



May 02, 2022

# CBM for propagation of in vitro plantlets

Lynn Doran<sup>1</sup>, Amanda P. De Souza<sup>1</sup><sup>1</sup>Realizing Increased Photosynthetic Efficiency (RIPE)

1



protocol .

Burgess Lab UIUC



Lynn Doran

Realizing Increased Photosynthetic Efficiency (RIPE)

Media preparation for in vitro propagation of plantlets. Validated for cassava in tissue culture.

[MS media for cassava propagation.docx](#)

Lynn Doran, Amanda P. De Souza 2022. CBM for propagation of in vitro plantlets. **protocols.io**

<https://protocols.io/view/cbm-for-propagation-of-in-vitro-plantlets-b8kfrutn>



Realizing Increased Photosynthetic Efficiency (RIPE) that is funded by the Bill & Melinda Gates Foundation, Foundation for Food and Agriculture Research, and the U.K. Foreign, Commonwealth & Development Office

Grant ID: OPP1172157

Cassava, tissue culture, media, propagation

protocol ,

May 02, 2022

May 02, 2022

61799

- Thoroughly sterilize all materials and work surfaces before pouring media.
- Use sterile technique after autoclaving, when pouring media into containers.
- Wear a lab coat and clean gloves that have been thoroughly soaked in 70% ethanol during media pouring.
- Do not turn off laminar flow hood blower fans during media setting time.
- Do not leave UV light on once media is in the flow hood. The UV light will damage the vitamin content of the media.

### Reagents

- Copper Sulfate
- Murashige & Skoog Basal Medium with Vitamins ([Phytotech Labs M519](#))
- Sucrose
- Carbencillin, C500
- Sodium Hydroxide, 1 M
- 70% Ethanol for sterilization

### Materials

- CONTAINER FOR PLANT TISSUE CULTURE, WITH LID, 330 ML, PS, STERILE ([Greiner Bio-one 968161](#))
- Weigh dishes or paper
- Autoclave tape

### Equipment

- Spatulas
- Graduated cylinder, 1000 mL
- Beakers, 2000 mL
- Reagent bottle, 2000 mL
- Pipette, 20-200 ul
- Pipette, 1-5 mL
- Spray bottle for 70% Ethanol
- Analytical Balance
- pH Meter
- Autoclave bin
- Autoclave
- Laminar Flow Hood

Autoclaves generate steam under high pressure. [Read all safety guidelines](#) and receive proper training before operating.