

**FAMILY: TILIACEAE**Genera: *Tilia***Morphology****1. PRECONDITIONING:**

METHOD	TIME (hrs)	TEMP (°C)
cut endocarp and remove seed, soak in beaker of water	6-18	20-25



Fig 1 External

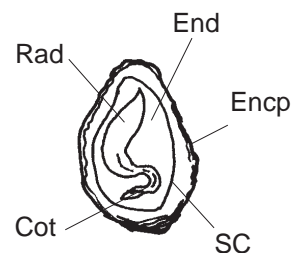


Fig 2 Embryo

Notes:

**2. PREPARATION & STAINING:**

METHOD	TZ Conc(%)	TIME (hrs)	TEMP (°C)
1. bisect longitudinally, leaving seed intact at top of cotyledons	0.1	6 -18	30-35
2. cut longitudinally, off center, to expose embryo	1.0	6 -18	30-35

Notes:

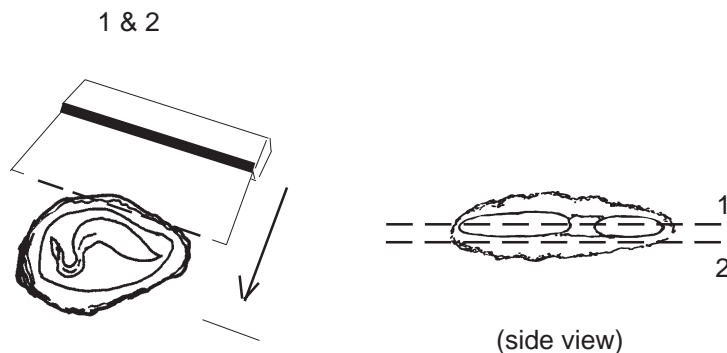


Fig 3 Preparation method

**FAMILY: TILIACEAE**

**Post Staining Notes:** None; or cut longitudinally, completely through embryo.

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

- entire embryo evenly stained
- endosperm completely stained

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

- radicle less than completely stained
- cotyledons less than completely stained
- hypocotyl less than completely stained
- endosperm less than completely stained

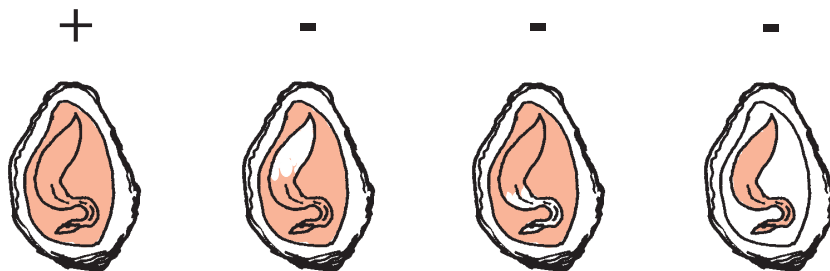


Fig 4 Seed stain evaluation

**REFERENCES:** 8