

mSWC–2 (Modified SWC–2)

Put leaf mould into a glass vessel to make a thin bottom layer, and add river sand onto the bottom layer up to one-quarter to one-fifth from the bottom. Add a pinch of garden lime to the river sand before use.

Dampen the soil with deionized water (or distilled water). Cover the glass vessel with a plastic cap or aluminum foil, and autoclave it twice with overnight rest in between (121°C, 20 min). After cooling the mixture to room temperature, pour sterilized deionized water (or sterilized distilled water) into it carefully (so as not to disturb the soil). In the case of brackish water strains, deionized water is replaced by about one-third–diluted Herbst artificial seawater (1/3 Herbst ASW).

Reference

Sakayama, H., Hara Y., Nozaki, H. 2004 Taxonomic re-examination of six species of *Nitella* (Charales, Charophyceae) from Asia, and phylogenetic relationships within the genus based on *rbcL* and *atpB* gene sequences. *Phycologia*, **43**, 91-104.

1/3 Herbst ASW

NaCl	3.0 mg
KCl ¹⁾	81.4 mg
CaCl ₂ ¹⁾	132 mg
MgSO ₄ ¹⁾	660 mg
NaHCO ₃ ¹⁾	504 mg
Distilled water	100 mL

- 1) In the NIES-Collection, the amount of KCl is reduced from 81.4 mg to 80.0 mg, 132 mg CaCl₂ is replaced by 172 mg CaCl₂ · 2H₂O, 660 mg MgSO₄ is replaced by 1.35 g MgSO₄ · 7H₂O, and the amount of NaHCO₃ is reduced from 504 mg to 49.5 mg.

Reference

Okazaki, Y., Shimmen, T., Tazawa, M. 1984 Turgor regulation in a brackish charophyte, *Lamprothamnium succinctum* I. Artificial modification of intracellular osmotic pressure. *Plant Cell Physiol.*, **25**, 565-571.