

## Musa (Banana) Multiplication Medium

Product ID: **M462**

### Introduction

**Description:** Contains the macro- and micronutrients as described by Murashige and Skoog (1962). IITA formulation as described by Vuylsteke (1989) (International Institute for Tropical Agriculture).

### Product Information

|                                    |                             |
|------------------------------------|-----------------------------|
| Solubility                         | Water (Partially)           |
| Physical Form                      | Solid                       |
| Storage Temp.                      | 2-6 °C                      |
| Grams of powder to prepare 1 Liter | 36.36                       |
| Other Notes                        | Plant Tissue Culture Tested |
| UPC / SKU                          | M462                        |



## M462 Musa (Banana) Multiplication Medium IITA Formulation\*

### PROPERTIES

**Form:** Powder

**Appearance:** White to Off-White

**Application:** Plant Tissue Culture

**Solubility:** Partially Soluble in Cold Water. Fully Soluble in Hot/Boiling Water.

**Typical Working Concentration:** 36.36 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:** Formulation as described by Vuylsteke (1989).  
pH = 3.75 - 4.75  
\*International Institute for Tropical Agriculture

| Formula (mg/L)                                |        |
|---|--------|
| Ammonium Nitrate                              | 1650   |
| Boric Acid                                    | 6.2    |
| Calcium Chloride, Anhydrous                   | 332.2  |
| Cobalt Chloride.6H <sub>2</sub> O             | 0.025  |
| Cupric Sulfate.5H <sub>2</sub> O              | 0.025  |
| Na <sub>2</sub> EDTA.2H <sub>2</sub> O        | 37.26  |
| Ferrous Sulfate                               | 27.85  |
| Magnesium Sulfate, Anhydrous                  | 180.74 |
| Manganese Sulfate.H <sub>2</sub> O            | 16.9   |
| Molybdic Acid (Sodium Salt).2H <sub>2</sub> O | 0.25   |
| Potassium Iodide                              | 0.83   |
| Potassium Nitrate                             | 1900   |
| Potassium Phosphate Monobasic                 | 170    |
| Zinc Sulfate.7H <sub>2</sub> O                | 8.6    |
| L-Ascorbic Acid                               | 20     |
| 6-Benzylaminopurine (BA)                      | 4.5    |
| Gellan Gum - Biotech Grade                    | 2000   |
| Glycine                                       | 2      |
| Indole-3-acetic Acid                          | 0.175  |
| Nicotinic Acid (Free Acid)                    | 0.5    |
| Pyridoxine.HCl                                | 0.5    |
| Sucrose                                       | 30,000 |
| Thiamine.HCl                                  | 0.4    |

#### Application Notes

Plant Tissue Culture Tested

#### References

Vuylsteke D (1989) Shoot-tip culture for the propagation, conservation, and exchange of Musa germplasm. Practical manuals for handling crop germplasm in vitro. 2. Rome: International Board for Plant Genetic Resources.

#### India Contact:



#### Life Technologies (India) Pvt Ltd.

306, Agarwal City Mall, opposite M2K Pitampura, Delhi-110034 ( India)

Tel # +91-11-4220-8000; 4220-8111; 4220-8222 Fax# +91-11-4220-8444, Mobile# +91-98105-21400,

Toll Free # 1800-120-2434

Email - [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) | [customerservice@atzlabs.com](mailto:customerservice@atzlabs.com)

ISO Certifications: [ISO 9001:2008 \(QMS\)](#) | [ISO 10002:2014](#)