Botrytis Damage to Rose Flowers

John R. Keller Department of Plant Pathology

Few growers are aware of the seriousness of Botrytis on rose flowers, perhaps because the damage usually is not as striking as that of Botrytis on carnations, glads, orchids, etc.

The damage to roses is usually called bruising because it appears as a bruise. The petal tips or the sides become brown and soft, although in some cases there may be numerous circular brown spots or blister-like patches over the petal surface. These infected petals are usually removed by the retailer. Under favorable conditions the watery brown discoloration advances until all infected petals collapse. In advance stages a loose fuzzy mass will be seen to be growing from the dead areas -- this is the Botrytis fungus itself.

Botrytis on roses is favored by the same environmental conditions that favor Botrytis on carnations, glads, etc. -- condensation on the flowers at moderate temperatures (usually about 55-70°F). Condensation on blooms in the greenhouse usually can be controlled by the use of additional heat and ventilation when outside temperatures are dropping or when the general humidity is very high.

Greatest damage occurs in storage or transit; particularly when flowers have been infected before cutting. Usually no symptoms can be seen at this time but with higher moisture conditions in storage or shipment Botrytis may develop very fast. At present, temperatures in shipping boxes are proper for Botrytis to develop. Very often infection occurs or the development of infected areas increases in transit when some growers wrap roses in wet newspapers -- this is an ideal situation for Botrytis development!

Whenever heavily infected material is discovered it should be destroyed immediately to prevent Botrytis spore formation and the distribution of these spores over the area by air currents.

At present, one of the best preventative measures against Botrytis damage is to keep the flower heads fairly dry. A new treatment which appears to offer good control of Botrytis in storage is being studied experimentally, but practical commercial applications have not yet been perfected.

