

PCR-RFLP Identification of *Bemisia tabaci* Biotypes in the Mediterranean Basin

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At least 20 genetic biotypes, with varying degrees of biological characterization, are currently recognized within the *Bemisia tabaci* (Hemiptera: Aleyrodidae) species complex. Their identification relies on a set of different molecular techniques. However, none of the available markers is completely adequate, due to technical difficulties or lack of reproducibility. We therefore developed a method for rapid biotyping of *B. tabaci* populations. The five biotypes (B, Q, M, S and T) reported until now in the Mediterranean Basin have been tested by PCR amplification of the cytochrome oxidase I mitochondrial gene followed by restriction with the enzyme *Tru9I*. The digestion patterns produced by this enzyme were able to identify the five biotypes clearly. Digestion with another enzyme, *TaqI*, discriminated only between biotypes B and Q. The newly developed method enables rapid biotyping and can be applied in studies aimed at assessing biotype distribution and competition at least in the Mediterranean area.

KEY WORDS: *Bemisia tabaci*; biotypes; mitochondrial cytochrome oxidase I; restriction endonuclease; RFLP.

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