

## Survey and molecular characterization of *Nomuraea rileyi* isolates

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### ABSTRACT

After conducting a roving survey in Chittoor district for the natural occurrence of *Nomuraea rileyi*, a few fungal infected and died (mummified) cadavers of *Spodoptera litura* and *Bombyx mori* were found and collected. With microscopic studies, the fungus was identified as *Nomuraea rileyi* and *Beauveria bassiana*. The molecular characterization of 7 isolates of *N. rileyi* was done by RAPD-PCR for studying the genetic variability/similarity. RAPD banding profile with 12 different random primers viz., 3 primers from OPD, 3 primers from OPY, 2 primers from OPM, 2 primers from OPA, 1 primer from OPC and 1 primer from OPW (Operon technology) showed 88.6 per cent polymorphism as all the bands obtained were polymorphic with size ranging from 100 bp to 3000 bp. Jaccards similarity co-efficients between the *N. rileyi* isolates showed 97.50 per cent genetic variation between isolates of Tirupati and V.Kota-1. While the isolates V.Kota-2 and Madanapalli were found to be genetically similar as 70.3 per cent similarity was observed between the isolates. In the resulted dendrogram V. Kota-2 and Madanapalli isolates formed one group and V. Kota-2 and Kanumakupalli another group and remaining isolates did not form any group.

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