

	Maintenance	Cold acclimation	Encapsulation	Loading
Photoperiod	16 h light/ 8 h dark	8 h light/16 h dark		
Light Intensity	87 $\mu\text{mole m}^{-2}\text{s}^{-1}$	87 $\mu\text{mole m}^{-2}\text{s}^{-1}$		
Temperature	25 $\pm$ 3°C	20°C light/-1°C dark	21°C	21°C
Transfer Interval	3 weeks	14 days	Step 1: not applicable Step 2: 30 minutes	Step 1: 18-20 hours Step 2: 18-20 hours
Vessel used	Magenta GA7	Magenta GA7	Step 1: Petri dish Step 2: flask	Flask
Medium used	<i>Pycnanthemum</i> growth	<i>Pycnanthemum</i> growth	Step 1: Ca-free MS+ 3% Na-alginate Step 2: 100mM CaCl <sub>2</sub> +MS Encapsulation	Step 1: 0.5 M Sucrose+MS Step 2: 0.75 M Sucrose+MS

Dehydration	Vitrification	Rewarming	Recovery
			16 h light/8 h dark
			Step 1: 27 $\mu$ mole m-2s-1 Step 2: 87 $\mu$ mole m-2s-1 Step 3: 87 $\mu$ mole m-2s-1
21°C		21°C	25 $\pm$ 3°C
Varies		Step 1: 15 minutes Step 2: 10 minutes	Step 1: 7 days      Step 2: 7 days      Step 3: not applicable
Petri dish in laminar flow hood	cryovial	cryovial	Petri dish
		Step 1: Not applicable Step 2: MS rehydration	Steps 1-3: <i>Pycnanthemum</i> recovery