# REPORT OF THE SEED CERTIFICATION SUBCOMMITTEE

## OF THE

#### LAKE STATES FOREST TREE IMPROVEMENT COMMITTEE

by W. H. Brener 1/

## BACKGROUND

The Forest Genetics Conference held at Eagle River, Wis., on March 30 \_ April 1, 1953, unanimously adopted a resolution approving the formation of a "Lake States Forest Tree Improvement Committee." Part 3 of that same resolution read: "That the tree improvement committee, as one of its first activities, take steps to foster forest tree seed certification in the three Lake States."

Consequently one of the first subcommittees formed within the Lake States Forest Tree Improvement Committee was that on Seed Certification. Its first activity wag to develop for the region a set of seed collection zones based on the cumulation of temperatures above 50° F. and on January temperatures. A report embodying these recommendations was published by the Forestry Division, Michigan Conservation Department in 1957.

Further direction to the Subcommittee came in the form of another unanimous resolution adopted by the Lake States Forest Tree Improvement Committee at Douglas Lake, Mich., in the summer of 1956. It read as follows:

<sup>1/</sup> Chairman of the Seed Certification Subcommittee and Superintendent of Nurseries, Wisconsin Conservation Department. The other Subcommittee members are D. W. French, F. J. Hodge, E. Kukachka, E. N. Lee, G. Meyer, D. W. Renlund, and Paul O. Rudolf.

<sup>2/</sup> Forest Tree Seed Collection Zones for the Lake States. 1957. Mich. Dept. Conserv., Forestry Div. (no series), 13 pp., illus.

"The Lake States Forest Tree Improvement Committee believes that a well-organized and adequately controlled system of seed (and seedling) certification could be an immediately effective method of significantly improving the genetic quality of planting stock. It is our judgment that the answers to several of the problems involved in developing a system which eventually could be widely applied can best be found by directly undertaking to produce certified stock on a pilot basis under public auspices. Problems requiring particular attention are: (1) selection of superior tree populations as seed sources, (2) preserva-

tion and management of selective stands for seed production, (3) maintenance of identity of seed lots during collection and processing of cones and during the production and distribution of seedlings, (4) statutory provisions for regulating the trade in certified seed and seedling stocks."

The Subcommittee next made a brief survey of tree seed certification throughout the United States and issued a report in October 1959 that included this recommendation:

"The Lake States Forest Tree Improvement Committee should accept the responsibility of preventing any hasty, ill-advised, or inadequate legislation in the Lake States that may bring forest tree seed certification into disrepute. To this end, it is recommended that the Subcommittee on Forest Tree Seed Certification prepare a set of certification standards which are suitable for Lake States conditions. These standards plus advice on procedures should be available to any group wishing to promote forest tree seed certification in any one of the three Lake States."

### Other Certification Activities

The same fall (1959) the International Crop Improvement Association (ILIA) adopted a set of minimum standards for certifying forest tree seeds. These standards had originally been prepared by the Georgia Chapter of the SAF, and they were applicable primarily to southern pines.

Stimulated by this action, the Society of American Forester's Committee on Tree Improvement appointed a Seed Certification Subcommittee with which the Lake States group cooperated. The SAF Subcommittee made a survey of opinion throughout the nation on tree seed certification and proposed a new set of minimum standards for tree seed certification of wider applicability. In view of these developments our Subcommittee decided to await issuance of the SAF Subcommittee recommendation and to evaluate their applicability in this region.

## Developments in Legislation

From the standpoint of legislation the current situation in the Lake States is this: Michigan has a law that provides (as of 1957) for the labeling of tree seeds offered for sale there. Apparently it also could provide for certifying tree seeds if the necessary machinery were set up. Minnesota's seed law defines "agricultural seed" as including seeds of "fiber plants." In some states this has been interpreted to include tree seeds, although others believe an amendment would be required to cover woody-plant seeds. The Wisconsin seed law spells out the definition of "agricultural seed" in more specific terms and would not permit inclusion of tree seeds without an amendment.

The Association of American Seed Control Officials (AASCO) has developed a Recommended Uniform Seed Law, actually a model state seed law, to foster uniformity in seed legislation. AASCO had a Flower, Tree and Shrub Seed Committee that proposed, in 1961, amendments to this model law to cover woody-plant seeds. It also recommended the extension of the Federal Seed Act to cover woody-plant seeds. Largely at the request of foresters to study these proposals further, the AASCO has not yet acted on its committee's recommendations.  $^3/$ 

### RECENT ACTIVITIES OF THE SUBCOMMITTEE

The Subcommittee has studied the 1962 ICIA minimum certification standards for tree seeds (based on the SAF Seed Certification Subcommittee recommendations). It considers them suitable for adoption in the Lake States except that designation of "elevation to the nearest 500 feet of the original geographic source" need not be an essential requirement.

