

IMPLEMENTATION OF IPM TO REDUCE PESTICIDE RESIDUE ON FRUITS: A CASE STUDY IN TRENTINO REGION

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The reduction of the residue of pesticides on fruits both in terms of the number of active ingredients and quantity of individual pesticides, is now not only a request from the consumer or the retailer, but a specific objective of the growers. The Integrated Apple Production System operating in Trentino (Italy) has been engaged on this front for years. According to the chemical analyses performed on the 575 samples collected in 2011 there are in average 3.24 p.a. per sample. Moreover, in 98% of the samples with detectable residues, the level did not exceed 30% of the official MRL. This result is achieved thanks to the implementation of the guidelines for integrated production by the 8000 fruit growers, to an extension service which justifies the need of the treatment and gives advice on which pesticide fit better for the time-pest combination, to the systematic check up of the sprayers, to the correct sizing of mix volumes to spray according to the size of the canopy, to the selection of active ingredients based on their residual activity in field tests, and to the systematic monitoring of the level of residues found on representative samples of the product at harvest . With these assumptions, the next goal is to eliminate all traces of insecticides and acaricides now present only in 30% of the samples. This aim could be achieved by extending the use of pheromone mating disruption to control fruit feeding Lepidoptera, as well as by promoting the use of short persistent residue products during the final part of the season. Results of some of the experimental field trials are presented and commented.