

IDENTIFICATION OF BIFIDOBACTERIUM SPECIES IN HUMAN FECAL
MICROBIOTA BY AMPLIFIED RIBOSOMAL DNA RESTRICTION ANALYSIS
(ARDRA)

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Bifidobacterium is one of the predominant human fecal bacteria and several health-promoting properties for the host have been attributed to this genus. However, its identification by biochemical and physiological tests is quite difficult and the results are not so reliable. Various culture-independent techniques have been suggested for the typification of bifidobacterial isolates. The aim of this study was to identify, using the use of amplified ribosomal DNA restriction analysis (ARDRA) technique, bifidobacteria isolated from the human fecal microbiota. The bacterial isolates were identified at species level and the results showed that *B. adolescentis* was most frequently recovered from adult feces, followed by *B. longum*, *B. thermophilum* and *B. bifidum*. These data confirmed *B. adolescentis* and *B. longum* as predominant populations in adults. The ARDRA technique allowed for the discrimination among these four species with the use of eight restriction enzymes, since distinctive profiles were obtained for each species.

Key words: *Bifidobacterium*, ARDRA, fecal microbiota.

Supported by: FAPEMIG, CNPq and CAPES, Brazil.