

**M534**

## Malmgren Modified Terrestrial Orchid Medium Without Sucrose and Agar

### Properties

Form:	Powder
Appearance:	Gray powder
Application:	Orchid Culture
Solubility:	Water
Typical Working Concentration:	21.84 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 and organic constituents as described by Malmgren (1996)

### Formula

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

### 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.

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