

Connecticut Agricultural Experiment Station

NEW HAVEN, CONN.

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DORMANT SPRAYS FOR ORCHARD PESTS.

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San José Scale. May be present on the bark of twigs and branches under small circular gray shells about two millimeters in diameter. Each sucks the sap. Later in the season the scales appear on leaves and fruit. There are four generations each season. Spraying the dormant trees with miscible oil, 1 part in 15 parts water, with liquid lime-sulphur (1-9), or dry lime-sulphur as directed by the manufacturer, is recommended.

Tent Caterpillar and Fall Canker Worm. The eggs of the tent caterpillar are now present as dark-colored cylindrical masses on the small twigs, covered with a glue-like coating. Those of the fall canker worm are in compact circular, rectangular or irregular masses on the bark of the larger branches. There is some evidence to show that lime-sulphur will kill the young tent caterpillars if applied just before hatching.

Other Insects. Aphid eggs are oval black and shiny objects on the new growth or around the fruit spurs. Eggs of the false or light apple red bug and of leaf hoppers are imbedded in the bark. The bud moth lives through the winter in inconspicuous cases fastened to the twigs around the buds, and the Oriental peach moth, which is present in Fairfield and New Haven Counties, hibernates in similar manner, usually nearer the base of the trees. These last mentioned pests are difficult to destroy in this condition and probably the dormant sprays will not seriously affect them. Some of the aphid eggs will be killed by the dormant spray, lime-sulphur being more effective than miscible oils.

European Red Mite. Owing to the favorable period for development of the pest last summer, apple orchards should be scouted this year, if not already done, for winter eggs of the European red mite. Should these be found in numbers (present on branches one to two inches in diameter and numerous enough so that the

branches appear red in color) prepare to treat with miscible oil. If you are not planning a complete spray program for the summer months, it will probably be best to use oil even if the eggs are few in number. Scalegide or Sunoco spray oil, diluted 1 gallon in 15 gallons of water, are recommended. Use fresh material if possible or make sure that the contents of each can or barrel are thoroughly mixed and that the material emulsifies completely when placed in the spray tank.

A casual examination of seven apple orchards in the central part of the State showed that two were heavily infested, two with a moderate infestation, and the remainder with few or no eggs. Towns in which the worst infestations were seen were Milford and Farmington.

Fungi. These carry over on the twigs both through the Mycelium and the spores. The latter often show as more or less conspicuous pustules. Some of the common fruit diseases that winter over in or on the twigs are the scab, brown rot and leaf curl of peaches, and the fire blight, sooty blotch, black rot, and possibly scab, of pears and apples. So far dormant spraying for fungous troubles has not been very effective except in the case of peach leaf curl. In this case the lime-sulphur treatment given for San José scale is effective.

Spray the trees lightly, but thoroughly, and avoid drenching. Make your application as soon as the buds begin to swell noticeably or show green at the tips.

If you are not sure that your orchard is infested, communicate with us and if possible send suspected material for examination.