

Abstract:

Botrytis infection results in considerable losses in the flower and pot plant industry. It results in vase life reduction in flowers such as roses, gerbera and lisianthus (*Eustoma*). In a series of vase life tests at the flower auction, in 2000-2003, we observed Botrytis infection in about 15% of all tests with roses, 25% of the tests with gerbera, and as much as 30% of the tests with lisianthus. Vase life of bunches of flowers with Botrytis infection was, on average, reduced by 3 days in rose and gerbera and by as much as 6 days (about half of the control value) in lisianthus.

An analysis was made of produce brought to the auction and found out by inspectors to have visible Botrytis infection. In roses as few as 23 cultivars (out of 225 cultivars sold at the auction) and 19 growers (out of 235) explained as much as 80% of Botrytis incidence. The cultivars represented a market share of 16% and the growers that brought roses with visible Botrytis a market share of 6%. Similarly, 80% of Botrytis incidence in gerbera was explained by 20 cultivars (22% of the market share) and 14 growers (33% of the market share). In lisianthus 80% of Botrytis infection at the auction was explained by 16 cultivars and 25 growers (both about 50% of the market share). It is concluded that Botrytis infection, insofar visible at the auction, is determined by a low percentage of cultivars (and growers) in roses and gerbera, but by about half of the cultivars (and growers) in lisianthus. In roses and gerbera the problem can apparently be solved, to a large degree, by elimination of a relatively small number of cultivars. In lisianthus in contrast, a large percentage of the cultivars grown in Holland show Botrytis.