

not secured with flax. The use of sand as a medium to check with blotter tests has possibilities and should receive more attention in the future.

The final referee test, No. 7, was one which compared the standard method of blue grass analysis with a modified and shorter method developed in the Iowa laboratory and described in the 1935 Proceedings of the Association. Briefly, the modified method involves a series of steps as follows; (1) the weighed sample is blown in a Leendertz or other blower for 10 minutes at 21 or other opening found by experience to remove most of the empty glumes, (2) all weed seeds and other crop seeds are removed by hand from either the heavy or light portions, (3) pieces of stones, dirt or straw which the blower did not blow over are removed by hand from the heavy portion and placed in the "inert", (5) the inert material is placed in the germinator in a Petri dish or glass tray, (6) for every normal blue grass seedling which appears in the inert portion,  $\frac{3}{4}$  the weight of an average seed is added to the pure seed which increases the purity percentage, and (7) the index value, Purity x Germination, is determined on the basis of corrected purity and actual germination. Three important features of the method are (1) considerable time is saved, (2) a check on the inert is made for viable seeds, and (3) with a constant speed motor repeated tests of the same sample give uniform results because the personal factor which enters in determining empty glumes is eliminated.

A high quality sample of blue grass was secured and two representative lots were sent to each association laboratory. Sixteen laboratories responded and reported the results secured by the two methods. The data are presented below showing the averages, high and low values, and differences in extremes.

Method	Purity					Germination				
	High	Low	Difference	Average	Time req.	High	Low	Difference	Average	Index value
Old method.	% 83.32	% 88.13	% 5.19	% 90.52	Min. 92.3	% 91.0	% 75.75	% 15.25	% 83.3	% 75.46
New method.	% 93.06	% 85.96	% 7.09	% 91.85	% 80.8	% 91.0	% 68.5	% 27.5	% 83.2	% 76.01

The above results show exceptionally close agreement between the two methods in averages of purity, germination and index value. It is believed that if uniform, constant speed motors were installed in every laboratory, more uniform results in purity determinations would be secured by the modified method than by the old method.

#### B. REVISION OF RULES

The subcommittee on revision of rules and regulations worked hard and faithfully. Changes in the old rules were made which should bring the rules up to date. New information concerning the testing of certain seeds of flowers, vegetables, and grasses, dormancy of seeds and its determination, and measuring the reliability of tests, is embodied in the purposed revised rules. An attempt to define germination in terms of laboratory technique and practice is made which is a decided improvement over the uncertainty which has existed for some time. The report of the subcommittee was mimeographed and distributed to members of the Association for study during the coming year.