

Supplementary information

Table 1S. Composition of stock solutions for preparation of Z8 medium according to Zehnder (Staub 1961): To a 700 mL of distilled water add 10 ml each of stock solutions of macroelements, 0.2 mL Fe-EDTA solution, 0.08 mL of Gaffron solution of micronutrients and make up to 1 L with distilled water. For a large-scale platform cultivation (a 150 L volume), weighed chemicals can be poured directly onto the platform and allowed to dissolve with a flow of CO₂.

Medium Z8

Compound	Stock solution (g.l ⁻¹ dH ₂ O)	Volume per 1 liter
NaNO ₃	46.7	10 mL
Ca(NO ₃) ₂ .4H ₂ O	5.9	10 mL
K ₂ HPO ₄	3.1	10 mL
MgSO ₄ .7H ₂ O	2.5	10 mL
Na ₂ CO ₃	2.1	10 mL
Fe-EDTA solution	See the prescription below	0.2 mL
Gaffron micronutrient solution	See the prescription below	0.08 mL

Fe-EDTA solution

Compound	Amount
HCl (35%)	2.2 mL
dH ₂ O	250 mL
FeCl ₃ .6H ₂ O	4.5 g
Na ₂ EDTA	4.65 g

Gaffron micronutrient solution

Compound	Amount per 100 ml
H ₃ BO ₃	0.31 g
MnSO ₄ .4H ₂ O	0.223 g
Na ₂ WO ₄ .2H ₂ O	0.003 g
(NH ₄) ₆ Mo ₇ O ₂₄ .4H ₂ O	0.0088 g
KBr	0.0119 g
KI	0.0083 g
ZnSO ₄ .7H ₂ O	0.0287 g
Cd(NO ₃) ₂ .4H ₂ O	0.0154 g
Co(NO ₃) ₂ .6H ₂ O	0.0146 g
CuSO ₄ .5H ₂ O	0.0125 g
NiSO ₄ (NH ₄) ₂ SO ₄ .6H ₂ O	0.0198 g
Cr(NO ₃) ₂ .7H ₂ O	0.0037 g
V ₂ O ₄ (SO ₄) ₃ .16H ₂ O	0.0035 g
Al ₂ (SO ₄) ₃ K ₂ SO ₄ .24 H ₂ O	0.0474 g