

# CONNECTICUT AGRICULTURAL EXPERIMENT STATION

TOBACCO SUB-STATION

WINDSOR, CONN.

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## Recommendations

For the

## Control of Wildfire

(Revised)

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The Bulletins of this Station are mailed free to citizens of Connecticut who apply for them, and to other applicants as far as the editions permit.

## Recommendations for the Control of Wildfire.

Wildfire did not cause serious damage in Connecticut and Massachusetts in 1923, probably due to the weather conditions which were unfavorable for its spread. However, we do not believe growers are justified in neglecting any of the control measures practiced in the past. The possible injury from wildfire is well known, and as long as it is present in the region, every precaution should be taken by all growers.

### SEED BED.

1. *Seed Selection.*—Select seed plants in wildfire-free fields. At least be sure that the individual seed plants are free from infection. Bagging the seed heads may be useful. Old seed is less likely to be contaminated.

2. *Seed Sterilization.*—If seed infection is suspected, seed should be sterilized with corrosive sublimate or silver nitrate. Formalin is very apt to cause injury and should not be used.

- a. *Corrosive Sublimate.* Soak for 15 minutes in a 1 to 1000 solution in a cheesecloth bag. Wash *thoroughly* and spread out to dry. Use for dry sown seed *only*.
- b. *Silver Nitrate.* For seed to be sown sprouted, use this treatment, 1 to 1000 for 15 minutes. Wash and dry. Silver Nitrate is probably the best treatment in all cases.

*Note.* *Corrosive Sublimate* and *Silver Nitrate* are both *poisons* and should be handled with great care.

3. *Location of Beds.* Do not use refuse from tobacco sheds or tobacco stems as fertilizer in the seed bed. If possible locate the seed beds on land where there was no wildfire the previous year, and where there has been no opportunity for contamination by drainage from tobacco shed or other refuse.

4. *Sterilize the Beds.* Sterilize the soil with steam at 100 lbs. pressure for 30 minutes, or with formalin 1-50 at the rate of one half gallon to the square foot. It is safer to sterilize the walks also. Spring sterilization is safer than fall sterilization.

5. *Sterilize the Sash.* Boards, sash, and cloth used in seed beds should be drenched with formalin, 1-50. New sash, plank, or cloth need not be sterilized.

6. *Spray or Dust the Plants.* Keep the plants covered with copper lime dust or a copper spray, such as *Bordeaux mixture*, at all times from the stage when they are as large as the finger nail until setting is completed.

7. *Watering.* Adopt a system of bed management which will keep the leaves wet for no longer periods than is necessary to produce good plants.

8. *Disease in Beds.* If the disease appears in isolated spots in the bed, these spots along with a broad margin of healthy plants should be killed by drenching with 1-10 formalin. The sash must be left off the bed for several hours after application of the formalin; otherwise the enclosed fumes will kill or injure seedlings for a considerable distance from the original place of application.

9. *Planting.* Pull plants for setting only from disease-free seed beds. Do not use plants which have stood over night after pulling. Water a long way ahead of pulling, so that the plant leaves will be as dry as possible. Remember that the wildfire germs can be carried on the hands, clothing, tools, sash, etc., and avoid such chances. Wildfire may be readily carried into a clean field by walking through it after having walked through a diseased field.

### FIELD.

10. Do not top dress fields with stalks or refuse from badly diseased crops.

11. Do not work in a field where there is any wildfire while the plants are wet.

12. Make frequent inspections as soon as the plants begin to grow in the field, and remove all diseased plants.

13. When the infection is light, removal of the diseased leaves at intervals of three or four days will reduce the number of centers of spread, and may materially reduce the amount of wildfire damage to the crop.

14. Destroy the second growth of suckers after the tobacco is harvested. These often become badly diseased and furnish an unnecessary possible source of infection.