

Records of the Division of Vegetable Pathological and Physiological Investigation  
RG# 54, Box 1, Book III, Letter 302, 1889

April 22, 1889

Mr. G. E. Ward,  
Belvidere, Nebraska

Dear Sir,

Mr. King has referred your letter to the Section of Vegetable Pathology. He states that he has sent the vegetable seeds but has no potatoes or artichokes.

It is not probable that the use of any particular variety would avoid the rot, as we know of no variety that is not subject to it under favorable conditions. You may however, be able to prevent it by complying with the following directions:

1. Plant only healthy seed or that which has been disinfected; i.e. be sure the seed does not come from a field in which the rot was present last year, and if you cannot do this, disinfect the seed by allowing it to remain for a few hours in an oven at a temperature of 104 to 100 degrees Fahrenheit. If the potatoes even come from a vicinity where potato rot has existed in the neighborhood this disinfection will probably be the wisest thing to do.
2. Plant in a light or well drained soil and hill up during the season.
3. Spray the growing plants with one of the remedies marked in the enclosed circular during the period of bloom, repeating the operation within ten to fifteen days.
4. Delay digging until the tops have been dead for a week at least, and if possible dig only during dry sunny weather.
5. Be sure that the potatoes are thoroughly surface dry when stored, and store in some dry cool place where they will remain dry.
6. As further protection dust the potatoes before storing with dry air slaked lime, using one bushel to every twenty-five bushels of potatoes.

Of course where you have already planted, only a part of these directions will be of use to you, and I would add that if the downy mildew makes its appearance anywhere in the field it would be good economy to pull up and destroy the tops affected. The best method of destruction is by burning.

Respectfully,

E. A. Southworth  
Assistant in Charge