

Fungicides and Bactericides for Treatment of Various Orchid Diseases

by Sue Bottom, sbottom15@bellsouth.net

Leaf spotting

| Chemical Name Active Ingredient | Application Rate (ts/pygal) | Floral Damages? | Systemic ? | Bacterial Diseases | | | | Fungal Rots | | | | Leaf and Flower Blights | | | | | | | | | | | |
|---|--------------------------------|-----------------|------------|----------------------------|-----------------------------|----------------------------------|--|----------------------------------|--|--------------------------------------|--------------------------------------|---|---|----------|---|---|---|--|--|--|--|--|--|
| | | | | Soft Rot <i>Erwinia</i> | Brown Rot <i>Erwinia</i> | Brown Spot <i>Pseudomonas</i> | Black Rot <i>Pythium</i> <i>Phytophthora</i> | Fusarium Wilt <i>Fusarium</i> | Root Rot <i>Rhizoctonia</i> <i>Solanii</i> | Southern Blight <i>Sclerotium</i> | Anthraxnose <i>Colletotrichum</i> | Leaf Spots <i>Cercospora</i> <i>Gulignardia</i> | Rusts <i>Sphenospora</i> <i>Uredo</i> | Botrytis | | | | | | | | | |
| Commonly Available Fungicides and Bactericides | | | | | | | | | | | | | | | | | | | | | | | |
| Captan 50W | 3 | No | No | X | X | | | | | | | | | X | X | X | X | | | | | | |
| Daconil | 2.3 | No | No | X | X | | | | | | | | | | | | X | | | | | | |
| Chlorothalonil | | No | No | X | X | | | | | | | | | | | | X | | | | | | |
| Dithane, Mancozeb | 4.5 Powder 1 Liquid | No | No | | | | | | | | | | | X | X | | X | | | | | | |
| Un-Zn-Ethylene Bisethioacetate | | No | No | | | | | | | | | | | X | X | | X | | | | | | |
| Kocide | 3 | Yes | No | X | X | X | | | | | | | | X | X | | | | | | | | |
| Copper Hydroxide | | Yes | No | X | X | X | | | | | | | | X | X | | | | | | | | |
| Liquid Copper | 4 - 6 | Yes | No | X | X | X | | | | | | | | X | X | | | | | | | | |
| Copper salts-fatty rosin acids | | | | | | | | | | | | | | | | | | | | | | | |
| Neem Oil | 6 | No | No | | | | | | | | | | | X | X | | X | | | | | | |
| Neem Oil | | No | No | | | | | | | | | | | | | | | | | | | | |
| Physan (Consan) | 2 | No | No | X | X | | | | | | | | | | | | X | | | | | | |
| Qualitany Azoxonium Chloride | | | | | | | | | | | | | | | | | | | | | | | |
| Phyton 27 | 0.8 - 2.4 | Yes | No | X | X | X | | | | | | | | X | X | | X | | | | | | |
| 21.4% Copper Sulphate Penathylate | | | | | | | | | | | | | | | | | | | | | | | |
| Thiomyl | 0.7-1 | No | Yes | | | | | | | | | | | X | X | | X | | | | | | |
| 50% Dinethyl | | | | | | | | | | | | | | | | | | | | | | | |
| Specialty Fungicides and Bactericides | | | | | | | | | | | | | | | | | | | | | | | |
| Aliette WDG | 5-9 foliar | ? | Yes | | | | X | drench | | | | | | | | | X | | | | | | |
| Fosetyl aluminum 80% | 8-1.5 drench | | | | | | | | | | | | | | | | | | | | | | |
| Banrot 40WP | 0.5 - 1.1 | Yes | Yes | | | | X | drench | | | | | | X | X | | X | | | | | | |
| Ethidazole 15% Thiophanate M | | | | | | | | | | | | | | | | | | | | | | | |
| ClearY's 3336 WP | 0.7 - 1 | No | Yes | | | | | drench | | | | | | X | X | | X | | | | | | |
| Thiophanate Methyl 50% | | | | | | | | | | | | | | | | | | | | | | | |
| Compass 50WDG | .2 - .4 | No? | Yes? | | | | | | | | X | | | X | | | X | | | | | | |
| Trifloxystrobin 50% | | | | | | | | | | | | | | | | | | | | | | | |
| Subdue Maxx | 0.05 (7-30 drops) | No | Yes | | | | | drench | | | | | | | | | | | | | | | |
| Metalaxyl 21.3% | | | | | | | | | | | | | | | | | | | | | | | |
| Terracior 75% WP | 0.4 - 0.8 drench | No? | Yes | | | | | drench | | | | | | | | | | | | | | | |
| Pentachloronitrobenzene 75% | | | | | | | | | | | | | | | | | | | | | | | |
| Truban 25% EC | 0.18 - 0.5 | ? | Yes | | | | | drench | | | | | | | | | | | | | | | |
| Etridiazole | | | | | | | | | | | | | | | | | | | | | | | |
| Zyban | 0.75 - 1.5 | No | Yes | | | | | drench | | | | | | X | X | | X | | | | | | |
| Mancozeb+Thiophanate methyl | | | | | | | | | | | | | | | | | | | | | | | |

