ECOTYPIC DIFFERENTIATION AND INCIPIENT SPECIATION AT BOTH QUANTITATIVE TRAITS AND NEUTRAL MARKERS IN *Cedrela odorata*

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Very few studies have examined the patterns of genetic differentiation in quantitative traits and molecular markers among populations of the same species. We investigated the genetic population structure, genetic architecture, and the degree of population differentiation in marker loci and genes coding quantitative traits among 29 populations of the endangered species *Cedrela odorata* in Central America and Mexico. Detailed analyses of quantitative trait and molecular markers divergence revealed a strong differentiation between the populations of the Atlantic coast of Panama and Costa Rica (high rainfall non-seasonal wet forest), as compared to the rest of Mesoamerica. The study suggests that a new subspecies is present in the Panama isthmus. An apparent explanation for the latter could be the pressure by selection in the very humid areas, adaptation to environments with a high humidity throughout the year and to the high competition with vegetation of very humid and pluvial forest that has considerably greater height and diameter than dry forests.

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