

NOTICE

The Purdue University School of Agriculture announces that the annual seed testing course will be offered beginning May 1, 1961. The course will consist of laboratory training and practice for both beginning and advanced analysts.

It will deal with identification of crop and weed seeds, purity analysis, germination testing, and take up important problems in seed distribution such as seedling evaluation, sampling, labeling, and seed buying procedures. Each enrollee is urged to bring special problems and problem samples.

The 1961 course is scheduled for a two week period. Interested persons should contact A. S. Carter, State Seed Laboratory, Purdue University, Department of Biochemistry, Lafayette, Indiana.

PROPOSAL FOR AN ADDITION OR AMENDMENT TO RULES

N. G. Lewis, Chairman
Rules Committee

Published below is a recommendation for an addition to rules Governing tolerances for mixtures, submitted to the Rules Committee by Prof. Miles, Chairman of the Subcommittee on Sampling and Tolerances. It will not be a rule until passed at an annual meeting.

Those who find applications for it may submit comments or questions to the Rules Committee for re-submission if necessary to the subcommittee. Alternatively, letters could be written directly to Prof. Miles with a copy to the Rules Committee.

PROPOSED RULE

In a mixture, two or more higher-priced and/or more desirable pure-seed components may show apparent deficiencies none of which exceeds its tolerance. The total of their apparent deficiencies may be compensated for by an excess of one or more lower-priced and/or less desirable pure-seed components, and/or other crop seed, and/or inert matter, and/or weed seed. In this case, the seed lot shall be declared mislabelled if the total of two or more of the apparent deficiencies of the higher-priced and/or more desirable pure seed components exceeds the special tolerance for that total.

--continued

PROPOSED RULE -- continued

EXAMPLE. Table A gives an example for a lot which would be declared mislabelled by the proposed rule. Lines 1 to 4 show the analyses and the apparent deficiencies from the sample. Lines 7 and 8 are computed in the usual way. They show that the apparent deficiency of 4.0% of Highland Bent does not exceed the tolerance of 4.40%. Obviously the slight apparent deficiency of 0.2% of bluegrass does not exceed the tolerance. Lines 9 and 10 show that the apparent deficiency of 5.0% of fescue does not exceed the tolerance of 7.40%.

Now, it is desirable to test whether the apparent deficiency of bent and fescue combined exceeds its tolerance. Line 6 is added to Part I of the table, and on this line the bent and fescue totals are entered in columns D, F and H. The tolerance is computed on lines 11 and 12. The totals in columns F and H of line 6 are copied on to line 11. Then on line 11, H is divided by F and the quotient is entered in G. Now on line 12, in F and H are entered the line 5 totals minus the line 11 values. Next on line 12, H is divided by F and the quotient is entered in G. In cell 11J (line 11, column J), L is written because 11G is larger than 12G. Now the larger value (11G) is divided by the smaller (12G) and the quotient 318 is entered in 11J. From the cbc entries 55.5%, L, and 3.8, the tolerance 4.66% is found in Table VIII. Since the apparent deficiency of 9.0% is greater than the tolerance, the deficiency of bent and fescue combined is declared real and the seed lot is said to be mislabelled.

Two Proposed Amendments to the 1960 Rules. The greatest ratio provided for in special tolerance Tables VII and VIII in the 1960 Rules is 19.9:1. It has been found that greater ratios may occur. Therefore, the 2 following amendments to the 1960 Rules are proposed.

1. On page 42, in paragraph 2, change the period at the end of the sentence to a comma and add: "but only when inspection of the data from the sample makes it obvious that the ratio described later does not exceed 19.9:1."

2. On page 43, add to paragraph 6 so that it will read: "If a ratio is less than 1.45, use the regular tolerance from Table V. If a ratio is greater than 19.9, extrapolate from Table VII or VIII to determine the tolerance."

Human minds are like wagons: when they have a light load, they are much noisier than when the load is heavy.

Table A. Computation to determine whether the sum of 2 apparent deficiencies in a seed mixture exceeds the special tolerance

Component	Analysis		Percent	Av. No. of seeds or other particles in 100 grams of the component mixture	Av. E/2	F	G	H	J
	"First"	"Second"							
	Apparent : Sum Deficiency B & C								
Part I									
1 Highland bent	40.0	36.0	4.0 OK	20,000	38.0	76.0	20,000	760,000	
2 Ky. bluegrass	30.0	29.8	.2	4,800	29.9	59.8	4,800	143,520	
3 Red fescue	20.0	15.0	5.0 OK	1,200	17.5	35.0	1,200	21,000	
4 Ryegrass	5.0	15.0	---	500	10.0	20.0	500	5,000	
5 Total	---	---	---	---	95.4	---	---	929,520	
6 Bent & fescue	---	---	9.0*	---	55.5	---	---	781,000	
Part II									
H/F									
7 Cbc: Highland bent				20,000	38.0	76.0	20,000	760,000	L = 6.8
8 Rc:				2,953	57.4	114.8	2,953	169,520	T = 4.40
9 Cbc: Red fescue				1,200	17.5	35.0	1,200	21,000	H = 9.7
10 Rc:				11,663	77.9	155.8	11,663	908,520	T = 7.40
11 Cbc: Bent & fescue				14,072	55.5	114.8	14,072	781,000	L = 3.8
12 Rc:				3,722	39.9	79.8	3,722	148,520	T = 4.66

1 cbc means component being considered, and rc means remaining component.

* Deficiency declared real because it exceeds the tolerance.