Managing Dieback in 'Bingo' Mandarin



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'Bingo' is a promising mandarin hybrid variety because it produces low-seeded fruits in a profitable market window in Florida. However, growers and nurseries face some challenges specific to 'Bingo'. A dieback syndrome has been affecting 'Bingo', which causes reduced growth and as much as 20% plant loss in the field in the first year. This project was undertaken to identify the causes of 'Bingo' dieback and to learn what practices might help reduce dieback incidence. Dieback occurs when injury, moisture, and fungi coincide. This is consistent with our observations over the past four years that injury and moisture are major factors. We can now conclude that dieback occurs when injured tissues are exposed to some *Colletotrichum* species under high moisture conditions. This may not be strictly pathogenic, and it appears that cultural management strategies may be successful in reducing dieback. We thus recommend that nurseries avoid overhead irrigation, excessive pruning, such as cutting trees back at planting, and rigorously clean/disinfect the pruning tools. It is not clear if the fungi play any role other than stimulating a hypersensitive host response. Growers can use this information by coordinating with nurseries to avoid the conditions that cause dieback. These trees should be very carefully handled until they are planted to avoid any damage. Additionally, planting trees of sufficient size with some branching can help avoid whole tree loss.

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