

## SES:MP

Freshwater protozoa

### Medium

3:1 mixture

See separate recipes. Autoclave separately. Mix aseptically.

## SES (Soil Extract with Added Salts)

### Stocks

	per litre
(1) $K_2HPO_4$	1.0 g
(2) $MgSO_4 \cdot 7H_2O$	1.0 g
(3) $KNO_3$	10.0 g

### Medium

	per litre
Stock solutions 1 - 3	20.0 ml each
Soil extract (SE - see recipe overleaf *)	100.0 ml

\* At the CCAP, SE1 is used for marine algae, SE2 for freshwater and terrestrial protozoa.

Make up to 1 litre with deionized water and autoclave at 15 psi for 15 minutes.

## MP (Chapman-Andresen's Modified Pringsheim's Solution)

### Stocks

	per 100 ml
(1) $Ca(NO_3)_2 \cdot 4H_2O$	20.0 g
(2) $MgSO_4 \cdot 7H_2O$	2.0 g
(3) $Na_2HPO_4 \cdot 2H_2O$	2.0 g
(4) KCl	2.6 g
(5) $FeSO_4 \cdot 7H_2O$	0.2 g
conc $H_2SO_4$	0.1 ml

### Medium

	per litre
Stock solutions 1 - 5	1.0 ml each

Make up to 1 litre with deionized water. Autoclave at 15 psi for 15 minutes.

## SE2 (Soil Extract 2)

### Freshwater and terrestrial protozoa

#### Preparing the soil

Site selection for a good soil is very important and for most purposes a soil from undisturbed deciduous woodland is best. Sites to avoid are those showing obvious signs of man's activity and particular care should be taken to avoid areas where fertilizers, crop sprays or other toxic chemicals may have been used.

A rich loam with good crumb structure should be sought. Stones, roots and larger invertebrates should be removed during an initial sieving through a 1 cm mesh. The sieved soil should be spread to air dry and hand picked for smaller invertebrates and roots. It should be turned periodically and picked over again. When dry it may be sieved through a finer mesh (2-4 mm) or stored as it is prior to use.

#### Medium

Soil is prepared as above. 105 g of air-dried sieved soil and 660 ml of deionized water are placed in a 1 litre bottle and autoclaved once at 15 psi for 15 minutes, then again after 24 hours. The contents of the bottle are left to settle (usually for at least a week) and then the supernatant is decanted and filtered. The final pH should be 7.0 - 8.0.