

2016 AOSA Rules Change Proposal 9

Purpose of Proposal:

It is proposed that the issue of evaluating decay at the point of attachment of the cotyledons and terminal bud decay be addressed for all applicable species.

Present Rule:

AOSA Rules for Testing Seeds Volume 4. Seedling Evaluation:

There is no current rule for these seedling defects that addresses all applicable species.

Proposed Rule:

3.5 Factors Affecting Seedling Evaluation

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3.5.10 Decay at the point of attachment of the cotyledons and terminal bud decay. Seedlings exhibiting decay at the point of attachment of the cotyledons to the seedling and/or decay (that was not caused by test conditions) in and around the terminal bud, causes the seedling to be classified as abnormal. The 50% Rule (see section 3.5.8) does not apply when either of these conditions is present.

Harmonization and Impact Statement:

Federal Seed Act Regs – Part 201 does not appear to specifically address decay at the point of attachment for cotyledons but does state that decay at the terminal bud is a defect when not caused by test conditions.

ISTA Rules state that damage or decay of the cotyledons at the two points of attachment of the cotyledons or near the terminal bud renders a seedling abnormal, irrespective of the 50 % rule. The 50 % rule also does not apply if one point of attachment of one cotyledon is necrotic or decayed and the other cotyledon is not intact; such seedlings are also considered as abnormal.

Canadian M&P states that seedlings that have decay at the point of attachment of the cotyledons are abnormal. Decayed terminal bud is also listed as a seedling abnormality.

Supporting Evidence:

Federal Seed Act Regs – Part 201

§201.56-6 Legume or pea family, Fabaceae (Leguminosae).

Decay at the point of attachment for cotyledons appears to not be specifically mentioned. Decay at the terminal bud is classified as a defect when not caused by test conditions.

ISTA Rules

5.2.8.1 Seedling abnormalities

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Note: damage or decay of the cotyledons at the two points of attachment of the cotyledons to the seedling axis or near the terminal bud renders a seedling abnormal, irrespective of the 50 % rule. The 50 % rule also does not apply if one point of attachment of one cotyledon is necrotic or decayed and the other cotyledon is not intact; such seedlings are also considered as abnormal.

Canadian M&P

4.14.4 Brassicaceae, Mustard Family

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Abnormal Seedling Description

Cotyledons

- decayed at point of attachment.

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4.14.9 Fabaceae, Legume Family II - Soybean and Lupine

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Epicotyl:

- missing.
- less than one primary leaf.
- deep, open cracks.
- terminal bud damaged, missing or decayed (but see note 4).

(Also other references in the Canadian M&P regarding decayed terminal bud.)

References:

Federal Seed Act Regs – Part 201 §201.56-6

ISTA Rules Section 5.2.8.1

Canadian M&P 4.14.4

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