

M551
**Malmgren Modified Terrestrial Orchid Medium
Without Sucrose**
Properties

Form:	Powder
Appearance:	Gray powder
Application:	Orchid Culture
Solubility:	Water
Typical Working Concentration:	28.84 g/L
Storage Temp:	2 – 6° C
Storage Temp of Stock Solution:	Preparation of concentrated solutions is not recommended as insoluble precipitates may form.
Other Notes:	Contains the macro- and micronutrients, agar, and organic constituents as described by Malmgren (1996) pH = 3.75 – 4.75

Formula

Calcium Phosphate, Tribasic	75	Casein, Enzymatic Hydrolysate	400
Na ₂ EDTA•2H ₂ O	37.26	Folic Acid	0.5
Ferrous Sulfate•7H ₂ O	27.8	Glycine (Free Base)	2
Magnesium Sulfate, Anhydrous	97.69	myo-Inositol	100
Manganese Sulfate•H ₂ O	1.54	Nicotinic Acid (Free Acid)	5
Potassium Phosphate, Monobasic	75	Pineapple Powder	20,000
Activated Charcoal	1000	Pyridoxine•HCl	5
Agar	7000	Thiamine•HCl	10
D-Biotin	0.05		

Application Notes

Plant Tissue Culture Tested

Plant species: Terrestrial orchids including Paphiopedilum, Cypripedium, and Phragmipedium

This medium is a good seed sowing medium for many terrestrial orchid species. Originally developed for Cypripedium, this medium is also used for germination of Phragmipedium and Paphiopedilum. Germination may be enhanced by including 50 ml of Coconut Water (C195) per liter of medium.

References

Malmgren, S. 1996. In: C. Allen, Editor, North American Native Terrestrial Orchids. Propagation and Production Conf. Proc., pp 63-71.