

## THE SUBCOMMITTEE ON SEED COLLECTION ZONES

F. J. Hodge

Our subcommittee was charged with developing seed collection zones for the Lake States upon the basis of some readily available climatic data. This we considered a first step toward forest tree seed certification for the region.

We examined seed collection zones developed by C. G. Bates and P. O. Rudolf for red pine and by H. L. Shirley for the Lake States region, and the U. S. Department of Agriculture tree seed collection policy. We consulted foresters and nurserymen in the three Lake States. We considered zones based on mean July temperatures. All previous or suggested zones seemed to have some unsatisfactory aspects.

At the suggestion of T. Schantz-Hansen and Paul Rudolf, we then developed some zones based on the summation of temperatures above 50° F. Paul Rudolf checked the development of red pine of many seed sources against these zones and found rather good agreement. There appeared to be some need, however, for subdividing these "degree-day" zones from east to west. Average January temperatures seemed to provide a good basis for this division. Using intervals of 1,000 "degree-days" above 50° F. and of 4° F. in average January temperature provides some 26 zones in the Lake States. Disregarding those that occur to a very limited extent only, there are only 8 to 10 zones per state. For use strictly within a state, it probably would be sufficient to use only the degree-day zones. This would provide 6 for Minnesota, 5 for Michigan, and 4 for Wisconsin. A report describing these zones and embodying our recommendations has just been reviewed and approved by the subcommittee. After further review and suitable revision it will be published and distributed.

We have also been considering another phase of seed certification. At a meeting held earlier this year at East Lansing, Michigan, it was proposed that a uniform seed testing law be prepared for agricultural seeds, and a draft of such a law was prepared. It was also suggested that the proposed law be broadened to cover forest tree seeds as well. We are working on that possibility now. If this can be done, the way should be open for this model law to be adopted by a number of states. Whether or not such laws are adopted, our next step should be to work toward certification of forest tree seed not only as to origin but also as to quality.

---

<sup>1</sup>/ Forester, Division of Forestry, Michigan Conservation Department, Lansing, Michigan. The other members of this subcommittee are B. L. Berklund, W. H. Brener, J. W. Macon, P. O. Rudolf, and T. Schantz-Hansen.