

olume 5 | Issue 1&2 | Apr. & Oct., 2014 | 22-26

e ISSN-2230-942X | Visit us - www.researchjournal.co.in



16S rRNA gene for ribotyping *Brucella*: A monospecific genus

MAYURA R. PATIL, ANIL KUMAR S. BANNALIKAR¹ AND VIKAS D. DIGHE²

Members of the Research Forum

Associate Author:

¹Department of Animal Biotechnology, Bombay Veterinary College, MUMBAI (M.S.) INDIA

²National Institute for Research in Reproductive Health, Parel, MUMBAI (M.S.) INDIA

Author for correspondence : MAYURA R. PATIL

Department of Animal Biotechnology, Bombay Veterinary College, MUMBAI (M.S.) INDIA

Email: dr.mayurapatil@gmail.com

Abstract : The aim of the study was to assess the usefulness of 16S rRNA gene in identification of *Brucella* spp. and phylogenetic study. For identification purposes, a 1477-bp fragment of 16S rRNA gene of 16 isolates and 3 control reference strains was amplified and 3 isolates with *B. abortus* S19 sequenced. The obtained sequences were submitted to GenBank for species identification. Sequence analysis of a 1477-bp 16S rRNA fragment allows the identification of *Brucella* spp. However, for discrimination of closely related species sequencing of the entire 16S rRNA gene, additional sequencing of the 23S rRNA gene or sequencing of the 16S-23S rRNA intergenic spacer is essential.

Key words: Brucella, bovines, 16S rRNA gene PCR, sequencing

How to cite this paper: Patil, Mayura R., Bannalikar, Anil Kumar S. and Dighe, Vikas D. (2014). 16S rRNA gene for ribotyping *Brucella*: A monospecific genus, *Vet. Sci. Res. J.*, 5(1&2): 22-26.

Paper History: Received: 28.07.2014; Revised: 30.08.2014; Accepted: 15.09.2014