

MICHIGAN AGRICULTURAL COLLEGE

EXPERIMENT STATION

PRESS BULLETIN NO 45

To the Editor:

The notice below will be of value to many of your readers. We, therefore, ask you to cooperate with us in calling attention to this timely matter.

R. S. SHAW,

Director.

Prevention of Celery "Blight"

The Michigan celery industry lost probably more than a million dollars in 1915 from the disease called Septoria Leaf Spot or "Blight." This loss could have been entirely prevented had proper methods been used.

Special Bulletin No. 77, a new publication of the Michigan Agricultural College, explains the cause of this disease, and tells how to prevent it. The bulletin is written for the small grower, but producers with large acreages can easily adapt the recommendations to their conditions. The bulletin is printed in both the English and Dutch (Hollandish) languages.

THE CAUSE OF BLIGHT.

The disease, or blight, is characterized by brown leaf spots specked with black dots. With a severe attack a shrivelling of the leaf stalks accompanies the spotting of the leaves. The cause of the Blight is a parasitic fungus, or mold, which steals from the celery plant. Splashing of rain spread the seed-like bodies, or spores of the fungus, from plant to plant. The spores sprout, bore into the celery leaf, and cause spots which then become a source of danger to other leaves.

HOW THE FUNGUS LIVES OVER WINTER

The fungus lives over winter on the trash from diseased plants. Nearly all samples of celery seed carry the fungus. Young plants become infected either from trash or from seed. Each diseased plant in the field is a centre from which the spores spread.

HOW TO PREVENT BLIGHT.

The bulletin gives the following rules for the prevention of celery "Blight."

1. Disinfect the seed before planting. Soak the seed $\frac{1}{2}$ hour in warm, but not hot, water. Then soak $\frac{1}{2}$ hour in corro-

sive sublimate, 1 part to 1000 of water. Corrosive sublimate is deadly poison and must be kept out of the reach of children.

2. Irrigate the seed beds in the greenhouse to avoid the splashing of the spores from plant to plant.

3. Rotate crops, if land enough is available. By all means rotate the seed bed.

4. Do not mulch the seed bed with old celery tops. Leave no celery trash about the seed beds.

5. Cultivate the dirt away from young celery plants so as to expose the crown. This allows the leaves to spread and helps to keep the heart leaves clean.

6. Do not work plants while the dew is on them or directly after a rain.

7. Drain the land well. Keep the ditches clean. Do not locate celery fields in hollows or in places surrounded by trees or buildings. Ventilation is essential for quick drying.

8. Spray the celery plants every two or three weeks with home-made Bordeaux mixture. Spray often if the season is as wet as the past one.

9. Direct the spray into the hearts to keep the new growth covered.

A SUCCESSFUL SPRAYING TEST

The College experiments of last summer at Muskegon demonstrated the value of spraying. The crop of celery harvested from the experimental field was the only celery of good quality harvested about Muskegon last fall. At an expense of not more than \$12.00 a crop valued at about \$1500 was saved.

The College is advocating the spraying of celery next year in spite of the high price of copper sulphate (Bluestone.) Blight does not come every year, but no one knows when the next outbreak will come. As a matter of crop insurance, the grower should put in practice the control measures outlined by this bulletin