# Mitochondrial DNA variability in populations of *Centris aenea* (Hymenoptera, Apidae), a crop-pollinating bee in Brazil

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**ABSTRACT.** *Centris* spp are oil-collecting solitary bees that are valuable pollinators of crops such as Brazil nut, cashew, and acerola. We investigated the genetic variability of populations of *C. aenea* in the northeastern region of Brazil. Total DNA was extracted from 59 individuals from 6 locations in the States of Pernambuco and Bahia and a 600-650-bp fragment of the mitochondrial COI/COII region amplified by PCR, followed by digestion with the restriction enzymes *Dra*I and *Ssp*I. PCR-RFLP analysis revealed eight different haplotypes among the populations. Haplotype A1, revealed by *Dra*I, was the most frequent (50%), and haplotypes A3 and A4 were exclusive to Feira de Santana, Bahia and Morro do Chapéu, Bahia, respectively. Among the

haplotypes revealed by *Ssp*I, B2 was the most frequent (37%) and B3 was exclusive to Feira de Santana. This information revealing high haplotype diversity will be useful for developing management strategies for *Centris*, especially because of increasing interest in the rearing and/or relocation of these bees for crop pollination.

**Key words:** Centridini; PCR-RFLP; Population variation; Solitary bee