

FAMILY: AQUIFOLIACEAEGenera: *Ilex***1. PRECONDITIONING:**

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

Morphology

Fig 1 External

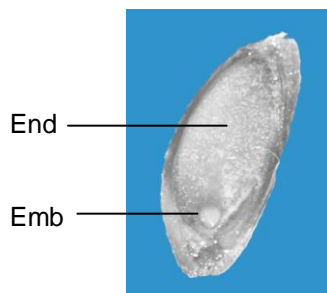
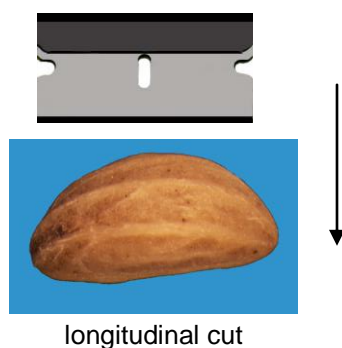


Fig 2 Internal

Note: Embryo is rudimentary.

**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 |



longitudinal cut

Fig 3 Preparation method

FAMILY: AQUIFOLIACEAEGenera: *Ilex***Post-staining notes:** Spread halves apart to view embryo.**3. EVALUATION:****VIABLE (NORMAL STAINING)**

- entire embryo evenly stained
- endosperm stained (minor discoloration or unstained areas allowed if away from embryo)

NON-VIABLE (ABNORMAL OR NO STAINING)

- any part of embryo unstained
- endosperm discolored or unstained close to embryo

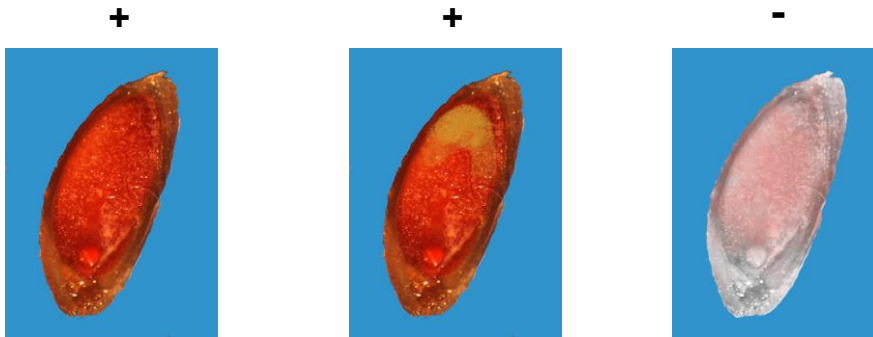


Fig 4 Seed stain evaluation

Photos and illustrations: Annette Miller, USDA/ARS NLGRP