

**E2563**  
**Eeuwens Y3 Basal Medium**

Synonym: Y3, Palm media

**Properties**

Form: Fine to Fluffy Powder  
 Appearance: White to Yellow Powder  
 Application: Plant Tissue Culture  
 Solubility: Water  
 Typical Working Concentration: 4.76 g/L  
 Storage Temp: 2-8°C  
 Storage Temp of Stock Solution: Preparation of concentrated solutions is not recommended as insoluble precipitates may form.  
 Other Notes: Plant Tissue Culture Tested

**Formula [mg/L]**

Potassium Nitrate	2020
Potassium Chloride	1492
Ammonium Chloride	535
Sodium Phosphate•H <sub>2</sub> O	312
Calcium Chloride•2H <sub>2</sub> O	294
FeNa-EDTA	32.5
Magnesium Sulfate•7H <sub>2</sub> O	247
Manganese Sulfate•H <sub>2</sub> O	8.487

Potassium Iodide	8.3
Molybdc Acid (Sodium Salt)• 2H <sub>2</sub> O	0.24
Zinc Sulfate•7H <sub>2</sub> O	7.2
Boric Acid	3.1
Cobalt Chloride• 6H <sub>2</sub> O	0.24
Cupric sulfate•5 H <sub>2</sub> O	0.16
Nickel Chloride•6H <sub>2</sub> O	0.024

**Application Notes**

Eeuwens Y3 medium was developed to improve shoot growth of Coconut Palms (*Cocos nucifera*), (Eeuwens 1976). This medium contains high amounts of potassium chloride and 10X potassium iodide over MS-based media to mimic the sea minerals in coconuts natural habitat.

**References**

Eeuwens CJ (1976) Mineral requirements for growth and callus initiation of tissue explants excised from mature coconut palms (*Cocos nucifera*) and cultured invitro. *Physiol. Plant.* 36:23-28.

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