Transformation Studies of *Bacillus thuringiensis cryIC* Gene into a Nitrogen-Fixing *Azospirillum lipoferum*

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A lepidopteran toxin gene, cryIC (pSB607) from entomopathogenic Bacillus thuringiensis subsp. aizawai was introduced into nitrogen-fixing Azospirillum lipoferum by transformation. Regeneration of spheroplasts was achieved at 99% with 39% frequency of regeneration. Transformants were screened on NB kanamycin with ampicillin plates and 4 transformants were selected after ten generations. SDS-PAGE and Western blot analysis confirmed the presence of a 68 kDa protein in the transformants. Studies on utilization of carbon sources indicate that glucose and sucrose are the most favorable carbon sources and 2% molasses is the cheap alternate carbon source for the better growth of parent A. lipoferum and transformants.