

Seed Disinfection Of Top Importance To Growers In Getting High Market Crop

By WALT JENDRZEJEWSKI

Seed disinfection is a subject of considerable discussion among potato growers at present. Control of ring rot, blackleg, rhizoctonia and scab calls for disinfection of seed as well as cellars, sacks and equipment.

Cellar disinfection is a standard recommendation. A thorough house cleaning in cellars, together with a good job of disinfection has been found profitable. The best and cheapest cellar spray solution is a copper sulfate (bluestone) solution made up at 1 lb. of copper sulfate to 10 gallons of water. Copper sulfate is effective in killing ring rot bacteria as well as miscellaneous mold and rot organisms.

Considerable ring rot infection of seed results from use of contaminated grading tables and cutting equipment or from sacks previously used to hold infected potatoes. Growers are particularly careful in guarding against such sources of infection. A strong lysol solution is commonly used to disinfect equipment, including knives.

Spread by Knives
Experiments have shown that ring rot bacteria are readily spread by cutting knives. A knife contaminated by having cut a tuber infected by ring rot is capable of infecting each of the next 30 to 40 tubers cut.

Some growers use several knives for each person cutting. Knives not in use are kept in a corrosive sublimate or lysol solution. Some growers use circular cutting mechanisms which revolve in a disinfectant solution.

If traces of ring rot are present in seed stock the bacteria from some of the rotted tubers are certain to have been smeared on the surface of many of the potatoes in the lot. Seed disinfection or treatment with the 1 1/2 to 2-hour dip in corrosive sublimate (mercuric chloride) solution will destroy such bacteria. The corrosive sublimate dip also effectively controls scab

and rhizoctonia spores and blackleg bacteria. Blackleg bacteria may have been smeared on the surface of tubers in a manner similar to ring rot.

Another dip used considerably here is the Semesan Bel dip which may be used on cut seed. Semesan Bel quite effectively controls scab and rhizoctonia but is less effective than corrosive sublimate in controlling ring rot and blackleg.

Scab Spores
Scab and rhizoctonia spores are often found on tubers which appear not to be affected. These two fungi are very much of a factor in potato production. Both are found in soils. But when untreated seed is planted, additional populations result. When treated seed is planted no spores are present on seed pieces and in addition disinfectant residues on seed pieces tend to repel organisms present in the soil. This is particularly true of rhizoctonia which frequently is so prevalent that many young sprouts are severely affected. Severe rhizoc damage results in poorer stands and lower yields.

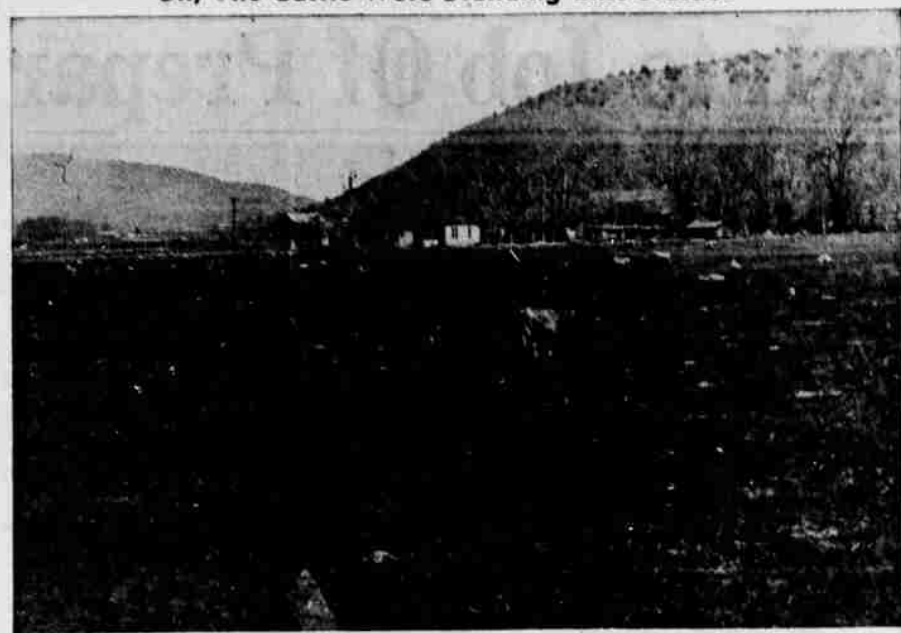
Rhizoctonia is not a factor in marketability of potatoes produced but does cut yields. Scab does not especially affect yield but badly scabbed tubers can't make grade. Seed disinfection has no value in control of leaf roll or eel worm. At this time of year eel worm infected potatoes can be distinguished by a rough warty appearance caused by growth irregularities in the irritated area occupied by each nematode. Peeling through one of these bumps will disclose the minute worm in the center of a slightly discolored area.

