

Prestorage warm solution treatments of Thiabendazole and Imazalil in reducing chilling injury of lime (*Citrus aurantifolia* Swing.) fruits during cold storage

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Chilling injury (CI) is a serious problem in the postharvest of citrus fruits. Grapefruit, sweet lime and lime fruits are the main commercial citrus fruits and the most sensitive fruits to CI.

The fungicides thiabendazole or imazalil were applied at 1000 and 3000 PPM at 25, 40 and 55°C on lime led to reduce chilling injury and decay.

Results of this study showed that lime fruits at both mature and green stages dipped in thiabendazole at 1000 ppm at 25°C for 2 minutes and imazalil at 3000 ppm at 25°C for 5 minutes had less pitting injury after 6 weeks storage at 3°C.

Fungicides at 1000 ppm reduced fruit decay significantly at 25 and 40°C but imazalil was more effective than thiabendazole.

Results of this study indicate that electrolytic leakage (indicator of ion Leakage percentage from cell membrane) can be used as an effective index of CI and the Leakage increased in response to chilling.