

**FAMILY: CUCURBITACEAE**

**Genera:** *Citrullus, Cucumis, Cucurbita, Lagenaria*

**1. PRECONDITIONING:**

METHOD	TIME (hrs)	TEMP (°C)
soak in beaker of water	overnight	20-25

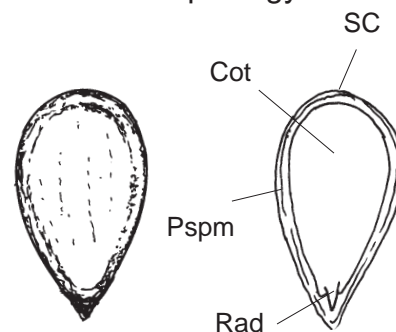
**Morphology**

Fig 1 External

Fig 2 Embryo

Notes:

**2. PREPARATION & STAINING:**

METHOD	TZ Conc(%)	TIME (hrs)	TEMP (°C)
1. cut longitudinally a thin slice off edge of seed or bisect longitudinally leaving seed intact at top of cotyledons	0.1	overnight	30-35
2. cut laterally and remove distal end of cotyledons	1.0	6-18	30-35

Notes: If seed is slow to stain, change to a stronger concentration of TZ solution. Removal of seed coat and perisperm envelope may also help with rapid staining.

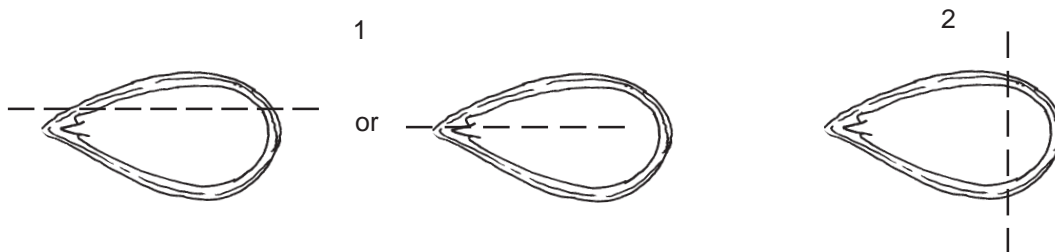


Fig 3 Preparation method

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**Post Staining Notes:** Remove embryo from seed coat and perisperm envelope.

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

- radicle staining slightly darker acceptable
- cotyledons stained very lightly acceptable
- less than half of cotyledons damaged and damage away from point of attachment

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

- any damage to radicle
- cotyledons less than completely stained
- half or more of cotyledons damaged or damage close to point of attachment
- presence of deep lesions

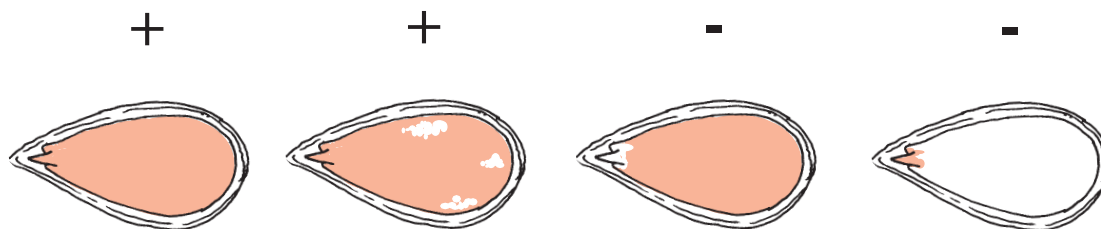


Fig 4 Seed stain evaluation

**REFERENCES:** 1, 2, 6, 11