

Effect of Bt Cotton on Growth and Development of Tobacco Caterpillar, *Spodoptera litura* (Fab)

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ABSTRACT

The mortality of early larval instars of *S. litura* was higher compared to the later instars on both the leaves and squares of Bt_2 cotton hybrids. Moreover the mortality on leaves was higher compared to squares for all the larval instars in Bt_2 (Tulasi4BGII) compared to Bt_1 (Tulasi4Bt) and non-*Bt* (Bunny) cotton hybrids. Exposure of later instar larvae of *S. litura* to plant parts of Bt_2 cotton hybrids exhibited reduced larval weight, prolonged larval development period, reduced pupation, formation of small pupae with less weight, reduced adult emergence and low growth and survival index compared to Bt_1 and non-*Bt* cotton hybrids.

Key words : Bt_1 , Bt_2 , Non- *Bt* cotton hybrids, *Spodoptera litura*.