

SOIL AND CLIMATE CHARACTERIZATION OF THE AVOCADO-PRODUCING AREA OF MICHOACÁN, MEXICO

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The agro-climatic variables of 22 municipalities are described in the present paper. The results indicate that 71% of orchards correspond to small property, 24% ejido and 5 % communal. The farm areas vary from less than 5 ha to more than 30 ha. The distribution of the area according to optimum conditions reaches 77% with regard to altitude; 76% to maximum temperature, and 60% to minimum temperature. The period with absence of cold temperatures corresponds to 17%, while 9% of these areas are under risk. In relation to heat units, 76% are under the optimum conditions. Regarding precipitation, evaporation and relative humidity, cultivation requirements are satisfied in 100% of the areas. As for soil, 86% of the orchards are in Andosols, considered as the best. In relation to the slope, 88% of the orchards are under good conditions (slopes below 15%). The agro-environmental conditions favor an excellent growth and yield of trees during the whole year. It is worth mentioning three types of weather: (A)C(w2)(w), semi-warm sub-humid, the most humid, in an altitude ranging from 1,600 to 1,800 masl; (A)C(w1)(w), semi-warm sub-humid, between 1,200 and 1600; and C(w2)(w), mild sub-humid climate between 1,900 to 2,300 masl. These conditions have favored a great advance of the avocado with a displacement of areas with forest vocation lands in 20% of the area; this figure represents the growth of the avocado-producing area to the detriment of the natural resources of the region.