

## Three variants of PVS2 used at NLGRP, Fort Collins, CO

May 2021

### **PVS2 Cryoprotectant Recipe: 250 mL**

- Glycerol (30% w/v) = 75.0 g
- Ethylene glycol (15% w/v) = 37.5 g or 33.7 mL
- Sucrose (0.4 M) = 34.23 g
- Dimethyl sulfoxide (15% w/v) = 37.5 g or 34.1 mL
- Murashige & Skoog basal medium with vitamins (PhytoTech Labs M519) = 1.1 g
- Bring to volume with distilled water
- Adjust pH to 5.8 with potassium hydroxide
- Filter sterilize using syringe filter or Stericup units (0.45 microns or smaller)

### **PVS2 Cryoprotectant Recipe (half-strength MS): 250 mL**

- Glycerol (30% w/v) = 75.0 g
- Ethylene glycol (15% w/v) = 37.5 g or 33.7 mL
- Sucrose (0.4 M) = 34.23 g
- Dimethyl sulfoxide (15% w/v) = 37.5 g or 34.1 mL
- Murashige & Skoog basal medium with vitamins (PhytoTech Labs M519) = 0.55 g
- Bring to volume with distilled water
- Adjust pH to 5.8 with potassium hydroxide
- Filter sterilize using syringe filter or Stericup units (0.45 microns or smaller)

### **Half-strength PVS2 Cryoprotectant Recipe: 250 mL**

- Glycerol (15% w/v) = 37.5 g
- Ethylene glycol (7.5% w/v) = 18.75 g or 16.85 mL
- Sucrose (0.4 M) = 34.23 g
- Dimethyl sulfoxide (7.5% w/v) = 18.75 g or 17.05 mL
- Murashige & Skoog basal medium with vitamins (PhytoTech Labs M519) = 0.55 g
- Bring to volume with distilled water
- Adjust pH to 5.8 with potassium hydroxide
- Filter sterilize using syringe filter or Stericup units (0.45 microns or smaller)