

Rule Change Proposal No. 2

PURPOSE OF PROPOSAL

To add drawings with captions that present a pictorial representation of the general seedling description under Family Violaceae adopted by AOSA in 2001. *Seedling Evaluation Handbook*, Contribution No. 35 to the Handbook on Seed Testing, AOSA (1992, revised 2002).

PRESENT RULE AND PROPOSED RULE

Seedling descriptions for Violaceae, Violet Family (present rule). The proposal is to insert drawings with captions for Violaceae, Violet Family, genus *Viola* sp.

See attached Seedling Evaluation Handbook excerpt.

HARMONIZATION

No drawings in ISTA Rules. Please note that AOSA's written description for Violaceae are in agreement with those of ISTA (Group A2.1.1.1, Dicotyledons with epigeal germination). This family is not covered by the Canadian Rules or FSA.

SUPPORTING EVIDENCE

A page, as it would appear in the *Seedling Evaluation Handbook*, Family Violaceae, with photographs was circulated at the Joint AOSA, SCST Flower Seed Committee Meeting, June 2002. The committee agreed on the photo representation and had no other additions. Drawings were done from these photos and live seedlings. This document is in a Pagemaker format and is available on request.

SUBMITTED BY

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VIOLACEAE, VIOLET FAMILY

Viola cornuta, viola

Viola tricolor, pansy

GENERAL DESCRIPTION

Seedling type: Epigeal dicot.

Food reserves: Cotyledons, which expand and become thin, leaf-like and photosynthetic; endosperm.

Shoot system: The hypocotyl elongates and carries the cotyledons above the soil surface. The epicotyl usually does not show any development within the test period.

Root system: A primary root with root hairs usually developing within the test period.

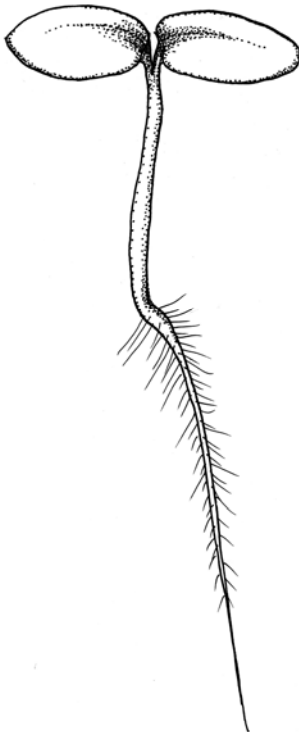


Fig. 1 Viola.

ABNORMAL SEEDLING DESCRIPTION

Cotyledons:

- less than half of the original cotyledon tissue remaining attached (see note 1).
- less than half of the original cotyledon tissue free of necrosis or decay (see note 2).

Epicotyl:

- missing (may be assumed to be present if cotyledons are intact).
- decayed at growing point.

Hypocotyl:

- deep open cracks extending into the conducting tissue.
- malformed, such as markedly shortened, curled or thickened.
- watery.

Root:

- weak, stubby or missing primary root (secondary roots will not compensate for a defective primary root; see note 3).

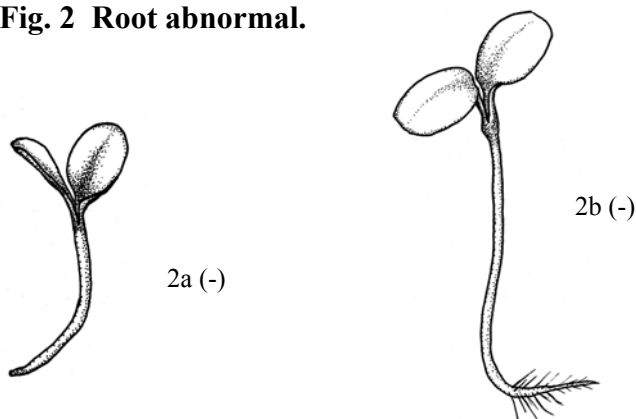
Seedling:

- one or more essential structures impaired as a result of decay from primary infection.
- albino.

NOTES

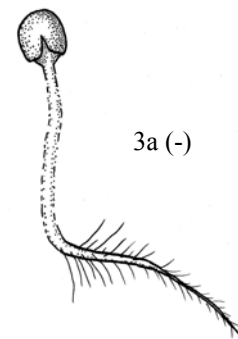
1. Seedlings in this group may produce three cotyledons instead of two. Such a seedling should be considered normal as long as the seedling is otherwise normal.
2. Seedlings with unshed seed coats may have decayed cotyledons. The seed coat must be removed for evaluation. If the seed coat cannot be removed, the seedling is classified as abnormal.
3. Certain cultivars of pansy may have a characteristically short primary root. This should be considered normal as long as the proportions between the root and the hypocotyl are balanced.

Fig. 2 Root abnormal.



- 2a. Missing primary root.
2b. Stubby primary root.

Fig. 3 Hypocotyl abnormal.



- 3a. Hypocotyl watery, seed coat not shed.