

DEVELOPING AN ACTION THRESHOLD FOR THE PERSEA MITE ON AVOCADO

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Oligonychus perseae was first discovered in Israel in the autumn of 2001 in several avocado plots located in the Western Galilee and has spread since to most of the growing areas. As no damage thresholds have been developed for this pest some growers will apply up to four acaricide applications per year, while others will not spray at all, often leading to extensive foliar damage. To reduce pesticide use on the one hand and to prevent damage to fruit quality and yield on the other, we set out the development of an action threshold for this pest. Towards this aim, we attempted to create different pest levels by applying acaricides (spirodiclofen and abamectin) at 50, 100, 250 mites/leaf and a non-sprayed control in a replicated block design for three consecutive years, 2004-2006, on Hass, evaluating the leaf damage and yields of 2005-2007. Based on cumulative mite days, the plots sprayed at 50 and 100 mites/leaf were similar and differed from the two higher levels, the latter pair also being similar. Mite population levels significantly affected leaf damage and mean tri-annual yields (2005-2007). At the higher threshold levels, mean yield was reduced by 20% in comparison to the mean yield attained when plots were sprayed at a threshold of 50-100 mites per leaf.