

The use of toxins from *Bacillus thuringiensis* (Bt) is an attractive strategy in insect pest management. At sporulation, Bt produces proteinaceous parasporal crystalline inclusions which when ingested are solubilized in the insect midgut. The endotoxin released disrupts the integrity of the midgut resulting in death. Two strains of *B. thuringiensis* Bt6E and Bt4 isolated from Sri Lanka have been investigated for their insecticidal properties in mosquito (Diptera: Culicidae) larvae.

Bt proteins were characterized by gel electrophoresis. Proteins observed in Bt6E were 200, 120, 118, 106, 97, 66, 45, 36 and 29 kDa while in Bt4, proteins of 120, 116, 97, 66,

45, 36 and 24 kDa were seen. These were comparable in molecular weights to diptero - toxins in other strains of Bt which are encoded for by the cry genes.

The bioassay of Bt (spores) in wet and freeze dried forms, tested larvicidal activity based on oral toxicity to second instar larvae of *Anopheles tesselleatus*. Mortality (100%) was observed with 3 mg/ mL of wet Bt4 protein at 72 h and 95% mortality with Bt6E at 96 h. Freeze dried Bt6E and Bt4 (0.5 mg/ mL) showed 95- 100% mortality in 48 h, with 69-84 % mortality respectively occurring in 24 h.

Comparable effects were seen with standard strain *Bt Kurstaki* although standard strain Bt HD 133 was less toxic on the water surface, which facilitated ingestion by surface feeding An. Tessellates larvae. The toxic effects of Bt6E and bt4 may be due to the presence of cry IV gene products. These results demonstrate that insecticidal toxins in Bt6E and Bt4 are toxic to Dipterans.