

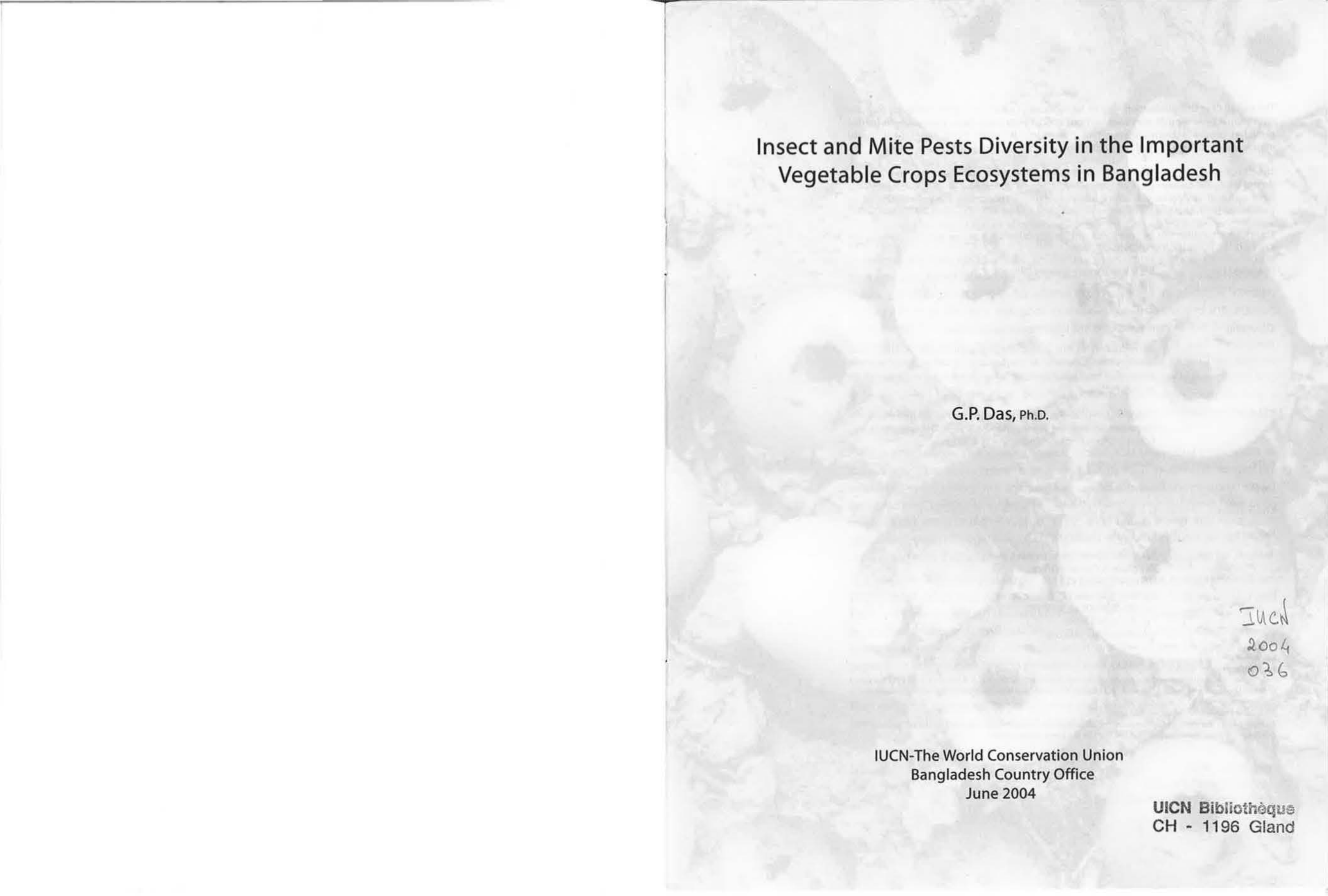


## Insect and Mite Pests Diversity in the Important Vegetable Crops Ecosystems in Bangladesh

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G.P. Das, Ph.D.

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Bangladesh Country Office  
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Fax: 880-2-9892854  
E-mail: info@iucnbd.org

**Cover Photos:**

*Front Cover (From left to right):*

A cut open brinjal fruit showing the nature of damage by the brinjal shoot and fruit borer, A country bean pod damaged by the flower and pod borer, A 'pani kachu' (low land taro) leaf damaged by the common cutworm.

*Back Cover (From left to right):*

A country bean leaf damaged by the country bean leaf paster, A cucurbit leaf damaged by the epilachna beetles, A cut open sweet potato root damaged by the sweet potato weevil.

## Foreword

Biodiversity or, the diversity of life has always fascinated people everywhere. It constitutes the outcome of the evolutionary processes of living organisms. The numbers of the flora and the fauna and their diversities increased geometrically through perhaps 2.5 billion years, proliferating by biological processes, and controlled by natural selection, filling almost every habitable ecological niche all around us. Biodiversity, also called "natural capital" consists of every form of life from microbes to the mightiest beasts and the gigantic trees. Bangladesh with her warm and humid climate is very rich in biodiversity including mammals, birds, reptiles, amphibians, marine and freshwater species, angiosperms, soil organisms, insects, etc. To date, a lot of discussions have taken place in our country, mostly centred around the higher plants and animals. Insects constitute a great richness in biodiversity, contributing a massive 70 per cent share in the global animal kingdom, notwithstanding the comparative negligence in their studies and documentation.

