

VARIETAL REACTION OF SELECTED ROSE CULTVARS TO POWDERY MILDEW, 2000: Thirty five rose cultivars were evaluated for response to powdery mildew at the Texas A&M University Research and Extension Center in Dallas, Texas. Roses were planted in February through April of 1999 for evaluation in the spring and summer of 2000. The experiment was conducted in a randomized block design with four replications. Plants were non-grafted, given no fertilizer or pesticides, and irrigation was minimal. Powdery mildew infection occurred by natural inoculation. Plants were rated empirically for severity of powdery mildew on a 0 to 4 scale. Evaluations were conducted during the first week of each month throughout the study period.

Disease severity was high on certain varieties early on in the study, notably 'Apricot China' and 'Souvenir de St. Anne'. By July, only 3 plants of the 140 in the study had any observable powdery mildew.

Disease rating (0 to 4) at each sampling date*

| Variety | Apr | May | Jun | Jul | Aug |
|--------------------------------|---------|----------|---------|--------|-------|
| Annie's Red..... | 0.0 c** | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Apricot China..... | 1.25 bc | 3.50 a | 2.25 a | 0.0 b | 0.0 a |
| Baty's Pink Pillar..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Belinda..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Belinda's Dream..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Blush Noisette..... | 0.25 c | 0.50 d | 0.0 d | 0.0 b | 0.0 a |
| Bon Silene..... | 0.0 c | 0.75 cd | 0.0 d | 0.0 b | 0.0 a |
| Caldwell Pink..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Cecile Brunner..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Chrysler Imperial..... | 0.0 c | 0.25 d | 0.0 d | 0.0 b | 0.0 a |
| Consuelo..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Duchesse du Brabant..... | 0.25 c | 0.50 d | 0.50 cd | 0.0 b | 0.0 a |
| Else Poulsen..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Gartendirektor Otto Linne..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Graham Thomas..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Heritage..... | 0.25 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Lindee..... | 0.25 c | 1.50 bc | 0.25 d | 0.33 a | 0.0 a |
| Livin' Easy..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Louis Philippe..... | 1.50 b | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Maggie..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Marchesa Boccella..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Marie Daly..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Marie Pavie..... | 0.75 bc | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Monsieur Tillier..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Mutabilis..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Perle d'Or..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Pinkie..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Puerto Rico..... | 0.50 bc | 0.50 d | 0.0 d | 0.0 b | 0.0 a |
| Sarah Van Fleet..... | 0.25 c | 0.25 d | 1.00 bc | 0.0 b | 0.0 a |
| Sea Foam..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Sir Thomas Lipton..... | 0.0 c | 0.0 d | 1.50 b | 0.50 a | 0.0 a |
| Souvenir de St. Anne..... | 3.00 a | 1.75 b | 0.0 d | 0.0 b | 0.0 a |
| Spice..... | 0.75 bc | 0.25 d | 0.0 d | 0.0 b | 0.0 a |
| The Fairy..... | 0.0 c | 0.0 d | 0.0 d | 0.0 b | 0.0 a |
| Zephirine Drouin..... | 0.25 c | 1.00 bcd | 0.0 d | 0.0 b | 0.0 a |

* Disease rating. 0 = 0% of foliage affected, 1 = 1% to 24% of foliage affected, 2 = 25% to 49% of foliage affected, 3 = 50% to 74% of foliage affected, and 4 = ≥75% of the foliage affected.

** Means within columns followed by common letters are not different ($P = 0.05$) according to Duncan's multiple-range test.