Careful Sorting
Careful sorting of seed can eliminate much of the eel worm infested tubers but sufficient numbers are likely to get by to result in serious field infestation. Once eel worm is established in a field it's there to stay. Soil fumigants are employed in infested fields but 100 per cent eradication is almost impossible. It is safer to discard seed lots in which eel worm has been found.

Although seed disinfection offers no solution to leaf roll problems, care at cutting time can eliminate many of the diseased tubers. If all seed showing net necrosis is discarded at cutting a large part of the leaf roll infected tubers will be eliminated. Not all tubers infected by the leaf roll virus will show the necrosis but those that do can be removed.

The elimination of leaf roll caused net necrosis from next year's crop depends on how well growers choose seed; on how many of the tubers showing necrosis are discarded at cutting time and on whether or not infected plants are rogued from fields as early as leaf roll symptoms develop. In short, the amount of net necrosis in next year's crop depends largely on how many leaf roll infected plants remain in the field throughout the season and on how many insects are present to spread the virus from those infected plants to healthy ones. It is under plants infected during the growing season that net necrosis occurs. The leaf roll plant from a bad seed piece doesn't produce browned snuds. It doesn't produce much of anything.

"Oh, The Cattle Were Standing Like Statues"



A spring scene such as the above picture which was taken out on the Merrill highway in the Klamath basin, may have inspired the writer of the song, "Oh, What A Beautiful Morning." Lambs gambol in the background of this typical basin scene.

Poisoning Season Here

During the next period of warm weather squirrel poisoning should reach its peak. During the past week there has been much demand for poison from the county agent's office and stores throughout Klamath county that handle this material. The following stores have been supplied by Harold Schieferstein and will be kept supplied from the county agent's office throughout the season:

J. W. Kerns and company, Klamath Falls; Mac's Cash store, Merrill highway; Pacific Supply Co-operative, Merrill; Malin Mercantile

store, Malin; D. J. Blise's store, Lakeview highway; F. W. Bold and Son, Bonanza; Lorella store, Lorella, Langell valley.

It should be kept in mind that poisoning on warm, still days is most effective. The period when the squirrels are carrying their young causes them to take poison readily and good results can be secured. Also the period immediately following the emergence of the young ones is an excellent time for poisoning. The squirrel population of Klamath county is down to an all-time low but there is some indication that the population is again building up and that land owners do not pay enough attention to this pest. It is easier to keep the squirrels down than to kill them off after they have become thick. Another reason for poisoning is from the health standpoint. Squirrels carry fleas that spread disease common to man and when thick, damage to crops, ditch banks and fields is great.

Children have a keener sense of taste than adults.

CAULKED BOOTS
14.85 to 22.95
Oregon Woolen Store

Classified Ads Bring Results.

Klamath Netted Gems
Drop Seed
700 Sacks
One year from certification.
Formerly Small Montana Blue Tag.
PRICED TO SELL.
ALSO
One Row Iron Age Planter
CALL OR SEE
EGGERS
Olene Store

New England Farm Chain Cuts Prices

NEWBURYPORT, Mass., April 24 (AP)—A New England grocery chain yesterday slashed prices 30 per cent and a half-dozen other communities prepared to join with this city in "rolling back" prices.

The Clover Farm chain—28 independently-owned stores in Massachusetts, Vermont and New Hampshire—announced effective immediately the price cut on 150 items.

Enthusiastic Response
Buyers response to a general 10 per cent price cut in Newburyport, where the movement originated yesterday, sent observers from other cities away enthusiastic about taking similar steps to combat inflation.

Norman J. Randall, executive secretary of the Northeast Development council sponsoring the campaign, called upon the entire nation to join the program because Newburyport "cannot do it alone."

Mayor John M. Keleher emphasized that the Newburyport plan was "not a markdown sale... but a refund to the consumer which retailers are making in an effort to bring into balance the economic machine which is seriously out of adjustment."

He said the principal purpose was to create sales "because without sales we cannot maintain the tempo of production, and if production is not sustained, unemployment results and purchasing power drops."

Cow Testing Contact Asked

Dairymen interested in the establishment of a cow testing association should contact interested dairymen, Wilbur Reeling, president of the Dairy association or the county agent's office. Local dairymen have held two meetings and to date have 19 days' work for a tester lined up, covering 550 cows. A total of 24 days' work each month and not less than 800 cows is necessary to put an association in operation on a full-time basis. The county agent's office has contacted the county agent's office at Medford to see whether any additional herds could be included from that county and a joint cow testing association established.