Fungicides and Bactericides for Treatment of Various Orchid Diseases

by Sue Bottom, sbottom15@bellsouth.net

| Chemical Name Active Ingredient | Application Rate (tspl/gal) | Floral Damage? | Systemic ? | Comments and Caveats - Always Check Manufacturer's Label for Information on Proper Use and Precautions |
|--|-----------------------------------|-------------------|---------------|---|
| Commonly Available Fungicides and Bactericides | | | | |
| Caplan 50W | 3 | No | No | Dip or spray, directed soil surface spray. Do not use with oil sprays. |
| Caplan | | | | |
| Daconil | 2.3 | No | No | |
| Chlorothalonil | | | | |
| Dithane, Mancozeb <small>1,1-Dimethyl-3-(4-chlorophenyl)-2-thiourea carbamate</small> | 4.5 Powder 1 Liquid | No | No | Leaves heavy residue on leaves. |
| Kocide | | | | |
| Copper Hydroxide | 3 | Yes | No | Do not use with Aliette. Do not use on Dendrobiums. |
| Liquid Copper <small>Copper salts-fatty/rosin acids</small> | 4 - 6 | Yes | No | Do not use with oil spray. Do not use on Dendrobiums. |
| Neem Oil | | | | |
| Neem Oil | 6 | No | No | Insecticide, Miticide and Fungicide |
| Phosan (Consan) <small>Calcium Ammonium Chloride</small> | 2 | No | No | Can use 10% pool algicide as alternative at 2 tspl/gal. Soak divisions for 3-5 min in 1.5 tspl/gal. 1 tspl/gal for gln surface and pot disinfection. |
| Phyton 27 <small>21.4% Copper Sulphate Penultimate</small> | 0.8 - 2.4 | Yes | No | Fungicide and bactericide. Do not use with Aliette. Do not use on Dendrobiums. Do not spray on flowers. |
| Thiomyl <small>50% Dimethyl</small> | 0.7-1 | No | Yes | Generic for Cleary's 3336. Do not tank mix with copper. Spray as indicated or drench. Alternate after 2 consecutive uses. Add wetting agent for better |
| Specialty Fungicides and Bactericides | | | | |
| Aliette WDG <small>Fosetyl aluminium 80%</small> | 5-9 foliar .8-1.5 drench | ? | Yes | Can use as protectant drench, do not spray within 7 days of copper fungicide use, do not mix with Mancozeb, metal ions or spreader sticker. |
| Banrot 40WP <small>Etridiazole 15%, Thiophanate M</small> | 0.5 - 1.1 | Yes | Yes | Do not tank mix with copper, spray as indicated or drench, wash foliage after drench application and water into pot, alternate after 2 consecutive uses, add wetting agent for better coverage. |
| Cleary's 3336 WP <small>Thiophanate Methyl 50%</small> | 0.7 - 1 | No | Yes | Do not tank mix with copper. Spray as indicated or drench. Alternate after 2 consecutive uses. Add wetting agent for better coverage. |
| Compass 50WDG <small>Trifloxystrobin 50%</small> | .2 - .4 | No? | Yes? | Do not use with organosilicate based products. |
| Subdue Maxx <small>Metaxyl 21.3%</small> | 0.05 (7-30 drops) | No | Yes | For molds caused by water, considered most effective for molds and root and stem rots, prevents and cures disease. |
| Terraclor 75% WP <small>Pentachloronitrobenzene 75%</small> | 0.4 - 0.8 drench | No? | Yes | Mostly used as protective drench and soil incorporation |
| Truban 25% EC <small>Etridiazole</small> | 0.18 - 0.5 | ? | Yes | Use as protectant drench, wash foliage after drench application, |
| Zyban <small>Mancozeb + Thiophanate methyl</small> | 0.75 - 1.5 | No | Yes | Do not use on Gloxinia |

Moyeam Vine
Wu Shuang Tea
mao yan mei