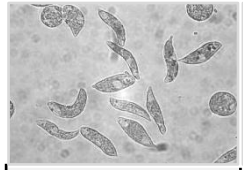
Culture Collection Process Chains







Sample Type	Collection	Transit Stabilization	Processing	Culture	Storage	Recovery	Dispatch
a. Freshwater Algae	a. Plankton net	a. Dry ice (- 80˚C) or cryogenic dry shipper (- 150˚C LN)	a. Preparative *in vitro* treatments	a. Cell suspension cultures	a. Cryobank suspension cultures	a. Rewarm, recover in culture medium	a. In cryogenic (LN) dry shipper (- 150˚C) or recovered as *in vitro* cultures
b. Post-dehiscent mature tree fruit / seed	b. Hand-collect from tropical rainforest floor	b. RH / T˚C stabilized + antifungal treatments	b. Disinfect, remove from fruit, excise embryo from surface-sterilized seed	b. Germinate seedling from excised zygotic embryo	b. Cryobank meristems excised from *in vitro* seedlings	b. Rewarm, meristems, regrow *in vitro,* transfer plants to glasshouse	
c. Vegetative plant clonal propagule (shoot, bud, tuber, bulb, rhizome)	c. Excise from donor plant or propagule	c. Aseptic *in vitro* field stabilization	c. Surface sterilize explants + phytosanitary treatments a - b QA / QC documents	c. Initiate culture from explant, clonal propagation / serial culture	*c. In vitro* genebank Active or (slow growth) Base (cryobank)	c. Rewarm, and / or transfer to standard culture, acclimatize regenerated plants	b – c As recovered cultures (*in vitro*) or regrown (*ex vitro*) plants