight bulls $953.

GROWER'S ASSOCIATION NOTES

The plant at Roseburg, formerly owned by the Umpqua Valley Fruit union, which has been recently purchased by the Oregon Growers' Cooperative association, is one of the finest plants in the state. It is of tile construction. Has one very attractive delivery feature, namely, the fruit can be delivered to both the first and second stories by auto or wagon. A double-deck platform, giving good shelter against sunshine and storm, is provided for delivery. The plant has a spur running the whole length of the building. The lot is a very choice one, very finely located, having a paved street leading up to the property. It is the plan of the Oregon Growers' Cooperative association in the near future to possibly enlarge the plant somewhat, probably a prune packing plant, and possibly later a cold storage plant. It will be very easy to turn the present plant into a cold storage plant at any time.

* * *

The Medford plant is very well located, the property consisting of 13 city lots, being a full city block, measuring 300 feet square. Trackage for 14 cars is provided, giving splendid loading facilities. The building is constructed of interlocking tile; is a two story and basement structure, the main floor, in addition to receiving room and office, packers' lunchroom, has four large precooling rooms, measuring 42x30, 30x40, 48x29 and 37x50. The packing room is on the second floor and measures 78x98. Fruit is conveyed to the packing room by means of a large waterpower elevator and by a power hoist endless chain system. Trucks unloading at the south end of the building load directly onto a movable belt. After the fruit is packed it is sent to the precooling rooms by means of gravity carriers and later can be loaded from the precooling rooms to the cars, also by gravity carriers. The building is equipped with a 25 ton Vulcan compressor, driven by a 50-O. motor. There are likewise two condensers in the basement. The entire east, south and west side of the building are surrounded by porches 12 feet wide. It will probably be the plan of the Oregon Growers' Cooperative association to turn this building entirely into a cold storage plant and to build additional packing sheds adjacent.

* * *

The fruit growers and business men of the Sheridan district have become very much interested in the Oregon Growers' Cooperative association, and have subscribed for over $18,000 worth of preferred stock. In the near future it is the plan of the association to build two buildings at Sheridan. The first unit will be a large drier, to accommodate many members who have no facilities for the evaporation of their prunes. The second unit will be a building for the handling of fresh fruits, especially apples. Ultimately it will be the plan to have a prune packing plant and a cold storage plant at Sheridan.

The Eugene Fruit Growers' association which operates the largest purely cooperative cannery in the Northwest and which has a national reputation, handles the bulk of the fruits and vegetables produced in this region and in addition to its plant in Eugene has branch plants at Creswell and Junction City. It did a million dollar business last year. In 1908 its total business was only $15,000, which gives some idea of the growth of the fruit industry since that time.

Holstein Breeders At Chehalis Plan Fall Fair Exhibit

Chehalis, Wash., April 10.—At a well attended meeing of the Lewis County Holstein-Friesian club held recently in County Agriculturiet Flagg's office, a committee composed of H. R. Shoultes, V. L. Bevington and F. M. Svinth was named to represent the organization at a national conference to be held soon in St. Paul. A committee to investigate plans for a field man was named, composed of H. R. Shoultes, E. A. Donaldson and E. M. Moses. The club has worked out plans to make a big exhibit at the Southwest Washington fair this fall, whereby a man with only one or two cows will have a chance to exhibit his stock, as well as the owners of larger numbers. J. C. Rush, Henry Bouchard and Ed Moses were named to look after this feature. Addresses were made at the meeting by A. T. Flagg on a better livestock campaign and Miss Z. May Meighen, county school superintendent, on "Pure Bred Children."

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