

เอกสารอ้างอิง

1. ประภิตต์สิน สีนันทน์, " ความสำคัญของราไมคอร์ไรซ่าในการช่วยการเจริญของต้นไม้ที่ใช้ในโครงการปลูกป่า ", วิทยาศาสตร์ ,สมาคมวิทยาศาสตร์แห่งประเทศไทย , กรุงเทพมหานคร , หน้า 245-251 , 2528
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ภาคผนวก ก
สูตรและวิธีการเตรียมอาหารเลี้ยงเชื้อ

อาหารเลี้ยงเชื้อ MMN (ปรับปรุงโดย Marx, D. H.) สำหรับแยกราเอกโตไมคอร์ไรซา
จากรากกล้าสน เก็บเชื้อราเอกโตไมคอร์ไรซาที่แยกได้ และใช้เตรียม Inoculum medium
ประกอบด้วย

CaCl ₂	50.0	มิลลิกรัม
NaCl	25.0	"
KH ₂ PO ₄	500.0	"
(NH ₄) ₂ HPO ₃	250.0	"
MgSO ₄ · 7H ₂ O	150.0	"
Thiamine HCl	0.1	"
FeCl ₃ (1%)	1.2	มิลลิลิตร
Malt Extract	3.0	กรัม
Glucose	10.0	"

เติมน้ำให้ครบ 1 ลิตร แล้วนึ่งฆ่าเชื้อ 121 องศาเซลเซียส นาน 15 นาที

ภาคผนวก ข

สูตรและวิธีการเตรียมปุ๋ยไนโตรเจน ฟอสฟอรัส และโปแตสเซียมในระดับต่ำ

1. ปุ๋ยไนโตรเจน ฟอสฟอรัส และโปแตสเซียม ซึ่งใช้ในการปลูกสนสามใบที่ใช้ในการทดลอง ปริมาณ 1 ลิตร ประกอบด้วย

ไนโตรเจน	30.000	ส่วนในล้านส่วน
ฟอสฟอรัส	20.000	"
โปแตสเซียม	25.000	"
แคลเซียม	30.000	"
แมกนีเซียม	24.000	"
โมลิดินัม	0.001	"
ทองแดง	0.006	"
โบรอน	0.090	"
สังกะสี	0.100	"
แมงกานีส	0.700	"
เหล็ก	1.000	"

สามารถเตรียมได้โดยเจือจาง Stock solution ของสารอาหารในน้ำปริมาณ 1 ลิตร ดังนี้

สารอาหาร	Stock solution	ปริมาณที่ใช้ต่อน้ำ 1 ลิตร
NH_4NO_3	45 ก. ในน้ำ 500 มล.	1 มล.
Na_2HPO_4	23 " " 250 "	1 "
KCl	11.8 " " 250 "	1 "
CaCl_2	21 " " 250 "	1 "
$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	24 " " 400 "	4 "
$\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$	2.5 มก. " 1000 "	1 "
$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	1.5 " " 100 "	1 "
H_3BO_4	64 " " 100 "	1 "
$\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$	44 " " 100 "	1 "
$\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$	0.25 ก. " 100 "	1 "
FeCl_3	0.29 " ใน	1 "
	0.2 mM EDTA100 "	

ประวัติผู้เขียน

นายศราวุธ หุ่นโตภาพ เกิดเมื่อวันที่ 19 เมษายน 2508 ที่จังหวัดกรุงเทพมหานคร
ได้รับปริญญาวิทยาศาสตรบัณฑิต สาขาจุลชีววิทยา จากคณะวิทยาศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
ในปีการศึกษา 2529

