

## Media Recipes for *Solanum*

### MS multiplication medium (solid) – 1000 ml

To a small volume of double distilled water (ddH<sub>2</sub>O) add:

MS basal medium w/vitamins <sup>1</sup>	4.43 g (prepackaged as M519 <sup>2</sup> )
Sucrose	30.0 g

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH<sub>2</sub>O
- ✓ Adjust pH to 5.7
- ✓ Add:

Agar (Bacto™ <sup>3*</sup> )	7.0 g
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- ✓ Stir and heat until boiling
- ✓ Dispense into Magenta®<sup>4</sup> GA7\* culture vessels (40 ml/vessel)
- ✓ Autoclave

### MS+0.3 M sucrose medium (liquid) – 1000 ml

- ✓ To a small volume of double distilled water (ddH<sub>2</sub>O) add:

MS basal medium w/vitamins <sup>1</sup>	4.43 g (prepackaged as M519 <sup>2</sup> )
Reagent grade sucrose	103.0 g

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH<sub>2</sub>O
- ✓ Adjust pH to 5.7
- ✓ Dispense into desired vessels
- ✓ Autoclave

### MS+0.7 M sucrose medium (liquid) – 1000 ml

- ✓ To a small volume of double distilled water (ddH<sub>2</sub>O) add:

MS basal medium w/vitamins <sup>1</sup>	4.43 g (prepackaged as M519 <sup>2</sup> )
Reagent grade sucrose	240.0 g

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH<sub>2</sub>O
- ✓ Adjust pH to 5.7
- ✓ Dispense into desired vessels
- ✓ Autoclave

**MS+0.8 M sucrose medium (liquid) – 1000 ml**

- ✓ To a small volume of double distilled water (ddH<sub>2</sub>O) add:
 

MS basal medium w/vitamins <sup>1</sup>	4.43 g (prepackaged as M519 <sup>2</sup> )
Reagent grade sucrose	274.0 g
- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH<sub>2</sub>O
- ✓ Adjust pH to 5.7
- ✓ Dispense into desired vessels
- ✓ Autoclave

**Kim potato recovery medium (solid) – 1000 ml**

- ✓ To a small volume of double distilled water (ddH<sub>2</sub>O) add:
 

MS basal medium w/vitamins <sup>1</sup>	4.43 g (prepackaged as M519 <sup>2</sup> )
Sucrose	30.0 g
IAA (indole-acetic acid)	0.05 mg
Zeatin	0.3 mg
GA <sub>3</sub> (gibberellic acid)	0.05 mg
- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH<sub>2</sub>O
- ✓ Adjust pH to 5.7
- ✓ Add:
 

Phytigel™ <sup>4</sup>	1.8 g
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- ✓ Stir and heat until boiling

- ✓ Autoclave
- ✓ In laminar flow hood, dispense slightly cooled liquid into sterile 60x15 mm Petri dishes. Allow to cool completely and then wrap dishes with Parafilm®\* until used.

<sup>1</sup>Murashige & Skoog, 1962

<sup>2</sup>Phytotechnology Laboratories, Shawnee Mission, KS\*

<sup>3</sup>Becton Dickinson & Co., Franklin Lakes, NJ\*

<sup>4</sup>Magenta Corp. Chicago, IL\*

\*Mention of trade names or commercial products in this article is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the U.S. Department of Agriculture.