Persea (AVOCADOS) PHYLOGENETIC ANALYSIS BASED ON MORPHOLOGICAL CHARACTERS: HYPOTHESIS OF SPECIES RELATIONSHIPS

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The present study aimed to determine whether the genus *Persea* is a monophyletic group and whether the division into two subgenera is artificial. The results suggest that *Persea* is a paraphyletic group. Two clades of *Persea* were recognised (*Eriodaphne* and *Persea* species.) *Eriodaphne* and *Persea* should be considered independent genera. Several characters of leaf and flower contributed to achieve the division of groups (subgenera). The definition of *Eriodaphne* was based on fruit colour, sessile glands at the base of the stamens, venation prominence and leaf-blade shape. *Persea* was more closely related to genera *Nectandra* and *Ocotea* than *Eriodaphne*. The eleven species included in *Persea* were recognized as species. The group was defined by fruit flavour, mature leaf colour, number of tertiary divergent veins, and pubescent bracts on the inflorescence. Within this group, where *P. guatemalensis* is included, a clade formed by six species was distinguished, by seed shape, venation pattern relief and number of fruits per cluster. Moreover, the seed shape supported the separation of *P. floccosa* and *P. zentmyerii*. Nevertheless, the phylogenetic relationships revealed by this study provide new bases for the selection and conservation of the species *Persea*.