

**FAMILY: MELANTHIACEAE**Genera: *Toxicoscordion*, *Veratrum*, *Zigadenus***1. PRECONDITIONING:**

METHOD	TIME (h)	TEMP (°C)
Imbibe on moist media	overnight	20-25

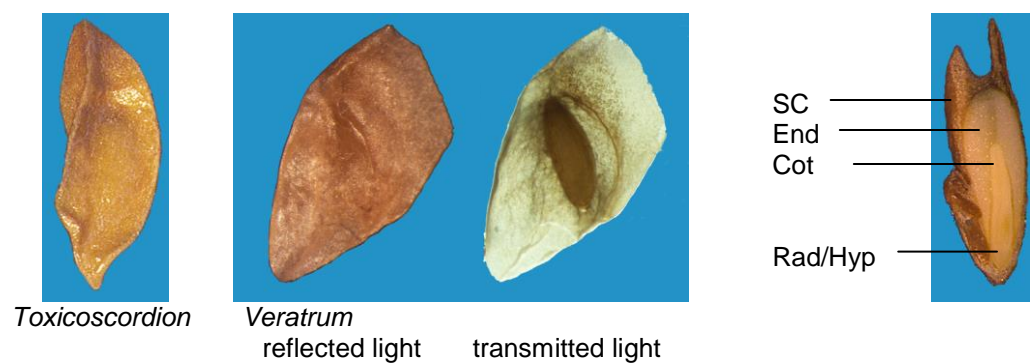
**Morphology**

Fig 1 External

Fig 2 Internal

**2. PREPARATION AND STAINING:**

METHODS	TZ Conc (%)	TIME (h)	TEMP (°C)
Cut longitudinally leaving enough tissue intact to keep both halves together	1.0	overnight	30-35



Fig 3 Preparation method

**FAMILY: MELANTHIACEAE**Genera: *Toxicoscordion*, *Veratrum***Post-staining notes:** Bisect and spread halves to examine embryo and endosperm.**3. EVALUATION:****VIABLE (NORMAL STAINING)**

- entire embryo evenly stained
- endosperm stained. Minor areas of unstained endosperm allowable if away from the embryo.

**NON-VIABLE (ABNORMAL OR NO STAINING)**

- any essential part of embryo unstained
- endosperm unstained or discolored adjacent to the embryo.



Fig 4 Seed stain evaluation

Photos: Annette Miller, USDA/ARS NLGRP