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Morphological variation in the collection germoplasm of Genipa america L.

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Genipa americana L. is a native fruit tree of Brazil. This species has significant social and cultural importance in regions where it occurs naturally. Information on the morphological characteristics of this species is insufficient to support genetic conservation strategies that have previously been adopted. The proposal was to characterize G. america germplasm from morphological characters in juvenile age. The active germplasm bank of G. americanafrom Embrapa was composed of eighteen progenies/provenances from Northeast, Brazil and ten repetitions. This germplasm were evaluated at twelve and eighteen months after planting. The measurements were performed using the following characteristics: plant height, top diameter, stem diameter, leaf length, and leaf width. Data analysis of multivariate methods that were employed, were based on the average Euclidean distance and cluster analysis of Tocher's method. The phenotypic distances between pairs of progenies ranged from 0,08 to 3,35. The pattern of phenotypic structure of 18 progenies (provenances) of G. americana resulted in the formation of three groups one constituted by the progenies of municipalities of Sergipe State and another by two progenies from Sergipe and Bahia States and a third by one municipality of Sergipe State. The most divergent progenies are promising to increase genetic variability of active germplasm bank.