LAND GOING

"When John Smith and Miles Standish came to these shores, the topsoil averaged about nine inches in depth. Today, due to the ripping and wearing action of water and wind on unprotected land and to the removal of organic matter—the result of land abuse—topsoil averages about six inches in depth for the nation as a whole. In some places it is all gone," said Secretary of Agriculture Anderson in a recent address.

WASHINGTON, April 24 (AP)—President Truman used his veto for the first time during the new republican-controlled congress yesterday and turned down legislation to give special powers to counsel for the senate defense investigating committee.

For Sale Seed Potatoes

Utah Netted Gems Cut or Drop

Idaho Blue Tag Drop Gems

White Rose Blue or Red Tag Also Drop Seed

See Crawford & Wolfe

Tulelake, Calif.

Phone 4441

Cooperative NEWS and SERVICE

—CO-OP—

Weekly News Events

Big shots visiting the Co-op this week include J. B. Stanley, manager, Chemicals Division of Pacific Supply Cooperative; Warren Westgate of the Sioux people; Don Gillespie, manager, Pacific Supply Feed and Seed Division, and Pacific's big boss, General Manager Charley Baker. — Queer, how all these foreigners arrive when fishing reports are good.

—CO-OP—

Weed Control

A great deal of time has been spent by us in the selection of the best materials to do the job at the least cost to our patrons. We wish to call attention to the many brands of 2-4-D offered on the market today, and the large variation in prices.—In selecting 2-4-D, be sure to know the strength of the parent acid, as oftentimes the cheaper brands are far the most expensive.

—CO-OP—

Plastic Tubes

Good stock of plastic tubes on hand for irrigation.

—CO-OP—

Sioux Grain Bins

Now is a good time to plan for bulk grain storage. These famous grain bins are now available, but will evidently be difficult to obtain later in the season.

—CO-OP—

Atlieide

Destroy the weeds and grass around buildings by using this product. Eliminates fire hazard.

—CO-OP—

Post War Planning

So this is the period for which we were planning during the war! Remember the committees set up to recommend the ways and means to keep good old Democracy on the job? Guess we overlooked the fact that so darn many people would forget about Democracy in their mad attempt to gather in the dollars—overlooked the fact that a lot of inferior merchandise would be manufactured and dumped on the market at inflated prices—overlooked the fact that strikes would constantly disrupt economy—and that even radio commentators would challenge Cooperatives who represent the finest people on earth, the ranchers and farmers, the one group of people, who, with disregard to hours or income, with inadequate machinery and scarcity of labor, increased food production to win a world war! It is a real pleasure to represent these people through a true Cooperative and to know that we will not be involved in strikes, look for a dishonest dollar, or challenge a free enterprise its privileges. Cooperatives do not disrupt post war planning and do a good job of holding prices in line.

—CO-OP—

Watch for this News Service Column Each Thursday.

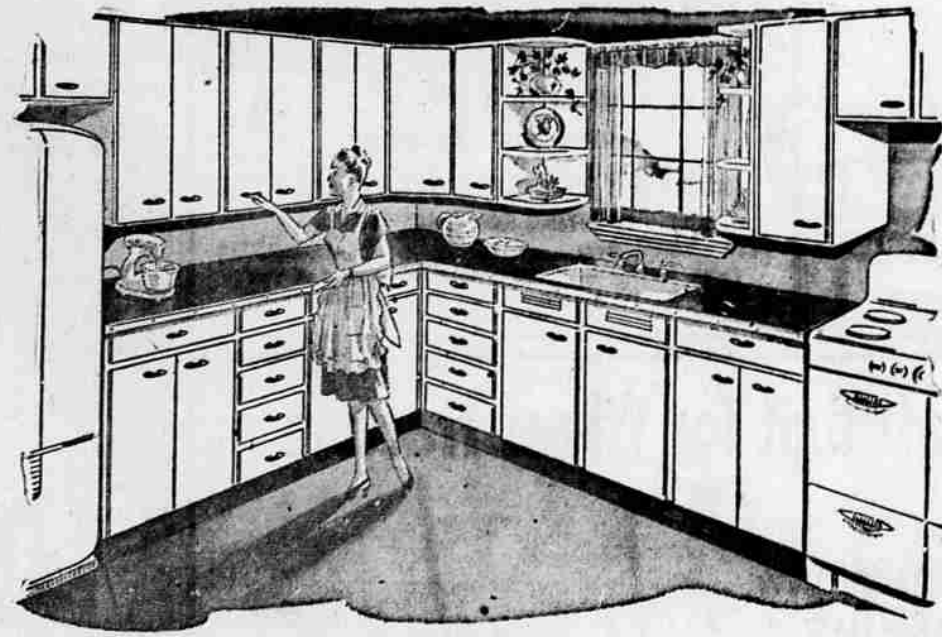
Homer M. Smith, Gen. Manager

Klamath Basin Cooperative

Montgomery Ward

Ninth at Pine Store Hours 9:00 a. m. to 5:30 p. m. Phone 3188

YOU PLAN IT... INSTALL IT...
PAINT IT YOURSELF and SAVE MONEY!
Sale Priced! 20% Off!!



