Title Effects of salicylic acid and some essential oils on control of postharvest strawberry (*Fragaria x anannasa* L. cv. Selva) diseases.

Author Taimoor Javadi, Abbas hassani, Mohammad Reza Asghari and Nahid Hashemi

Citation Abstracts Book, 6th International Postharvest symposium, 8-12 April 2009, Antalya, Turkey. 256 pages.

Keyword Salicylic acid; essential oil; strawberry

Abstract

Strawberry is highly perishable fruit, especially during the postharvest phase, when remarkable losses can occur. Strawberry fruits of cv. Selva were harvested at commercial ripeness (> 75 % of fruit surface showing red color) and transported to laboratory. Fruits with defect, overripe or too small were eliminate. The inhibitory effects of three essential oils (Thyme, Clove and Summer savory) at different concentration (0, 200, 400 and 600 ppm) and salicylic acid at two concentration (0 and 2 mmol) were tested against strawberry postharvest decays. Percent of decay fruits and decay severity of fruits measured during the experiment. Results showed that essential oils and salicylic acid treatments had significant effects on fruit decays and decay severity. Effects of essential oils on control of fruit decays were type and dose dependent. Thyme oil were more effective than clove and summer savory oils. In addition thyme oil accompanying with salicylic acid were the best treatment in control of fruit decays.