

## *Appendix 1*

### **Media and Solutions**

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#### **A1.1. P<sub>5</sub>ARP and P<sub>5</sub>ARP+H**

Mix in a 2 liter flask: 900 ml dH<sub>2</sub>O and 17 gm cornmeal agar. Autoclave; cool to 50°C. Add 100 ml of the following stock solution: To 500 ml sterile dH<sub>2</sub>O add: 25 mg pimaricin, 1.25 g ampicillin, 50 mg rifampicin, 500 mg pentachloronitrobenzene (Store stock solution at 4°C.). For P<sub>5</sub>ARP+H add 50 mg hymexazol (Tachigaren™, 70% a. i.). For P<sub>5</sub>ARP+B and P<sub>5</sub>ARP+B+H the basic recipe was amended with 10 ppm benomyl<sup>1</sup> (E. I. DuPont DeNemours and Co.; Wilmington, DE). For P<sub>10</sub>ARP+B and P<sub>10</sub>ARP+B+H the basic recipe was adjusted to 50 mg pimaricin/liter.

#### **A1.2. P<sub>5</sub>ARP-V8**

Mix in a 2 liter flask: 850 ml dH<sub>2</sub>O, 50 ml clarified V8 juice<sup>2</sup>, 15 g Difco Bacto™ agar (Becton Dickinson; Sparks, MD). Autoclave; cool to 50°C. Add 100 ml of the following stock solution: To 500 ml sterile dH<sub>2</sub>O add: 25 mg pimaricin (2.5% aqueous; Sigma Chemical Co.; St. Louis, MO), 1.25 g ampicillin sodium salt (Fisher Scientific; Fairlawn, N. J.), 50 mg rifampicin (ICN Biomedicals, Inc.; Aurora, OH), 500 mg pentachloronitrobenzene (Terrachlor™, 75% a. i.). Store stock solution at 4°C. For P<sub>5</sub>ARP+H-V8 add 50 mg hymexazol (Tachigaren™, 70% a. i.).

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<sup>1</sup> Benomyl was used to reduce growth of contaminants, such as *Mortierella* spp. (P. V. Oudemans. 1999. *Phytophthora* species associated with cranberry root rot and surface irrigation water in New Jersey. Plant Dis. 83: 251-258.)

<sup>2</sup> To prepare clarified V8: Add 1 gm CaCO<sub>3</sub>/100 ml V8 juice. Stir for at least 20 min. Centrifuge 10,000 rpm for 10 min. Transfer supernatant.

### **A1.3. V8 Broth**

Clarify V8 as described for P<sub>5</sub>ARP-V8. Adjust to desired percent solution with dH<sub>2</sub>O. Autoclave.

For V8 agar add 15 g Difco Bacto™ agar (Becton Dickinson; Sparks, MD) before autoclaving.

### **A1.4. Soil Extract**

Add 15 g of sandy loam soil to 1 liter ddH<sub>2</sub>O. Stir overnight. Allow soil particles to settle for several days before transfer of aqueous portion to sterile container. Store at 4°C.

### **A1.5. Mineral Salt Solution**

Dissolve the following in 50 ml ddH<sub>2</sub>O: 4.0 g Ca(NO<sub>3</sub>)\*4H<sub>2</sub>O, 2.7 g MgSO<sub>4</sub>\*7H<sub>2</sub>O, 0.51 g KNO<sub>3</sub>. Bring to 1 liter volume with ddH<sub>2</sub>O and autoclave for 20 min. Add 1 ml sterile of the following chelated iron solution when cool. To make chelated iron solution: Add 0.652 g EDTA and 1.245 g FeSO<sub>4</sub>\*7H<sub>2</sub>O to 50 ml ddH<sub>2</sub>O. Stir and heat gently until dissolved. Add 0.375 g KOH. Filter through 0.22 µm filter to sterilize. Store chelated iron solution at 4°C.

### **A1.6. Acidified Potato Dextrose Agar**

Add 39 g potato dextrose agar to 1 liter dH<sub>2</sub>O. Autoclave and cool to 50°C. Add 1 ml concentrated lactic acid while stirring.