The Subcommittee also has studied the Recommended Uniform Seed Law and the amendment to it recommended by the former Flower, Tree and Shrub Seed Committee of the AASCO. It believes that the amended model law, or something comparable to it, would be a desirable guide for the development of state tree seed laws in this region when and if such legislation is needed.

<sup>3/</sup> Ed. Note. AASCO did, however, take affirmative action in October 1963 on these recommendations.

In addition the Subcommittee has reviewed the following resolution adopted by the Northeastern Forest Tree Improvement Conference in 1962:

"Be it resolved that this Conference go on record as favoring steps to inform the public authorities and administrators on the need for tree seed improvement and that such improvement be accomplished by enacting the following two amendments into the Federal Seed Act as soon as possible: (A) Prohibit the interstate shipment of tree and shrub seeds unless the seeds so shipped conform to the requirements of the seed laws and the rules and regulations pertaining to such seeds in the state into which the seeds are shipped, (B) prohibit importation into the United States of any tree and shrub seeds which fail to meet minimum standards of purity and germination to be established by the Secretary of Agriculture."

The consensus of the Subcommittee was that this resolution made good sense. The provisions of the resolution if enacted would protect U.S. purchasers against imported tree seed of low physical quality and would protect users in states with tree seed laws against inferior seed from out of state while imposing no restrictions within states that for one reason or another did not want or need their own tree seed laws.

Finally the Subcommittee is aware of the substantial progress in establishing seed production areas throughout the region during the past 5 years.

#### SUBCOMMITTEE RECOMMENDATIONS

The following are apparent to the Subcommittee:

- (1) The great majority of foresters contacted support tree seed certification in principle.
- (2) Mandates from the original Lake States Forest Genetics Conference and from the Lake States Forest Tree Improvement Committee since then have directed the Subcommittee to provide guidelines for tree seed certification in this region.
- (3) Currently nurseries in the Lake States use about 6 tons of tree seed annually, about 60 percent in public nurseries and about 40 percent in private nurseries. Although much of this seed is collected or procured locally by the user, commercial trade in tree seed gives signs of increasing in the region and seed imports may increase.
- (4) Within the next few years an increasing amount of seed from seed production areas will be used by public nurseries, and within 20 years there may be a significant amount of seed produced from seed orchards in the Lake States. Some of this may enter the seed trade.

In view of these facts and the background information previously related, and in the belief that tree seed certification will protect seed buyers, will encourage the production of seed of improved forest trees and will lead to more intensive forestry the Subcommittee recommends Chat:

- 1. The ICIA minimum standards for tree seed certification be considered as a basis for local tree seed certification standards in the Lake States. We suggest that the Upper Mississippi Valley Section and the Wisconsin-Michigan Section of the SAF refer the standards to appropriate committees for study, the development of local standards, and their referral to appropriate authorities or associations when standards are needed.
- 2. A model law, similar to the Recommended Uniform Tree Seed Law as amended by the former Flower, Tree and Shrub Seed Committee of AASCO, be provided to guide the development of state legislation, particularly in Minnesota and Wisconsin, when needed. This might well be done by the respective SAF Sections as suggested under item 1. State agencies should be encouraged to develop tree seed legislation only after it is apparent that there is a real need for it and only if they are assured of the necessary manpower and funds to administer and enforce such legislation.
- 3. We support amendments to the Federal Seed Act that will (a) prohibit interstate shipment of woody-plant seeds unless the seeds so shipped conform to the requirements of the seed laws and the rules and regulations pertaining to such seeds in the states into which they are shipped, and (b) prohibit importation into the United States of woody-plant seeds that fail to meet minimum standards of purity and germination to be established by the Secretary of Agriculture. Appropriate organizations, agencies, and officials should be advised of our stand.
- 4. Users who collect their own tree seed look to the recommended seed certification standards as a guide to classification of and record-keeping on the seed they use.

In concluding this report we wish to stress that tree seed certification should be primarily for the benefit of the seed user. He should realize that he will have to bear the added costs of certifying seed, and he should therefore understand the probable value of the different seed categories and that the stock developed from such seed must be grown under certain conditions to attain its potential value.