WARDS FINE Unpainted Wood Cabinets ...WILL FIT YOUR KITCHEN!

You can easily make your kitchen a place of beauty that's fun to work in! Plan it so you'll have everything right at your fingertips... with Wards unpainted wood cabinets. Come in, let us show you... you'll find Wards cabinets are made for you! Then install them yourself, Wards easy way—they all fit comfortably together with handy bolts. Paint them to suit your taste... have a gay kitchen, sparkling in your favorite colors! Wards long-lasting wood cabinets are never cold to the touch, work smoothly, clean easily. See them TODAY!

Priced as low as \$8.08

BUY NOW...PAY LATER UNDER WARDS CONVENIENT MONTHLY PAYMENT PLAN!

Tune in Art Baker, 9:00-9:15 a. m., Monday through Friday, KFJI

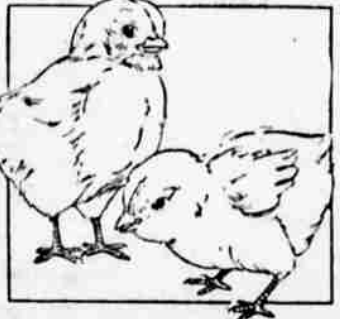
Montgomery Ward

Store Hours 9:00 a. m. to 5:30 p. m. Phone 3188

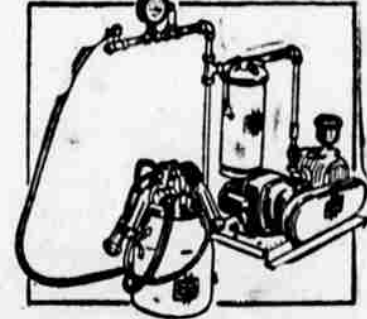
All Farm Needs Cost Less at Wards

You save—and save a lot—when you buy at Wards Farm Department! And you get quality farm needs—supplies and equipment you know you can depend on! Visit Wards Farm Department today, and see for yourself. You'll agree... better farm needs cost less at Montgomery Ward!

See These Ward Week Values!



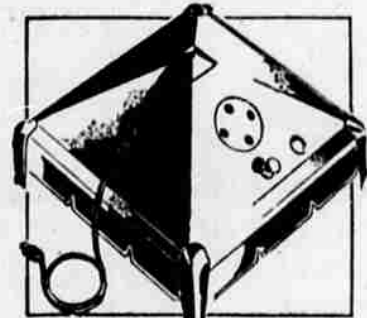
R.O.P.-SIRED CHICKS
100, as-hatched **16.00**
Profit more with Wards 3-star, R.O.P.-sired chicks! From Oregon pullover-controlled flocks!



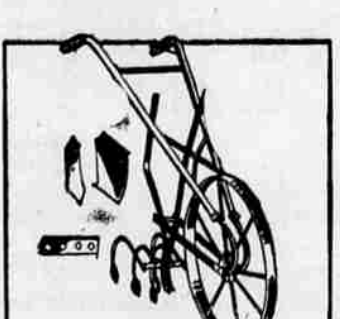
WARDS NEW MILKER
Sale **138.00**
Single unit
See it—compare it—with the finest milkers made. Priced with aluminum pail, 1/2 h.p. motor.



FENCE CONTROLLER
Sale **14.77**
Less battery
Dependable—holds animals with strong, safe shock in any kind of weather! Operates by battery.



SALE! CHICK BROODER
Reg. **16.45**
18.45
Electrically heated by thermostat-controlled Chromolox unit! Steel canopy. Holds up to 200 chicks!



GARDEN CULTIVATOR
Sale **6.29**
Low wheel type
Does more accurate work... has balanced frame! All steel! Four extra tools!



3 1/2 GAL. SPRAYER
Sale **6.44**
Cools less, yet Wards compressed air sprayer has big capacity! For most any spray! Steel tank!

Tune in Art Baker, 9:00-9:15 a. m., Monday through Friday, KFJI