

Table 1 Research progress in cryopreservation of different seaweed species (Adapted from Yang et al., 2021)

Species	Cryoprotectant	Cooling method	Post-thaw viability
<i>Ulva pertusa</i>	DMSO, Glycerol, Sucrose	Controlled-rate cooling	50%
<i>Ulva intestinalis</i>	Glycerol, NaCl, Ethylene glycol	Controlled-rate cooling	60%
<i>Neopyropia tenera</i>	DMSO, Diglycerol	Vitrification	80%
<i>Saccharina japonica</i>	DMSO, Glycerol	Controlled-rate cooling	70%
<i>Gracilaria corticata</i>	DMSO	Controlled-rate cooling	65%
<i>Hypnea musciformis</i>	Glycerol	Vitrification	55%
<i>Ulva prolifera</i>	Glycerol	Controlled-rate cooling	90%
<i>Ectocarpus fasciculatus</i>	Glycerol	Controlled-rate cooling	75%