International Seed Testing Association - Dr. P. S. Wellington, Cambridge, Eng. Association of Official Seed Analysts --Miss Edythe Britton, Sacramento, Calif. Society of Commercial Seed Technologists - Mr. Harley Reeder, Tucson, Ariz. Association of Commercial Seed Anaysts of Canada - Mrs. Ivah Clark, Toronto, Ont.

This year the committee arranged the following:

1. A Workshop to be held at the Montana meeting.

2. Copies of Methods and Procedures of Seed Testing, Canada Department of Agriculture, were sent to each official and Commercial Laboratory in the United States and other countries which export seed to Canada.

3. A project still in the progress is the collecting of lists of noxious weeds as defined in various countries. To-date we have such lists for Australia, Canada, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

The committee would appreciate suggestions.

MULTIPLE UNIT RULE CHANGE

by

Dan Niffenegger, Committee Chairman

The proposed Rule change concerning chaffy grass samples which contain multiple units (Table 1) will be considered at the coming Association meeting. This article was prepared so that those who are interested may acquaint themselves with the problem.

The manual separation of multiple units in samples of the chaffy grasses often requires considerable time. Working times of over one hour per sample have been recorded. Various ways of avoiding this time-consuming job have been suggested. The method now under consideration was suggested as long ago as 1937. Tried first with orchard grass, it has since been applied to at least 10 different grasses. Briefly, the method is this: The weight of multiple units in a sample is determined. A certain percentage of that weight is then assumed to be pure seed, the remainder inert.

The sub-committee on the Determination of Inert Matter in Multiple Florets of Certain Grasses was appointed in 1958. All known available data were gathered and summarized by the committee. In addition, a

request was sent to every official seed laboratory in the Association for data from 10 samples of one of the chaffy grasses. The Rule change which will be considered at the coming meetings was proposed after studying data from all sources. These date represent over 3200 samples.

A clear cut definition of a multiple unit is needed if agreement in results reported by different laboratories is to be accomplished. A definition is included in the proposed Rule change. Other definitions would be just as satisfactory if factors were adjusted, but the problem of uniformity in reported results would be the same.

A sliding formula is suggested for use with samples of creeping red fescue, crested wheatgrass, orchard grass, and intermediate wheatgrass. It is based on the assumption that the percentage of pure seed in multiple units is related to the percentage of single florets in the sample. (As a rule, well-cleaned samples contain more single florets and fewer multiple units than uncleaned samples, and the multiple units remaining possess smaller attachments.) Sufficient data were not available to establish a sliding formula for meadow fescue, tall fescue, ryegrass, and chewings fescue. For these grasses, a constant factor is proposed. It might be desirable in the future to obtain more data on chewings fescue to establish a sliding formula. Since meadow fescue, tall fescue, and ryegrass normally contain so few multiple units, there should be no need for changing the factors now recommended.

A decision of whether or not to accept this change will be made at the annual meeting. Those having opinions (for or against) concerning the change are urged to make opinions known to the Committee along with supporting data, before the annual meeting if possible. A detailed report of the Committee study is available from the Committee chairman.

Table 1. Proposed change in the Rules for Testing Seeds.

Optional Treatment of Chaffy Grasses:

Definition: a multiple unit is defined as any unit possessing at least one fertile floret to which is attached any type of inherent inert matter, except the rachilla.

Procedure:

1. Determine the percentage of multiple units (and, if applicable, the percentage of single florets) in the sample.

2. If less than 5% multiple units are present, separate them into pure seed and inert matter manually.

3. If 5% or more multiple units are present, apply the appropriate factor:

If single floret percentage is: %	Factor to apply to multiple units is: Creeping Red Fescue %	Crested Wheatgrass %	Orchard Grass %	Intermediate Wheatgrass %
50% or below	80	70	80	72
50.01-55.00	81	72	81	74
55.01-60.00	82	73	81	75
60.01-65.00	83	74	82	76
65.01-70.00	84	75	82	77
70.01-75.00	86	76	82	78
75.01-80.00	87	77	83	79
80.01-85.00	88	78	83	80
85.01-90.00	89	79	83	81
90.01-95.00	90	79	84	82
Over 95.00	91	80	84	83

4. A constant factor may be applied to multiple units of the following crops:*

Meadow fescue	83%
Tall fescue	77%
Ryegrass	74%
Chewings fescue	91%

*This factor represents the percentage of the multiple unit weight which may be considered pure seed.