

## SPATIO-TEMPORAL DYNAMICS OF ANTHRACNOSE ON AVOCADO (*PERSEA AMERICANA* MILL)

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The temporal and spatial dynamics of the pathosystem *Persea americana* - *Glomerella cingulata* (*Colletotrichum gloeosporioides*) was studied in two 'Hass' avocado orchards in Michoacan, Mexico, using spatial autocorrelation and isopath maps. A 6 X 10 tree matrix was selected in the center of each orchard to evaluate anthracnose severity in 60 fruits in the lower portion of each tree. The autocorrelograms showed spatial autocorrelation with significant contiguous and noncontiguous elements in rows and through rows, at the beginning of anthracnose in orchard 1. Also the isopath maps showed the infection foci at the beginning of the disease. Spatial autocorrelation occurred at any time on July, September, November and December, with contiguous and noncontiguous elements in orchard 2. Anthracnose occurred in fruits in phenological stages 3 to 6, with relative humidity higher than 80%. Severity was low (up to 3.7%) with an intensity rate  $b^{-1} = 0.016 - 0.019$ , and incidence was high (100%), these percentages represent risks for post-harvest processing. A phenological scale for 'Hass' avocado fruit development based on fruit size and heat units was used.