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## Isolation of scarabid specific *Bacillus thuringiensis* (Bt) containing cry8 gene from sugarcane ecosystem

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A study was undertaken to isolate *B. thuringiensis* from sugarcane ecosystem in Tamil Nadu, India and to identify isolates containing crystalline protein of Bt that are toxic to Coleopteran insects. The isolation of *B. thuringiensis* was carried out on Traver's media following heat treatment. Isolates were identified based on the ability of the isolate to produce crystal toxin which can be detected under phase contrast microscope. The cry gene content of 58 *B. thuringiensis* isolated from this study was identified by Polymerase Chain Reaction Method. The universal primers of cry 8 gene which is specific against the members of scarabaeidae family of the order Coleoptera was used to detect environmental isolates that would be positive for the gene. Isolate Bt 378 which was found cry8 positive revealed that the amplified nucleotide sequence when analyzed with ClustalW2 showed a maximum identity of 88.92% with other cry 8 genes. Further confirmation on its toxicity is being confirmed on the coleopteran beetle *Holotrichia serrata* (Fabricius).

### Biography

HarishT has completed BTech Biotechnology from Karunya University 2013 and currently pursuing final year MTech Biotechnology from Karunya University, India. He had presented a review paper of "An Overview of Antibiotic Resistance Microorganisms" in the "International Symposium on Innovations in Free Radical Research and Experimental Therapeutics and 5th Annual Convention of Association of Biotech and Pharmacy" (2011) at Karunya University. He also had presented a poster under the title of "Nanotechnology in Clinical Diagnosis" in the "National Conference on "Molecular Diagnostics for Sustainable Health in Biosciences and Technology" held at Karunya University (2011). He has also participated in "Stimulating Bio-Entrepreneurs Talk" conducted by ABLE Biotech. He also attended national level workshop on "Recent Techniques in Cell Culture Cytotoxicity Assay" at Karunya University and 3 National levels Technical symposium and an "International Symposium on Translational Neuroscience and 32nd Annual Conference of Indian Academy of Neurosciences" at NIMHANS, Bangalore, 2014.

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