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## **Plant Genomics**

## COMMERCIAL OPPORTUNITIES BEHIND GENETIC AND CLIMATIC CHARACTERIZATION WITH MANAGEMENT CULTURE APPROACHES OF *Heliconia* Species in Central-Occident Region of Colombia

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One interspecific hybrid of *Heliconia* species with great commercial potential were subjected to genetic characterization together with a climatologic description of the collection places. The first, based in the systematical collection of data derived from 7 weather stations controlled by Cenicafé and IDEAM located in the area of study, and the latter, through the amplification of SSR obtained from the previous development of a genomic library for *Heliconia* stricta cv. Iris red. As a result, it was observed that, at least, 13 loci SSR are required to distinguish among different *Heliconia* tested material. It means that there is a

great probability of finding unique genotypes. From 18 initial tested primers, there were identified 13 informative SSR from which the most polymorphic were HES69, HES 63, HES 57, HES 67 y HES 55 with a discrimination power and Polymorphic Information Content (PIC) ranging among 0.620 and 0.970 in every studied specie. In that sense, these markers showed a high discrimination power for *Heliconia* genus, but also the climatic study confirmed that the central-west region of Colombia meets all climate requirements in order to establish a continue production of flowers.

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