

CONTENTS

	pages
1. Introduction	1
2. Review of Literature	6
2.1 Impact of starvation on economic and reproductive characters.	6
2.2 Starvation and simultaneous application of juvenile hormone analogue methoprene - its impact on economic and reproductive characters.	14
2.3 Effects of imidazole compounds	19
3. Materials and Methods	29
4. Results	39
4.1 Consumption and utilization of food by the fifth instar larvae during dry part of summer.	39
4.2 Efficiency of conversion of digested food (ECD) due to daywise starvation during dry part of summer.	46
4.3 Economic characters due to daywise starvation during dry part of summer.	51
4.4 Reproductive performances due to daywise starvation during dry part part of summer.	59
4.5 Utilization of leaf nitrogen due to daywise starvation during dry part of summer.	64
	Contd....

4.6 Consumption and utilization of food by fifth instar larvae during wet part of summer.	70
4.7 Efficiency of conversion of digested food (ECD) due to daywise starvation during wet part of summer.	79
4.8 Economic characters due to daywise starvation during wet part of summer.	83
4.9 Reproductive performances due to daywise starvation during wet part of summer.	90
4.10 Utilization of leaf nitrogen due to daywise starvation during wet part of summer.	95
4.11 Determination of the doses of KK-42, KK-22 and KK-110 for induction of trimoulters in bivoltine (KPGB X P ₅) during wet part of summer.	101
4.12 Comparative performances of larvae treated with selected doses of imidazoles during wet part of summer.	112
4.13 Rearing performance of larvae treated with selected dose of imidazoles during wet part of summer.	113
4.14 Reproductive performance of induced trimoulters during wet part of summer.	115
4.15 Utilization of nitrogen in food by induced trimoulters of KPGB X P ₅ during wet part of summer.	116
4.16 Rearing performance in the next generation of KPGB X P ₅ reared from the eggs of induced trimoulters.	119
4.17 Rearing performance of polyvoltine (Nistari) female X induced trimoulter bivoltine male.	119

Contd...

5. Discussion	121
5.1 Consumption and assimilation of food by fifth instar larvae of <i>B.mori</i> during dry part of summer due to starvation on different days.	121
5.2 ECD during dry part of summer due to starvation on different days.	133
5.3 Economic characters(cocoon) caused due to daywise starvation during dry part of summer.	143
5.4 Reproductive characters caused due to daywise starvation during dry part of summer.	150
5.5 Utilization of nitrogen by the daywise starved fifth instar larvae during dry part of summer.	154
5.6 Consumption and assimilation of food by fifth instar larvae of <i>B.mori</i> during wet part of summer due to starvation on different days.	160
5.7 ECD during wet part of summer due to starvation on different days.	170
5.8 Economic characters(cocoon) caused due to daywise starvation during wet part of summer.	178
5.9 Reproductive characters caused due to daywise starvation during wet part of summer.	184
5.10 Utilization of nitrogen by the daywise starved fifth instar larvae during wet part of summer.	187
5.11.Determination of dose of imidazoles KK-42, KK-110 and KK-22 for induction of trimoulters in bivoltine during wet part of summer.	194
	Contd...

5.12 Comparative nutritional efficiencies of induced trimoulters due to selected dose of imidazoles during wet part of summer.	203
5.13 Comparative effect of different imidazoles on rearing performance during wet part of summer.	205
5.14 Reproductive performances of induced trimoulters during wet part of summer.	207
5.15 Utilization of nitrogen in food by induced trimoulters during wet part of summer.	209
5.16 Rearing performance at the next generation of induced trimoulters.	212
5.17 Rearing performance of the hybrids of the three way crosses of Nistari X induced trimoulters bivoltine males.	213
6. Summary	216 - 222
7. References	223 - 257

.....