

## EFFECTS OF FERTIGATION IN THE INCIDENCE OF *SPHACELOMA PERSEAE* J. IN *PERSEA AMERICANA* M. IN MICHOACÁN, MÉXICO

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The state of Michoacán (México) is the largest avocado producing region in the world with a total area of 77.989 ha. The scab disease (*Sphaceloma perseae*) affects more than 60% of the fruits in some locations resulting in a decrease of up to 50% in market prices. The aim of this work was to determine the effects of fertigation on the incidence and severity of scab in the avocado fruit. The study was carried out in two different agro-climatic environments in the state of Michoacán: Tancítaro (warm subhumid, 2150 m a.s.l., andosol soil type) and Ziracuaretiro (warm semi-warm, 1350 m a.s.l.; luvisol soil type). The experiment was a randomized block design with three replicates. Thirteen treatments of nitrogen, phosphorous and potassium as well as three treatments of evaporative layers of water were applied. One tree per replicate and treatment was measured and twenty fruits per tree were harvested to determine scab incidence. A subsample of ten fruits was used to evaluate the degree of severity of the disease in the fruits. Significant differences were found at Ziracuaretiro in response to fertigation treatments. The lowest scab incidence (38%) was obtained with the 0-2-1 kg/ tree of N, P, K treatment and with 0.75 of evaporative layer of water in comparison with that obtained in the control (52%). The same pattern was observed in Tancítaro, the lower the nitrogen the lower the incidence of the scab: here the lowest incidence (41%) was obtained with the 1-2-1 kg/ tree of N, P, K treatment and 0.75 of evaporative layer of water whereas a 58% was obtained in the control. The pathogen is present in both agro-climatic conditions requiring temperatures between 10°C and 26°C, frequent periods of higher than 80% relative humidity and high thrip populations.