



RAPD identification of *Varroa destructor* genotypes in Brazil and other regions of the Americas

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ABSTRACT. The mite *Varroa destructor* is the main pest causing damage to apiculture worldwide. In Brazil and other parts of the world, where bees of African origin and their hybrids predominate, the bees can survive these mites without treatment. Studies have shown a correlation between the various genotypes of the mite and its fertility in different geographical regions. Information about mite genotype could be helpful in understanding the diverse effects and relationships of the mite with bees in different regions of the world. DNA analysis by RAPD technique has permitted identification of three distinct genotypes in the mite *V. destructor*, namely Russian, Japanese and Papua New Guinea. We found predominance of the Russian genotype in Brazil, along with other parts

of South America, and in Cuba and Mexico. The Japanese genotype was exclusively found on Fernando de Noronha Island in Brazil.

Key words: RAPD; *Varroa destructor*; Resistance; Genotype