The Blister Rust of White Pine (Peridermium Strobi Klebahn) Found in Ohio

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THE BLISTER RUST OF WHITE PINE (PERIDERMIUM STROBI KLEBAHN) FOUND IN OHIO.*

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Many are familiar with Circular 38, Bureau of Plant Industry, U. S. Department of Agriculture, issued in August, 1909, warning growers and importers of white pine seedlings that the blister rust of this species had been introduced into New York state and probably into Pennsylvania. This rust fungus, (Peridermium strobi Klebahn) has been found by rust specialists to be one stage of the blister rust of currants and gooseberries, (Cronartium ribicola Fisch. de Waldh.). The rust has long been of special interest in Europe, and particularly in Germany, because of its apparent preference to the American white pine, (Pinus strobus) as the host plant for the aecidial or peridermium stage. Now by one of these biological transferences, we have this particular rust fungus, heretofore unknown in America, brought back to the native home of the white pine. We have in this fact a situation which may be a serious drawback to the future successful culture of white pine in North America. Just how serious the drawback will finally prove cannot now be determined.

* Presented at the Akron meeting of the Ohio Acad. of Sci., Nov. 25, 1910.
We know that there has recently been a marked development in interest in forest planting, and that among all the lumber trees thus far utilized for this purpose white pine has been a great favorite. So far as I know, no record exists of the discovery of the rust (Cronartium ribicolum) on currants and gooseberries in the United States, but the disease may be serious from this point of view as well. Through the kindly co-operation of the Department of Nursery and Orchard Inspection, the Department of Botany of the Experiment Station has received specimens of this rust upon white pine seedlings growing in beds at Painesville, Ohio. Mr. Evans, the Deputy Inspector, who discovered the diseased specimens, stated that there was only one found among the large number of seedlings. The specimen is preserved in the Station Laboratory at Wooster. And of course both the Department of Nursery and Orchard Inspection and the nursery people are striving to stamp out the disease so far as that shipment is concerned. The trees at Painesville were imported in the spring of 1909 from Levavasseur & Co., of Ussey, France. Subsequently, Mr. Evans discovered one or more diseased specimens on premises at Akron, Ohio. This lot of white pine was imported in the spring of 1908 from E. T. Dickinson, Chatenay, France.

Diseased Seedlings Probably of German Origin. We have from the observations of American visitors, notes that in the region of Ussey, and doubtless in that of Chatenay, there are no white pine grown. The French nurserymen had secured white pine seedlings more cheaply, as we had, by going to the German growers, and doubtless this is the explanation of the disease upon the seedlings imported from France. As stated in the Circular 38 before quoted, it was previously known that many German growers of white pine had sent diseased seedlings to the United States, and these had been distributed throughout much of New York and in parts of Pennsylvania.