

Media Recipes for *Fragaria*

***Fragaria* growth medium (solid) – 1000 ml**

- ✓ To a small volume of double distilled water (ddH₂O) add:

MS basal medium w/vitamins ¹	4.43 g (prepackaged as M519 ²)
BA (6-benzylaminopurine)	0.4 mg
Sucrose	25.0 g
- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH₂O
- ✓ Adjust pH to 5.8
- ✓ Add:

Gellan gum (Phytigel™ ^{3*})	1.3 g
Agar (Bacto™ ^{4*})	3.0 g
- ✓ Mix and heat until boiling
- ✓ Dispense into Magenta®⁵ GA7* culture vessels (75 ml/vessel) or LifeGuard®^{6*} culture vessels (125 ml/vessel)
- ✓ Autoclave

MS+2.0 M glycerol+0.3 M sucrose medium (solid) – 1000 ml

- ✓ To a small volume of double distilled water (ddH₂O) add:

MS basal medium w/vitamins ¹	4.43 g (prepackaged as M519 ²)
Reagent grade sucrose	102.7 g
Glycerol	184.2 g (w/v)
- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH₂O
- ✓ Adjust pH to 5.8
- ✓ Add:

Agar (Bacto™ ^{4*})	8.0 g
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- ✓ Dispense into desired vessels
- ✓ Autoclave
- ✓ In laminar flow hood, dispense liquid medium into sterile Petri dishes

MS+2.0 M glycerol+0.4 M sucrose medium (liquid) – 1000 ml

- ✓ To a small volume of double distilled water (ddH₂O) add:

LS basal medium w/vitamins ⁷	4.43 g (prepackaged as L689 ²)
Reagent grade sucrose	136.9 g
Glycerol	184.2 g (w/v)

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH₂O
- ✓ Adjust pH to 5.8
- ✓ Dispense into desired vessels
- ✓ Autoclave

PVS2 (liquid) – 250 ml

- ✓ Combine:

Glycerol	75.0 g (w/v)
Ethylene glycol	33.8 ml
DMSO	34.1 ml
Reagent grade sucrose	34.25 g
MS basal medium w/vitamins ¹	1.1 g (prepackaged as M519 ²)

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (250 ml) with double distilled water (ddH₂O)
- ✓ Adjust pH to 5.8
- ✓ Filter sterilize

MS+.8 M sucrose medium (liquid) – 1000 ml

- ✓ To a small volume of double distilled water (ddH₂O) add:

MS basal medium w/vitamins ¹	4.43 g (prepackaged as M519 ²)
Reagent grade sucrose	273.84 g

- ✓ Stir until dry ingredients are completely dissolved
- ✓ Bring to final volume (1000 ml) with ddH₂O
- ✓ Adjust pH to 5.8
- ✓ Dispense into desired vessels

- ✓ Autoclave

***Fragaria* recovery medium (solid) – 1000 ml**

- ✓ To a small volume of double distilled water (ddH₂O) add:

MS basal medium w/vitamins ¹	4.43 g (prepackaged as M519 ²)
BA (6-benzylaminopurine)	0.4 mg
Sucrose	25.0 g
PVP (polyvinylpyrrolidone)	1.0 g

- ✓ Stir until dry ingredients are completely dissolved

- ✓ Bring to final volume (1000 ml) with ddH₂O

- ✓ Adjust pH to 5.8

- ✓ Add:

Agar (Bacto™ ^{4*})	8.0 g
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- ✓ Dispense into desired vessels

- ✓ Autoclave

- ✓ In laminar flow hood, dispense liquid medium into sterile Petri dishes (60X15 mm)

¹Murashige & Skoog, 1962

²Phytotechnology Laboratories, Shawnee Mission, KS*

³Sigma-Aldrich, St. Louis, MO*

⁴Becton Dickinson & Co., Franklin Lakes, NJ*

⁵Magenta Corp. Chicago, IL*

⁶Osmotek Ltd, Rehovot, Israel*

⁷Linsmaier and Skoog, 1965

*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.