

Title Regaining market access to Taiwan: the story so far....
Author A. Jessup, D. Daniels
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Abstract

As of 1 January 2006, Taiwan banned the entry of all produce from Australia that is host to Queensland fruit fly (Qff): Taiwan was formerly a multi-million dollar market for Australian summerfruit and cherries. The ban on exports to Taiwan caused significant losses to the summerfruit and cherry growing and exporting industries and placed an extra burden on domestic market prices. Emergency funding was sought to conduct research to find a postharvest quarantine treatment that can be applied to Australian summerfruit and cherries to assure freedom from Qff in imported fruit.

This is the story of what happened and what progress has been made in regaining market access for Australian summerfruit and cherries to Taiwan. Australian summerfruit (plums and nectarines/peaches) and cherries were subjected to cold storage treatment at temperatures of $1.0 \pm 0.5^{\circ}\text{C}$ or $3.0 \pm 0.5^{\circ}\text{C}$ for disinfestation of Queensland fruit fly. Larval development studies were conducted to determine the course of development of each immature life stage to enable each stage (i.e. eggs, first instar, second instar and third instar) to be tested separately. The most tolerant stage trials were conducted by exposing each stage to cold treatment for 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14 days. Large scale trials on the optimum cold duration against the most treatment tolerant life stages confirmed treatment efficacy to the satisfaction of importer requirements.

When plums were stored at either 1°C or 3°C , the third instar larva was most cold-tolerant. When nectarines were stored at 1°C , the second instar was most tolerant and at 3°C the first instar was most tolerant. The most treatment tolerant life stage in cherries treated at 1°C or 3°C was the first instar larva: When large scale confirmatory trials were carried out on the most cold-tolerant life stages, there were no survivors following storage at either $1.0 \pm 0.5^{\circ}\text{C}$ for a period of 14 days or $3.0 \pm 0.5^{\circ}\text{C}$ for a period of 14 days.

Results from the work described here have proven that storage treatments at 1°C for 14 days or at 3°C for 14 days for Australian summerfruit and cherries are suitable as quarantine treatments against Queensland fruit fly. The next step is to allow the Taiwanese authorities to review these submissions.