

Distribution and Incidence of Scab (*Sphaceloma perseae*) in Avocado (*Persea americana*) and its Relation to Thrips in The 'Hass' Cultivar in the State of Michoacán, Mexico

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Abstract. Scab in the avocado fruit is a disease that affects the producer's return. It exists throughout the entire avocado zone of Michoacán, where it is endemic. The objectives of this study were to determine the areas of greatest incidence of scab as well as its distribution and whether a relationship exists between the damage caused by thrips and scab in avocado fruit.

The working hypothesis was that scab in avocado is found to be distributed all over the areas where avocado is grown in Michoacán, and its incidence is greater in semi-hot sub-humid climates. Also, the damage caused by thrips in avocado fruit facilitates scab infection.

It was found that scab in avocado is distributed in the following types of climates: warm humid, warm sub-humid, semi-hot humid, semi-hot sub-humid, semi-cold humid, and semi-cold sub-humid.

The disease occurred with greater severity in semi-cold sub-humid and warm sub-humid climates. In the semi-hot sub-humid climate, there is a relationship between the damage caused by thrips and that caused by scab. This relationship is represented by the model $Y = 3072.16 + 0.8774X^2$ with a coefficient of equal correlation of 0.7488, where Y = percent incidence of scab and X = percent of damage from thrips.

For the warm humid climate, the equation is $Y = 12.5171 + 1.0887X$, with a coefficient of equal correlation - 0.73. Again where Y = percent incidence of scab and X = percent of damage from thrips. This model shows us that for each 1 % of fruit damaged by thrips, 1.0887 percent of fruit is damaged by scab.