

REPORTS OF SPECIAL COMMITTEES AND SUBCOMMITTEES

Report of Special Committee on Standardized Tests

The special committee appointed by the President of the Association to investigate the possibility of developing a series of uniform tests began its work late in 1940. The original plan for the committee was for four laboratories, including the Canadian Department of Agriculture and the Federal Laboratory in Washington, to make germination tests of a few samples independently and, if the results were too divergent, to have one laboratory replant the samples and at the time of the final count all four representatives would meet together, each make a separate estimate and then try to agree on a common basis of evaluation. Following that procedure the intention was for the Federal representative to send out replicate samples to each of several selected laboratories and arrange a planting schedule. Finally he would visit personally each cooperating laboratory on the day the final count was made and acquaint the local analyst with the method of evaluation agreed upon by the several members of the committee. By the above procedure it was hoped that, in time, a greater degree of uniformity might be developed. The Agricultural Marketing Service of the United States Department of Agriculture approved the basic plan but because of lack of funds was unable to provide for the laboratory visitation by one of its staff.

In 1941 the project carried forward consisted of tests by four laboratories of three samples of onion, two samples of sweet clover and one sample of flax in blotters and in sand. The results of these several tests were summarized and analyzed. The data showed that only with the flax sample were the normal sprouts in blotters in reasonably close agreement. In all other cases the differences between the four laboratories were significantly different, in four out of the six lots highly significant. The data from the sand tests showed that for three out of six lots the percentages of emergence obtained by the four laboratories were not significantly different. The classification of normal seedlings in sand gave uniform results in two out of six lots. The differences in sand for the other four lots were not as variable as those from the blotter tests.

In 1942, two samples of onion, and one each of sweet clover, alfalfa and flax were tested in blotters and in sand. Sand and blotters from the Iowa laboratory were supplied to each member of the committee and each in turn made additional tests using local sand and blotters. Seedlings were classified as normal, abnormal and questionable. In all there were ten blotter tests and ten sand tests, each with four replications.

As a whole the differences were far less divergent than in the previous year. In three out of ten tests in blotters the differences were significant, in two of the three the differences were highly significant. In the sand tests there were three out of the ten in which the differences were significant, in two of the three the differences were highly significant.

In general the uniformity in sand was considerably greater than in blotters because of the seven comparisons in which the differences were not significant each in blotters and sand the average probabilities were .14 for blotters and .46 for sand. The results suggest that sand offers a superior medium for the development of a standard procedure. There was no indication that the Iowa sand was superior or inferior to that used by each laboratory.

The results of the two years' work with four kinds of seed, together

with the differences in opinion exercised by many analysts as to what constitutes normal and abnormal seedlings and pure and impure seed has lead the committee to believe that there is need for unification of ideas and procedures. This need is also emphasized by the fact that the Canadian Department of Agriculture, the U. S. Department of Agriculture, through the Agricultural Marketing Service, and the Association of Official Seed Analysts constitute three agencies each with autonomy and authority to develop procedures and make rules and regulations for seed testing.

To coordinate the work of these agencies and to provide for an ultimate basis of agreement the committee makes the following recommendations:

- (1) That its efforts to promote standardization and uniformity of methods for seed testing in seed laboratories be continued.
- (2) That the membership of the committee be officially recognized as including at least one representative each from the Canadian and United States Departments of Agriculture, the chairmen of the Research and Rules Committees of the Association and one additional member from the Association at large to be appointed by the President. The chairman of the committee shall be appointed by the President to serve for a period of three years.
- (3) That projects be those which have been carried to a reasonably satisfactory conclusion insofar as research is concerned but which offer promise of establishing uniform procedures in all laboratories.
- (4) That from time to time the committee publish the results of its findings and present recommendations to the Association for the adoption of such procedures as it is believed are necessary to uniformity in seed testing. - R. H. Porter, Chairman, W. C. Pfaender, G. P. Steinbauer, and W. H. Wright.

Report of Committee on Qualifications

by W. H. Wright, Chairman

Qualifications for Official Seed Analysts and Necessary Equipment for Seed Analytical Work

Seed analysis for purity and testing for germination plays a very important part in inter-state and inter-national trade in seed, and are of vital importance to agriculture.

Persons in charge of laboratories and seed analysts require knowledge, skill and patience. Without properly trained personnel in the official laboratories it is impossible to maintain the necessary uniformity of technique and reporting on individual lots of seed which are shipped from place to place.

The Association of Official Seed Analysts, after careful consideration, has drawn up the attached statement of qualifications for analysts, and necessary equipment for the operation of efficient laboratories.

1. Because seed testing can fulfill its obligation to agriculture only if the work is on a sound scientific foundation which is based on a personnel with such training as will enable them to understand the broad significance of their work and to develop seed testing to meet changing conditions, therefore, this Association recommends the following as desirable minimum qualifications for those selected for positions in seed testing laboratories.

- (a) Qualifications for those in direct charge of laboratories:
College graduation with broad foundation in biology, post-graduate

MINUTES

The thirty-fourth annual meeting of the Association of Official Seed Analysts was held at the University of Kentucky, Lexington, Kentucky, on July 28-30, 1942. The following actions were taken at the meeting:

I. The report of the executive board was read and the recommendations were accepted with the following amendments to Recommendation I:

"A referee test is a test carried out to check the uniformity of the work of laboratories when using the official method."

"The decision as to what constitutes a referee test or other type of research data be left to the judgment of the Research Committee."

II. It was voted that reports and papers of the Association be published and the chairman of the Editorial Committee submit bids for printing and planographing and at the same time consider ways and means of reducing the size where feasible.

III. The Report of the Public Service Committee which was based upon information received from forty-two states was approved and accepted.

IV. The Report of the Legislative Committee which dealt with the extent to which state laboratories are following or are in favor of a uniform seed bill was approved and accepted.

V. The Association voted to accept the following report of the Rules and Regulations Committee:

At the last annual meeting the Association passed a resolution instructing the incoming committee to revise the Association's rules so that they would fit in as closely as feasible with the Federal Seed Act rules and regulations. The Committee makes these recommendations.

1. That the proposed rules be given the first approval by the Association at this meeting with the stipulation that mimeographed copies be prepared and distributed to all members of the Association by the incoming committee on rules and regulations with the view that everyone may study the proposed rules carefully and make proposals for additions or changes.

2. That the incoming committee, after having given due consideration to all proposals and recommendations, prepare a final draft of the proposed rules to be presented at the meeting a year hence for final adoption or rejection.

VI. The following report of the Membership Committee was approved:

"Your Membership Committee presents for consideration the Georgia Laboratory as a member laboratory. The following names are submitted for honorary membership:

Miss Jessie C. Ayres
Miss Anna M. Lute
Mr. Edgar Brown
Mr. W. J. Lackey

"We also recommend that Miss Albina Musil, Mrs. Vivian K. Toole and Dr. E. H. Toole of the United States Department of Agriculture and Dr. C. W. Leggatt of the Seed Research Laboratory at Ottawa, Canada, be elected associate members. These persons are engaged in seed research work but are not affiliated with a member laboratory."