BLISTER RUST NEWS SERVICE

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Pine values aid farm values in the Northeastern States. The white pine blister rust causes pine profits to shrink by destroying the crop. Effective measures of controlling this disease are now known and have been applied on about 2-1/2 million acres during the period 1917 to 1923. The total acreage of white pine growth in the northeast is estimated at about 8,000,000 acres. Control measures must be extended over the unprotected area as quickly as possible, since the blister rust is spreading rapidly.

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Insuring White Pine Against Blister Rust.

You can insure your white pine crop against the blister rust for its ordinary life of 50 to 60 years by paying a small premium periodically for the removal of currant and gooseberry (Ribes) bushes. This premium might vary from 10¢ to $2.00 per acre, according to the kind and number of Ribes bushes present and the character of the land, but should not average more than 50¢ per acre.

The pine has a cash value before maturity if the premium has been paid regularly and the forest properly protected by Ribes removal. At maturity, the full value of the pine can be secured. For 50 year pine on average soil the stand should run about 37,800 feet per acre, worth at $10.00 per thousand feet, $378.00 per acre. It may be necessary to rework an area for currants and gooseberries a second or thirdtime after a period of five to ten years, depending on local conditions.

The Protection of the White Pine from the
Blister Rust Aids in Controlling the Gypsy and Brown-Tail Moths.

In the control of these insect pests, the white pine being a "resistant" or unfavorable food plant of the insects, is left to mature, while oaks, willow, cherry and gray birch are removed as "non-resistant" trees. Part of the regular forest practice in southeastern New England has been a gradual change from a mixed growth of pine and hardwoods to a pure white pine forest.

When white pines are found in mixture with oaks, the gypsy moth caterpillars may actually defoliate the pines, and if this defoliation is repeated several years in succession it may kill the pines. The larvae of the brown-tail moths will not eat coniferous growth (pines). It is for these reasons that the elimination of the favorite food plants of the insects is carried on and white pine is encouraged.

It will not pay, however, to turn the forest into white pine and allow it to be ruined by the blister rust; hence, the necessity of controlling this disease by destroying the currant and gooseberry bushes, which act as carriers of the rust fungus.

The writer this past spring saw numerous places in southern Massachusetts where protection from blister rust had been given and so-called "moth" thinnings had been made, the trees removed being largely oaks while all white pine had been left. A fine reproduction of young white pine had sprung up, together with a number of hardwood sprouts. A release cutting in a few years will remove the hardwood sprouts and will result in a pure white pine woodlot.

There are other trees "resistant" to the gypsy and brown-tail moths besides white pine, such as ash, red maple, walnut, spruce, red pine and hemlock, which may be favored when it is not desirable to have a pure white pine forest; but the white pine is usually favored in forest practice.

Advice concerning the control of this disease can be secured by writing the State Forester or the U. S. Department of Agriculture.

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A comparison of the
White Pine Blister Rust and the Chestnut Blight.

These two forest tree diseases, the blister rust and the chestnut blight, have a number of things in common, but are unlike in other ways. Both are parasitic fungi and of foreign origin, the blister rust coming from Europe and the chestnut blight from Asia. Both destroy valuable forest trees.

They differ in that the chestnut blight passes its entire life on one plant, namely, the chestnut, while the blister rust spends its life on two totally different plants, gooseberries and currants on one hand and the 5-needled or white pines on the other. One blighted chestnut tree can infect another but the blister rust cannot spread direct from pine to pine. This weak point in the life cycle of the blister rust shows us the method of combatting it, namely, the removal of the least valuable host plants, the currants and gooseberries.

The losses from the chestnut blight have been estimated at between 25 and 100 million dollars. Since the value of the eastern and western five-needed pine exceeds 504 million dollars, the losses from the blister rust might ultimately have exceeded those from chestnut blight, but for the development of practical control measures. Heavy losses from the blister rust are being prevented wherever the control measures are being applied.

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