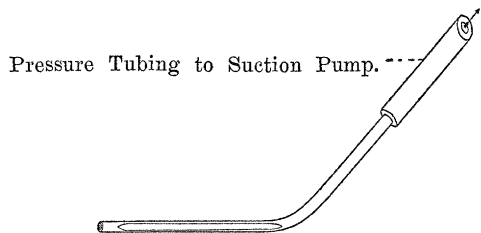


Florida, Wisconsin and Kansas. Recently silver scurf has been reported from Oregon⁴ and Washington.⁵ It has been very difficult to trace the introduction of this disease into Utah for the reason that the potato growers are not always informed as to the source of their seed tubers. In most cases the seed was said to have been purchased from other points within the state of Utah, but in some instances it was definitely ascertained that the seed came from Idaho. It is certain, therefore, that seed planted on new soil, with the resultant crop developing the disease, must have been infected previous to being planted. The writer believes that the silver scurf disease of the potato is widespread throughout the intermountain states particularly in Utah and Idaho. P. J. O'GARA

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A SIMPLE DEVICE FOR COUNTING SEEDS

In preparing tests of seed germination a great deal of rather monotonous work is required in counting the seeds. The device to be described was worked out to obviate part of this labor, and has proved very efficient in our seed laboratory. In the hope that it will save valuable time for other workers in this field the following description is presented.



The seed counter is made from a piece of brass or copper tubing 20 cm. in length and about .5 cm. in diameter. This is bent in the middle at an angle of 45° and then on one

⁴ Bailey, F. D., "Phytopathology," 4: 321-322, August, 1914.

⁵ Rees, H. L., *Western Washington Experiment Station Bulletin*, 1: 15-16, 1914.

side filed almost paper thin for a distance of 8 cm. At intervals of .7 cm. on this flattened side ten holes of suitable diameter are punched with a needle and hammer. One end of the tube on the side nearest the holes is sealed with solder or sealing wax, and the other end is connected by .5 cm. rubber pressure tubing to a small Richards air pump.

The seeds to be counted are placed in a flat tray and the pump started. The suction through the fine openings holds the seeds in lots of ten to the tube, which are removed by a flick of the finger. In case more than one seed adheres to a hole the extra ones can be quickly removed by tapping the tube, or with the finger. It will be found advisable to have tubes made up with various sizes of holes, one for small seeds such as tobacco, with openings as small as can be made with a No. 7 needle; one with medium-sized holes of .5 mm., which are best adapted to seeds of the size of radish, clover, etc., and one with holes of 1 mm. in diameter. Seeds with a very rough exterior such as beet seed do not lend themselves well to this method of counting as the surface is too uneven to be held by the suction. Large seeds—beans, peas and corn for instance—are too heavy to be held by the suction produced by the small Richards pump, but there is no doubt that with a stronger suction such as that produced by a vacuum cleaner this method could be used in counting these heavier seeds.

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THE JOURNAL "ISIS"

TO THE EDITOR OF SCIENCE: I beg to call your attention to one of the incidents of the war which is likely to be overlooked in the midst of all the excitement of daily battles and the destruction of life and property. I refer to the devotion to scholarship, to duty, and to educational ideals shown by Dr. G. Sarton, of Wondelgem-lez-Gand, editor of *Isis*, in continuing the publication of this im-