

PROCEDURE IN SLECTING SAMPLES FOR DIAGNOSIS OF
BACTERIAL RING ROT OF POTATOES
(CORYNEBACTERIUM SEPEDONICUM)

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This potato disease has been known in the western part of the United States for about 25 years. It was noted first in this country in 1932 from Maine. The losses, while great locally in certain cases, have been less than for many other diseases. The special concern is in the tremendous potential damage to the industry should it get out of hand.

Thus there are strict certification standards and rigid quarantines. At least this is true in this State. It is easy to understand then why the prompt and accurate determination of the disease is so important particularly in seed lots. It is possible that litigation may arise over infected lots of potatoes.

In 1963 the task of making the ring rot determination on potato lots for the Washington State Department of Agriculture became one of my official responsibilities. This alone is no light burden.

It has seemed desirable to try to make more certain that the collection, transmission and diagnosis of samples are accurate and authentic. After extensive counsel a form has been prepared with directions to encourage better sampling. This form is reproduced herewith and some discussion of the points listed may be appropriate.

It should be pointed out that we will make every attempt feasible to render an accurate determination and we will report the results on samples run as negative or positive. Evidence of the readings will be retained.

The importance of this work is clearly indicated by the memoranda from Directors Dwyer and Madsen. We ask your cooperation in following suggested procedures so as to make this service worthwhile.

BACTERIAL RING ROT REPORT
WASHINGTON STATE DEPARTMENT OF AGRICULTURE and/or
WASHINGTON STATE UNIVERSITY

DIRECTIONS: 1) It is necessary to follow these directions to provide satisfactory samples for diagnosis and testing. All appropriate information as listed must be furnished before the sample will be run. Samples will not be returned.

- 2) A sample should consist of a minimum of 3-5 tubers and/or affected stems and root systems.
- 3) Place lower stems and root systems in dry plastic bags for transportation.
- 4) Wrap affected tubers in dry newspaper and place in boxes. Do NOT put tubers in plastic bags or waxed paper.
- 5) Keep samples cool and deliver promptly.

Sample No. _____ (Do not fill in).

Grower: _____ Lot: _____ Whse., Bin, Field, Car,
Truck, etc. No. _____

Address: _____ Location: _____

Sample represents: Seed lot () ; Commercial planting () ; Variety: _____

Selection of sample
Sample selected by: _____ Witnessed by: _____
(Signature) (Signature)

Date sample taken: _____ Date sent or delivered: _____

Sample received by: _____ Date: _____

RESULTS: Diagnosis and Gram Stain Reading

Sample examined by: _____ Date: _____

Condition of sample: Satisfactory () : Unsatisfactory: ()

Slides made by: _____ Slides read by: _____

Slides made by: _____ Slides read by: _____

Slides checked by: _____

RING ROT (Corynebacterium sepedonicum) POSITIVE (), NEGATIVE ().

Remarks:

Signed by: _____