

Title Do agronomic factors influence skin pitting on kiwifruit caused by *Phialophora* sp.?
Author D. Spadaro, A. Galliano, G. Gilardi, A. Garibaldi and M.L. Gullino.
Citation Journal of Plant Pathology Volume 90 (2, Supplement) August 2008, Book of Abstract, 9th International Congress of Plant Pathology, August 24-29, 2008 Torino, Italy,. 507 pages.
Keywords kiwifruit; pitting

Abstract

In recent years a postharvest disease of kiwifruit, characterized by skin pitting appearing after 3 or more months of storage, and caused by *Phialophora* sp., has been reported in most Italian packinghouses. The damage, often only minor lesions when the storage rooms are opened, becomes economically significant by the time fruit reaches the distribution channels and consumers, after transport. Nineteen kiwifruit orchards were chosen for survey in 2002-03. The two samples showing highest disease incidence (15.33 and 15.04%) had significantly lower dry matter content than the other samples (10.61% on average). The nitrogen content, by contrast, increased with increased *Phialophora* incidence. A lower calcium content also contributed to create favourable conditions for the growth of *Phialophora*, although less significantly. Further evidence of these relationships were provided during the seasons 2004-05 and 2005-06. Healthy batches had dry matter significantly higher and nitrogen content significantly lower than diseased batches. A low level of dry matter was related to the use of excessive irrigation aimed at obtaining higher yield. High nitrogen levels, directly related to excessive fertilization, also contributed to lower the storability of the fruit and its resistance to *Phialophora*. Accurate estimation of the susceptibility to skin pitting of kiwifruit entering the packinghouse is necessary. In particular, batches with predisposing factors, such as low dry matter and high nitrogen content, should be more carefully handled, and their time in storage reduced.