

Table 1: Value of total haemocytocount in bacteria and temperature treated bivoltine accession

Day	Acc. No - 173		Acc. No - 176		Acc. No - 197		Acc. No - 265		Acc. No - 271		Acc. No - 275	
	Bacterial treated at 41°C	Treated at 41°C	Bacterial treated at 41°C	Treated at 41°C	Bacterial treated at 41°C	Treated at 41°C	Bacterial treated at 41°C	Treated at 41°C	Bacterial treated at 41°C	Treated at 41°C	Bacterial treated at 41°C	Treated at 41°C
1	13.296	24.919	7.554	36.686	24.144	1.447	31.238	37.668	19.812	29.273	10.406	30.100
2	39.474	30.794	17.516	38.424	24.877	27.754	38.878	33.541	44.114	18.398	27.930	39.787
3	35.096	32.674	36.022	45.725	56.885	45.661	51.870	31.089	61.899	36.144	71.922	53.022
4	44.510	25.448	84.586	57.278	73.648	46.258	44.510	40.877	59.229	57.057	99.115	26.296
5	62.186	38.961	70.949	54.089	76.826	7.17	62.186	41.506	86.453	61.771	72.995	45.576

Table 2: T value of total haemocyte count in bacteria injected mv accession and temperature treated multivoltine accession

S. No	Races	T.values
1	MV-0001	38.537
2	MV-0027	15.400
3	MV-0045	24.222
4	MV-0056	23.866
5	MV-0066	6.881

count was observed on the 5th day larvae. There was increase of THC counts in temperature treated bivoltine accession also but not as bacterial treated (Table1). The results obtained with bacteria treated and thermal treated larvae were statistically analyzed. Among 6 bivoltine, maximum inhibition zone of 2.1 CMs diameter was found in BBI-275 followed by BBI-197 with 2 CMs and other inhibition zone of 1.7 CMs BBI-173, 1.5CMs in BBI-176, 1.4 CMs in BBI-265 and 1.35 CMs in BBI-271. In case of multivoltine, maximum inhibition zone of 2.1 CMs was found in BMI-0045 followed by 1.9 CMs in BMI-0001. The results obtained in MV accessions were given in the table 2

The gel electrophoresis study indicated that the response varied among 6 bivoltine accessions maximum number of 4 bands were observed in BBI-197, followed by 3 bands in BBI-176.

DISCUSSION

The increase in the haemocyte counts in the bacteria injected larvae indicated the cellular responses to the foreign bodies. Similar observation were reported by Venkatasubbaiah *et al* 2001 in the BV larvae infected with Bombyx mori nuclear poly hocchoris virus (BmNPV). In the present study race A has indicated 4 extra protein band, which are directly correlated with maximum inhibition zone (2.0 CMs) in that particular accession. From the above study, it can be inferred that among multivoltine accession BMI-0045 are considered as resistant to bacterial infection based on inhibition zone assay. Among bivoltine BBI-0197 and BBI-0197 are considered as resistant to bacterial infections based on the appearance of extra protein observed in the electrophoresis study.

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