

PRELIMINARY STUDY OF FUNGI SPORES IN MANGO CROP  
AS AFFECTED BY MICROCLIMATE

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Data of air temperature ( $T$ ), relative humidity ( $RH$ ), wind velocity ( $Wv$ ) and pluviometric precipitation ( $P$ ), collected at Petrolina-PE, Brazil, from April to December 2001, were utilized in a seasonal evaluation of the relationship between microclimate and number of spores of the fungi *Lasiodiplodia theobromae* and *Alternaria solani* in a mango orchard, cv. Tommy Atkins, irrigated by microsprinklers. With regard to spores of the fungus *L. theobromae*, it was found a number higher than 30 per week under the following conditions inside the orchard:  $26^{\circ}\text{C} < T_{\text{mean}} < 28.5^{\circ}\text{C}$ ;  $33^{\circ}\text{C} < T_{\text{max}} < 36^{\circ}\text{C}$ ;  $21^{\circ}\text{C} < T_{\text{min}} < 23^{\circ}\text{C}$ ;  $55\% < RH_{\text{mean}} < 68\%$ ;  $84\% < RH_{\text{max}} < 100\%$ ;  $23\% < RH_{\text{min}} < 41\%$ , and  $Wv > 0.4\text{m}\cdot\text{sec}^{-1}$ . The same number of *Alternaria solani* spores was obtained in the following conditions:  $23^{\circ}\text{C} < T_{\text{mean}} < 25.5^{\circ}\text{C}$ ;  $29.5^{\circ}\text{C} < T_{\text{max}} < 36^{\circ}\text{C}$ ;  $17.5^{\circ}\text{C} < T_{\text{min}} < 20^{\circ}\text{C}$ ;  $56\% < RH_{\text{mean}} < 71\%$ ;  $92\% < RH_{\text{max}} < 98\%$ ;  $26\% < RH_{\text{min}} < 41\%$ , and  $Wv > 0.5\text{m}\cdot\text{sec}^{-1}$ . The subscripts mean, max and min stand for weekly mean, maximum and minimum values, respectively. It was not evidenced the influence of pluviometric precipitation on spore population level of the two fungi.