

FAMILY: JUNCACEAEGenus: *Juncus*, *Luzula***1. PRECONDITIONING:**

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

Morphology

Fig 1 External

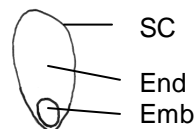
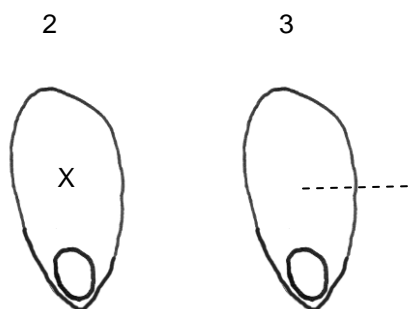
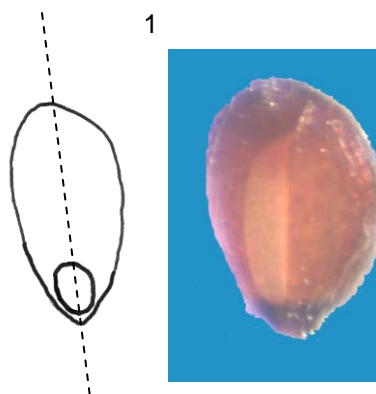


Fig 2 Embryo

**2. PREPARATION AND STAINING:**

METHODS	TZ Conc (%)	TIME (h)	TEMP (°C)
1. Cut longitudinally through embryo	0.1	24-72	30-35
2. Pierce seed with needle through endosperm tissue	1.0	24-72	30-35
3. Cut laterally, partially through endosperm	1.0	24-72	30-35

Notes: Seeds tend to stay on solution surface. Seeds may be placed on filter paper moistened with TZ solution for staining (see section 14.2) or wrapped in filter paper to ensure full submersion.



Seeds wrapped in filter paper to ensure full submersion.

Fig 3 Preparation method

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Post-staining notes: Bisect longitudinally or clear pierced seed with glycerol or lactic acid if seed coat is not translucent enough for evaluation.

**3. EVALUATION:****VIABLE (NORMAL STAINING)**

- embryo completely stained
- nutritive tissue is non-living and will not stain

NON-VIABLE (ABNORMAL OR NO STAINING)

- any essential part of the embryo unstained
- immature seed (see sections 15.1.3.2 and 15.1.3.4)

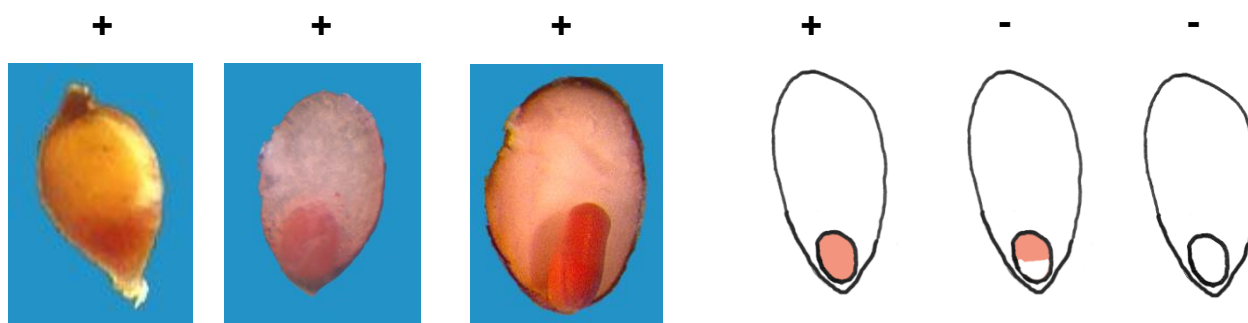


Fig 4 Seed stain evaluation