

Abstract:

The effect of rain covers on postharvest development of Botrytis under storage in controlled atmosphere (CA) conditions was examined on two cherry cultivars, 'Lapin' and 'Colney'. Fruit was stored at 1°C under CA regimes of 2%O₂:5%CO₂: balance N₂, 5%O₂:10%CO₂: balance N₂ and 5%O₂:15%CO₂: balance N₂ in comparison with regular cold storage (air conditions). Assessments for grey mould incidence were carried out after 8 and 18 days, followed by 6 days in distribution. There were no significant differences between the CA treatments with respect to grey mould incidence for either 'Lapin' or 'Colney'. However, there were noticeable differences between the two varieties. 10% of CO₂ gave effective control over Botrytis development for the total of 18 days in storage, and this effect was extended until distribution. Results further showed that CA inhibited fungal development on cherries from both covered and uncovered trees after 8 and 18 days.