

Genetic variability in wild genotypes of *Passiflora cincinnata* based on RAPD markers

C.B.M. Cerqueira-Silva^{1,2}, L.D.H.C.S. Conceição³, E.S.L. Santos^{1,2},
C.B. Cardoso-Silva², A.S. Pereira⁴, A.C. Oliveira⁵ and R.X. Corrêa⁴

¹Departamento de Estudos Básicos e Instrumentais,

Universidade Estadual do Sudoeste da Bahia, Itapetinga, BA, Brasil

²Instituto de Biologia, Universidade Estadual de Campinas, Campinas, SP, Brasil

³Centro de Pesquisa Agropecuária dos Cerrados,

Empresa Brasileira de Pesquisa Agropecuária, Planaltina, DF, Brasil

⁴Departamento de Ciências Biológicas, Universidade Estadual de Santa Cruz,
Ilhéus, BA, Brasil

⁵Departamento de Ciências Naturais, Universidade Estadual do Sudoeste da Bahia,
Vitória da Conquista, BA, Brasil

Corresponding author: R.X. Corrêa

E-mail: ronanxc@uesb.br

Genet. Mol. Res. 9 (4): 2421-2428 (2010)

Received August 25, 2010

Accepted October 2, 2010

Published December 21, 2010

DOI 10.4238/vol9-4gmr981

ABSTRACT. The genetic diversity and characteristics of commercial interest of *Passiflora* species make it useful to characterize wild germplasm, because of their potential use for fruit, ornamental and medicinal purposes. We evaluated genetic diversity, using RAPD markers, of 32 genotypes of *Passiflora cincinnata* collected from the wild in the region of Vitória da Conquista, Bahia, Brazil. Thirteen primers generated 95 polymorphic markers and only one monomorphic marker. The mean genetic distance between the genotypes estimated by the complement of the Dice index was 0.51 (ranging from 0.20-0.85), and genotype grouping based on the UPGMA algorithm showed wide variability among the genotypes. This type of information contributes

to identification and conservation of the biodiversity of this species and for the identification of pairs of divergent individuals for maximum exploitation of existing variability.

Key words: Genetic breeding; Genetic variability; Grouping analyses; Coefficient of similarity; Biodiversity conservation; Molecular marker