**Rule Proposal #5**

**Title**: Adjusting Germination Percentages for Extra or Missing Seeds

**Purpose of Proposal**: To harmonize AOSA with ISTA, giving analysts the option to adjust final percentages rather than retest if there are +/- 5 or less seeds at the end of a germination test.

**Present Rule**: none

**Proposed Rule**:

6.6 c (4) inaccuracies in counting and recording results (see 6.7 e).

6.7 e If the total number of evaluated seeds and seedlings is more than 5 above or below the minimum required number (400 or 200 seeds), a retest must be conducted. If the number of extra or missing seedlings is 5 or less, the final percentages are adjusted by dividing by the total number of seeds tested, rather than 400 or 200. Alternately, a retest may be conducted.

Example:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Category | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Total | Calculation | Final % | Adjusted Final % |
| Normal | 95 | 93 | 96 | 94 | 378 | 378/397 | 95.2 | 95% |
| Abnormal | 1 | 3 | 2 | 2 | 8 | 8/397 | 2.0 | 2% |
| Dead | 4 | 4 | 2 | 1 | 11 | 11/397 | 2.8 | 3% |
| Total | 100 | 100 | 100 | 97 | 397 |  |  | 100% |

In calculating the adjusted final percentage, the same rounding rules described in 6.7a shall apply. Table 14J is still used to calculate tolerance between replicates.

This method applies to coated and uncoated samples.

**Harmonization Statement**: This method is already in the ISTA Rules. The Federal Seed Act Regulations do not address what to do with extra or missing seeds/seedlings.

**Supporting Evidence**: This is a procedural change to more accurately reflect final germination percentages when small counting errors have been made. The Germination Committee was consulted in developing this proposal.

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