

Floating formulation for Bacillus thuringiensis var. israelensis obtained from semi-solid rice medium.

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A loopful of Bti maintained on Luria-Bertani agar medium was transferred to Bacto-Peptona agar medium. After 3 days at 30°C, the petri-dishes were washed with sterilized water (100 ml/petri-dish). The suspension obtained represented the inoculum for the semi-solid rice-based fermentation medium. The growth units were incubated until complete sporulation of Bti. The resulting biomass was dried at 60°C in an oven for 24 h, sieved through 60 Tyler. The retained powder did not show any larvicidal activity. In parallel, colloidal bentonite was treated with organic macromolecules dissolved in toluene; after sedimentation, the bottom phase was dried at 120°C for 4 h. This treatment led to a spreading and floating clay which resulted in a good carrier for Bti. Then, the two powders were mixed in the proportion of 1(Bti):150(clay). The bioassays were performed under laboratory conditions utilizing 2nd instar *Culex* sp. larvae, with 3 repetitions (20 larvae each) being observed during 96 hours. The data were treated with Abbott method. A complete methodology was developed to get floating units of Bti with 143 mg/m² of biological activity.

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