CHARACTERIZATION OF LEAF ANATOMY IN 48 SEGREGANTS OF 'COLÍN V-33'

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According to the literature, the anatomical characteristics of the leaf are directly related to gas exchange; therefore, this aspect was studied including the characterization of leaf anatomy in 48 avocado segregants of 'Colín V-33'. Leaf transversal sections were made, including the midrib, where characteristics of strata were evaluated as well as of cells particularly of palisade parenchyma I and vessel elements of the xylem. Multivariate statistical analysis methods and multiple correlation analysis were used. It was found in the canonical structure, that the most important variables of the first canonical function (CF1) were the palisade parenchyma II, width of palisade mesophyll I cell and area of palisade mesophyll I cell; for CF2, thickness of bundle epidermis, area of central veins, diameter of central veins, area of xylem and area of parenchyma of central veins; and for CF3, thickness of palisade mesophyll I, length of palisade mesophyll I cell and the length/width ratio of palisade mesophyll I cell. Four groups were formed according to the principal component analysis. In the multiple correlation analysis of Pearson, which the variables of gas exchange of leaf, no relation was found between these physiological variables and the leaf anatomical characteristics studied.