

## List of Tables

Sr No.	Table no.	Title	Page no.
1	Table 1.1	Incubation period, Number of adult emerged, Grain weight loss and Body length of <i>S. oryzae</i> in different host grains	28
2	Table 1.2	Effect of Insect Infestation on Quality Parameters of Grains	31
3	Table 1.3	Fecundity, Female: Male and longevity periods ( $\pm$ SEM) of <i>S. oryzae</i> on stored grains (24–30°C; 60 $\pm$ 10% RH; 12 h photophase)	33
4	Table 1.4	Grain loss/ day and Average grain consumption by single larvae/day (mg) ( $\pm$ SEM) of <i>S. oryzae</i> on stored grains	35
5	Table 2.1	Different concentration of FBS and ecdysone in growth media	48
6	Table 2.2	Describe the sequence of primers used to amplify COI and 16sRNA of the midgut cells of <i>S. oryzae</i>	51
7	Table 2.3	Depicts the primer sequence with its annealing temperature and product size for the characterization of SoMG cell line	57
8	Table 2.4	Depicts the % cell growth in Grace's media and TNM-FH media with different concentration of FBS and ecdysone with % difference in cell growth at 24 hrs	62
9	Table 2.5	Depicts the % cell growth in Grace's media and TNM-FH media with different Concentration of FBS and ecdysone with % difference in cell growth at 48 hrs	64
10	Table 2.6	Depicts the % cell growth in Grace's media and TNM-FH media with different concentration of FBS and ecdysone with % difference in cell growth at 72 hrs	66
11	Table 2.7	Depicts the % cell growth in Grace's media and TNM-FH media with different concentration of FBS and ecdysone with % difference in cell growth at 96 hrs	68
12	Table 2.8	Shows the Cell growth density at 24 hrs interval on 9th passage	70
13	Table 3.1	Depicts the primer sequence with its annealing temperature and product size for the ROS gene expression of SoMG cell line	94

14	Table 3.2	Shows the IC <sub>50</sub> values And their Sub lethal doses LD(IC <sub>50</sub> /20), MD (IC <sub>50</sub> /10) and HD (IC <sub>50</sub> /5) for the Fenitrothion and malathion on SoMG cell line as well as Sf9 cell line	97
15	Table 3.3	Effect of fenitrothion on SoMG and Sf9 Cell line in a dose and time dependant manner	108
16	Table 3.4	Effect of malathion on SoMG and Sf9 Cell line	109
17	Table 3.5	Depicts the mean± SD values of fluorecence in SoMG and Sf 9cells treated with sub-lethal doses of Fenitrothion and malathion for 24, 48, 72 and 96 hrs and stain with AO/EB	114
18	Table 3.6	Depicts the no of cells with alter cell morphology in SoMG cells treated with sub-lethal doses of fenitrothion for 24, 48, 72 and 96 hrs and stain with DAPI	118
19	Table 3.7	Depicts the mean± SD values of fluorecence in SoMG cells treated with sub-lethal doses of fenitrothion for 24, 48, 72 and 96 hrs and stain with DAPI	119
20	Table 3.8	Depicts the mean± SD values of fluorecence in SoMG cells treated with sub-lethal doses of fenitrothion for 24, 48, 72 and 96 hrs and stain with DCFH-DA	123
21	Table 3.9	Depicts the mean± SD values of Folds increase in SOD, GST and CAT in SoMG cells treated with sub-lethal doses of fenitrothion at 24, 48, 72 and 96 hrs	126
22	Table 3.10	Depicts the percentage of cell status treated with sublethal dose of fenitrothion at 24hrs, 48 hrs, 72 hrs and 96hrs	133
23	Table 3.11	Depicts the cells going in early apoptosis and apoptosis (in folds) in SoMG cells treated with sub-lethal doses of fenitrothion for 24, 48, 72 and 96 hrs	134
24	Table I	List of the most notable insect cell lines with the source of each and its applications in entomological research	142