

**HISTOLOGICAL CHARACTERIZATION OF XYLEM VESSEL ON STEMS AND CAVITATION
VULNERABILITY IN AVOCADO ROOTSTOCKS (*Persea americana* Mill) AND HASS
VARIETY IN NURSERY PLANTS.**

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Recent anatomic studies on avocado trees (Reyes-Santa María *et al*, 2002) show the existence of differences in anatomy of xylem vessels among the different avocado varieties. In order to determine if these differences occur in nursery plants of Hass grafted on rootstocks of different races, the following aspects were determined through histological sections on stems: frequency of xylem vessels (vessels mm² xylem area), average diameter of vessels (µm), relative hydraulic conductivity and vulnerability rate to cavitation that different plant materials would show. Mexicola, Nabal, Zutano and Nachlat 3 rootstocks as well as the Hass variety presented significant differences regarding frequency and average diameter of xylem vessels. Nevertheless, no differences were found among rootstocks studied in terms of relative hydraulic conductivity, which would suggest an adjustment between the diameter of vessels and their frequency. Although the results obtained are opposite to those obtained by Reyes- Santa María *et al* (2002), this could occur due to the physiological and chronologic age of the material evaluated.