

There is no direct means of dealing with this disease. Rotation and the use of clean, disinfected seed are, however, of value. It appears, also, that strong vigorous vines can bear a good deal of injury from the fungus without showing serious results in the crop. Hence anything that favours a vigorous condition will help to prevent loss.

DISINFECTION OF SEED-POTATOES.

This is of use only against external diseases such as scab and powdery scab. It is useless against internal ones like late blight and wilt. Pick over the potatoes before treating, rejecting those visibly affected with rots, late blight, or badly attacked by scab.

Formaldehyde Treatment.

Formaldehyde is a gas. The commercial article (also called formalin) is a solution of this gas in water. In buying by measure, know what you are getting. The usual druggist's pint is the American or wine pint, weighing 16 oz. The imperial pint weighs 20 oz. Where large quantities are to be treated, it might pay to buy co-operatively through farmers' organizations. The present wholesale price is about \$3 per gallon, imperial (about 10 lb.), in 40-gallon barrels, while the retail price is about 50 cents a pound. It has a powerful hardening and corrosive action on the skin, especially the stronger solutions, and the gas is irritating to the eyes, throat, and nose.

Effects of Treatment.

This destroys spores adhering to the surface of the tubers, but the result will last only as long as the tubers are kept protected against contamination. Formaldehyde, being a gas, evaporates, after which there is no further protection from it. Hence, if treated tubers are to be dried and stored instead of being planted at once, it is essential that the place of storage be also disinfected thoroughly by swabbing down with formaldehyde, 1 lb. to 10 gallons of water, or bluestone, 1 lb. to 10 gallons. A cement or board floor is preferable, and this should be similarly treated. If only an earth floor is available, it should be well swept, sprinkled with one of the above solutions, and then covered with sacks or canvas soaked for an hour in one of them, or two hours in the dipping solution. It would, however, in this case be better to treat just before planting and avoid drying and storing. It is then only necessary to spread the treated tubers on dipped sacks out-of-doors, and cut and plant as soon as the excess of liquid has drained away. If more potatoes are treated than actually planted they are not injured for human or stock food. Sprouted potatoes are liable to have the sprouts broken off and the remainder seriously damaged. Tubers intended for specially early yields must therefore be treated before putting into the sprouting-boxes, which should also be disinfected.