FAMILY: FUMARIACEAE

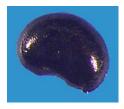
Genera: Corydalis, Dicentra



1. PRECONDITIONING:

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

Morphology



Dicentra

Fig 1 External

Note: Embryo is rudimentary.

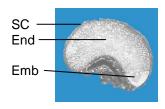


Fig 2 Embryo

2. PREPARATION AND STAINING:

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

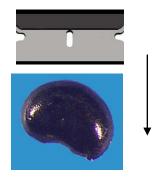


Fig 3 Preparation method

FAMILY: FUMARIACEAE

Genera: Corydalis, Dicentra

Post-staining notes: Spread halves apart to examine embryo.

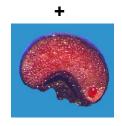
3. EVALUATION:

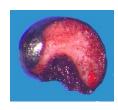
VIABLE (NORMAL STAINING)

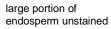
- entire embryo evenly stained
- endosperm stained (minor discoloration or unstained areas allowed if away from embryo)

NON-VIABLE (ABNORMAL OR NO STAINING)

- embryo unstained
- endosperm discolored or unstained close to embryo









no stain

Fig 4 Seed stain evaluation

Photos: Annette Miller, USDA/ARS NLGRP