

TABLES AND FIGURES	Page No.
Chapter I - Introduction	
Figure: Sheet web of a ground spider <i>Hippasa sp.</i>	13
Figure: Orb web of <i>Argiope aemula</i>	13
Figure: Irregular web of <i>Cyrtophora cicatrosa</i>	14
Figure: Irregular web of <i>S.sarasinorum</i>	14
Figure: Web of <i>S. sarasinorum</i> on a barbed wire fence	15
Figure: Labyrinths in the web of <i>S. sarasinorum</i> with egg masses	15
Figure: Sub-adult of <i>S. sarasinorum</i> in Field	16
Figure: Mature females of <i>S.sarasinorum</i> in Laboratory	16

Chapter III – Materials and Methods	
Figure: Location of the Study site	31
Figure: Paddy crop at the study site	49
Figure: Shrubs of <i>Prosopis</i> at the study site	49
Figure: Collection of spider webs for laboratory rearing and specimen collection of insects trapped in the web	50
Figure: Laboratory rearing of <i>S. sarasinorum</i> ; mature female with sub-adults in the rearing jar	50
Figure: Topical Application of chemical; droplet seen on the dorsal anterior abdomen of the spider <i>S. sarasinorum</i>	51
Figure: Vial Coating Method; <i>S. sarasinorum</i> spider released in treated vial	51

Chapter IV – Results	
A Field studies	
Table A1.1: List of pests found in the crops at the study site	54
Table A1.2 : List of spiders of different guilds found in the crops at the study site.	54
Table A1.3 : Total list of insects found in the webs of <i>S. sarasinorum</i>	56
Table A1.4 : The list of insects found in the web of <i>S.sarasinorum</i> in (Kharif) monsoon cropping season	57
Table A1.5 : The list of insects found in the web of <i>S.sarasinorum</i> in (Rabi) winter cropping season	57

TABLES AND FIGURES (Contd.)	Page No.
Figure A1.1: Order wise distribution of insects found in web of <i>S.sarasinorum</i> in (Kharif) monsoon cropping season	58
Figure A1.2 : Order wise distribution of insects found in web of <i>S.sarasinorum</i> in (Rabi) winter cropping season	59
Figure A1.3 : Family wise distribution of insects found in web of <i>S.sarasinorum</i> in (Kharif) monsoon cropping season	58
Figure A1.4 : Family wise distribution of insects found in web of <i>S.sarasinorum</i> in (Rabi) winter cropping season	59
Figure: Several insects of Order Diptera	80
Figure: Melanogromyza obtusa	80
Figure: Coccinellid beetle	81
Figure: Chrysomelid beetle	81
Figure: Gryllus compestris	82
Figure: Acridium succintum	82
Figure: Euconocephalus sp	83
Figure: Nezara viridula	83
Figure: Membracid bug	84
Figure: Buprestid beetle	84
Figure: Lygaeus militaris	85
Figure: Scarabid beetle	85
Figure: Euchrysops cnejus	86
Figure: Noctuid Moth	86
B Laboratory studies	
Table B1.1: LC50 and LD50 Values (in ppm) of the chemical pesticide tested on social spider <i>Stegodyphus sarasinorum</i>	63
Table B1.2: Web building rating (mean of 3 tests) for both methods of exposure to the chemical pesticides tested on social spider <i>Stegodyphus sarasinorum</i>	63
Figure B1.1: Impact of Topical application of five agrochemicals at various doses on the mortality of social spider <i>Stegodyphus sarasinorum</i>	64
Figure B1.2: Impact of Vial coating of five agrochemicals at various concentrations on the mortality of social spider <i>Stegodyphus sarasinorum</i>	64

TABLES AND FIGURES (Contd.)	Page No.
Table B2.1: Mean activity of AChE found in <i>S.sarasinorum</i> for different insecticide treatments.	70
Table B2.2: Mean level of LPO found in <i>S.sarasinorum</i> for different insecticide treatments.	70
Table B2.3: Mean activity of GST found in <i>S.sarasinorum</i> for different insecticide treatments.	71
Table B2.4: Mean activity of GSH found in <i>S.sarasinorum</i> for different insecticide treatments.	71
Figure B2.1: Acetylcholine esterase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via topical application.	72
Figure B2.2 : Acetylcholine esterase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via Vial Coating	73
Figure B2.3: Lipid Peroxidase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via topical application.	74
Figure B2.4: Lipid Peroxidase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via Vial Coating.	75
Figure B2.5: Glutathione S Transferase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via topical application.	76
Figure B2.6: Glutathione S Transferase activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via Vial Coating.	77
Figure B2.7: Reduced Glutathione activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via topical application	78
Figure B2.8: Reduced Glutathione activity in <i>Stegodyphus sarasinorum</i> exposed to five agrochemicals at sublethal dose via Vial Coating.	79