ABSTRACT

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To characterize the collection of 33 native isolates of *Rhizobium leguminosarum* biovar *phaseoli* and examine their genetic relatedness, ERIC primers were used to fingerprint their genomes. Primary experiments were performed with three standard strains, CIAT899, UMR1899 and TAL182, in order to find a suitable PCR condition. At a Mg^{2+} concentration of 2.5 mM and an anealing temperature of 48 °C, differentiatable PCR patterns among the three standard strains were obtained. These conditions were then used with purified genomic DNA from native isolates. The obtained ERIC-PCR pattern indicated that 33 isolates could be classified into 11 different strains. The results have shown that ERIC-PCR could be used in typing and assessment of phylogenetic relationship of rhizobium.