

Connecticut Agricultural Experiment Station
NEW HAVEN, CONN.

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THE CALYX AND LATER SUMMER SPRAYS
FOR APPLES

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The *pre-pink* and *pink* sprays have been outlined in Bulletin of Immediate Information No. 33, and in this bulletin the *calyx* and later summer sprays will be discussed.

For convenience of reference, we will designate the calyx spray as summer treatment No. 3 (*pre-pink* and *pink* being Nos. 1 and 2 respectively) and the later treatments will be numbered in succession. As the formula for all of these sprays is the same except such additions as will be noted we will give the formula used and recommended by this Station.

Dry Arsenate of Lead..... $1\frac{1}{2}$ lbs. to 50 gals. water.
Spreader..... $\frac{1}{2}$ lb. to 50 gals. water.
Liquid Lime-sulphur..... $1\frac{1}{2}$ gals. to 50 gals. water.
(Dry Lime-sulphur can also be used with equally good results if preferred, following the directions of the manufacturer for dilutions.)

SUMMER TREATMENT No. 3.

The calyx treatment should be put on immediately after the petals fall while the calyx cup is still turned up and open. This treatment is the most important insect spray on the schedule and depends on its timeliness for its efficiency. The principal insect to be controlled is the *codling moth*, but other important ones are *canker worms*, *apple and thorn skeletonizer* and *tent caterpillar*. *European red mite* will be controlled by the Lime-sulphur in this spray and if *aphis* and *red bug* are present, nicotine sulphate can be added at the rate of three-fourths pint to 100 gallons. We do not include the nicotine in the formula as oftentimes it is unnecessary and it adds materially to the cost of the mixture.

This spray is necessary in the control of *apple scab* but is not very efficient unless the *pre-pink* and *pink* sprays have been given. *Black rot leaf spot* is also controlled by this spray.

SUMMER TREATMENT No. 4.

Use the same formula as No. 3 and apply two weeks later. For leaf eating insects and late scab infection.

SUMMER TREATMENT No. 5.

Same formula as before and put on first week in July. For apple and thorn skeletonizer, apple maggot, fruit speck and sooty blotch.

SUMMER TREATMENT No. 6.

Same as No. 5 and applied the last week in July. For second brood codling moth, apple maggot, fruit speck and sooty blotch.

NOTES.

Nos. 5 and 6 should not be put on when it is excessively hot nor at extra high pressure, as foliage injury is likely to result.

Nicotine sulphate may be added to the last two treatments if leaf hoppers are prevalent.

Extra sprays immediately following the calyx for the control of curculio have not been recommended as their value is somewhat doubtful. In recent work at this Station, there are indications that these sprays may be of benefit, not so much from the poison as by the repellent action of any material that is on the fruit.

We do not feel safe in recommending dust for control of apple troubles, but if one wants to use it, the same schedule may be followed.