

S1 Table. Formulas of nutrient solution.

N sufficient		N deficient	
Component	Concentration	Component	Concentration
Ca(NO ₃) ₂ ·4H ₂ O	2.5mM	Ca(NO ₃) ₂ ·4H ₂ O	0.25mM
KNO ₃	2.5mM	KNO ₃	0.25mM
KH ₂ PO ₄	0.5mM	CaCl ₂	2.25mM
MgSO ₄ ·7 H ₂ O	1.4mM	KCl	2.25mM
H ₃ BO ₃	50uM	KH ₂ PO ₄	0.5mM
MnSO ₄ ·H ₂ O	10μm	MgSO ₄ ·7 H ₂ O	1.4mM
ZnSO ₄ ·7H ₂ O	0.76μm	H ₃ BO ₃	50uM
CuSO ₄ ·5H ₂ O	032μm	MnSO ₄ ·H ₂ O	10μm
(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O	0.016μm	ZnSO ₄ ·7H ₂ O	0.76μm
Na ₂ Fe-EDTA	0.077μm	CuSO ₄ ·5H ₂ O	032μm
		(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O	0.016μm
		Na ₂ Fe-EDTA	0.077μm
P sufficient		P deficient	
Component	Concentration	Component	Concentration
Ca(NO ₃) ₂ ·4H ₂ O	2mM	Ca(NO ₃) ₂ ·4H ₂ O	2mM
NH ₄ NO ₃	0.5mM	NH ₄ NO ₃	0.5mM
KNO ₃	2.5mM	KNO ₃	2.5mM
KH ₂ PO ₄	0.5mM	KH ₂ PO ₄	0.01mM
MgSO ₄ ·7 H ₂ O	1.4mM	K ₂ SO ₄	0.26mM
H ₃ BO ₃	50uM	MgSO ₄ ·7 H ₂ O	1.4mM
MnSO ₄ ·H ₂ O	10μm	H ₃ BO ₃	50uM
ZnSO ₄ ·7H ₂ O	0.76μm	MnSO ₄ ·H ₂ O	10μm
CuSO ₄ ·5H ₂ O	032μm	ZnSO ₄ ·7H ₂ O	0.76μm
(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O	0.016μm	CuSO ₄ ·5H ₂ O	032μm
Na ₂ Fe-EDTA	0.077μm	(NH ₄) ₆ Mo ₇ O ₂₄ ·4H ₂ O	0.016μm
		Na ₂ Fe-EDTA	0.077μm

All of these formulas were modified from Hoagland solution [23].