Documentation on the diverse insects, mites and vegetable crop pests in Bangladesh has been rather scanty and sporadic. It is difficult to get the scientific names along with the taxonomic position of all the recorded insect and mite pest species of vegetable crops in one document. Efforts have been made in the present publication to bring together all insect and mite pests associated with the vegetable crops recorded in whatever form since 1948 to date, along with their current scientific names, orders, families, pest status, etc.

The insect and mite pest diversity in the vegetable crops ecosystems will not only remind us of their richness and status, but will also help us understand their roles in maintaining the natural balance in the ecosystem. This will also facilitate the research and documentation of insects from other cropping systems. It is hoped that the publication will be of use to the students, academics, scientists, extension personnel, environmentalists, etc.

This publication is an additional outcome of the Biodiversity Strategic Action Plan project. I appreciate the hard work and sincere efforts of Dr. G. P. Das in preparing such a handy and useful document.

Dhaka  
June 2004

Dr. Ainun Nishat  
Country Representative  
IUCN Bangladesh Country Office

# Insect and Mite Pests Diversity in the Important Vegetable Crops Ecosystems in Bangladesh

**G. P. Das<sup>1</sup>**

Tuber Crops Research Centre  
Bangladesh Agricultural Research Institute  
Joydebpur, Gazipur, Bangladesh

## **Abstract**

Since 1948 (the practical beginning of the crop entomology in the area now called Bangladesh) the insect and mite pests of different crops have been recorded and documented. The paper reports the insect and mite pests recorded and documented during 1948 and 2003 from the vegetable crops (brinjal, potato, sweet potato, aroids, yams, cabbage, cauliflower, knolkhol, radish, turnip, lady's finger, tomato, cucurbits, beans, kangkong, lettuce and amaranthus) ecosystems with their common and scientific names, orders, families and pest status (key / major, minor and occasional). Over 175 species of insect and mite pests have been recorded from the vegetable crops ecosystems in Bangladesh. This testifies the great diversity of the insect and mite pests in the vegetable crops ecosystems here.

## **Introduction**

Research on the crop entomology in the region now called Bangladesh practically started from 1948 after the partition of the British India. Since then the insect and mite pests of different crops have been recorded and documented in different journals, reports, books, reviews, etc. It is hard to get all information together in one place. In the present contribution attempts have been made to compile the insect and mite pest species recorded from different vegetable crops (brinjal, potato, sweet potato, aroids, yams, cabbage,

<sup>1</sup> Present address: Agricultural Biotechnology Support Project II (ABSP II), House 18, Road 4, Sector 4, Uttara, Dhaka.

cauliflower, knolkhol, radish, turnip, lady's finger, tomato, cucurbits, beans, kangkong, lettuce and amaranthus) with their common and scientific names, orders, families and pest status (key / major, minor and occasional). Pertinent references have been thoroughly consulted and cited.

**List of the insect and mite pest species associated with the important vegetable crops ecosystems in Bangladesh**

The recorded insect and mite pest species of the important vegetable crops in Bangladesh are listed in Table 1. Attempts have been made to use the current scientific names of the insect and mite pest species. In some cases the synonyms have also been given.

**Table 1. Insect and mite pests of the important vegetable crops ecosystems in Bangladesh.**

Common name	Scientific name	Order	Family	Status	Reference
Brinjal					
Shoot and fruit borer	<i>Leucinodes orbonalis</i> Guenee	Lepidoptera	Pyralidae	Major	Alam <i>et al.</i> , 1964; Alam, 1967; Alam, 1969; Islam, 1999; Das, 2003
Epilachna beetle	<i>Henosepilachna</i> (= <i>Epilachna</i> ) <i>vigintioctopunctata</i> (Fab.)	Coleoptera	Coccinellidae	Major	
Epilachna beetle	<i>Epilachna dodecastigma</i> (Wied.)	Coleoptera	Coccinellidae	Major	
Leafhopper (Jassid)	<i>Amrasca</i> (= <i>Empoasca</i> ) <i>devastans</i> (Distant)	Homoptera	Cicadellidae (= Jassidae)	Major	
Leafhopper	<i>Nephotettix bipunctatus</i> Fab.	Homoptera	Cicadellidae	Minor	
Mealy bug	<i>Coccidohystrix</i> (= <i>Centrocooccus</i> ) <i>insolitus</i> (Green)	Pseudococcidae	Homoptera	Major	
Black cutworm	<i>Agrotis ipsilon</i> (Hufnagel)	Lepidoptera	Noctuidae	Major	
Black ant	<i>Camponotus compressus</i> Fab.	Hymenoptera	Formicidae	Minor	
Brown ant	<i>Tetramorium guineenae</i> Fab.	Hymenoptera	Formicidae	Major	
Field cricket	<i>Brachytrypes portentosus</i> Licht.	Orthoptera	Gryllidae	Major	
Leaf roller	<i>Antoba</i> (= <i>Eublemma</i> ) <i>olevacea</i> (Walker)	Lepidoptera	Noctuidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Hairy caterpillar	<i>Selepa celtis</i> Moore	Lepidoptera	Noctuidae	Major	
Aphid	<i>Aphis gossypii</i> Glover	Homoptera	Aphididae	Minor	
Lace wing bug	<i>Urentius hystricellus</i> (Richter) (= <i>U. echinus</i> Distant)	Hemiptera	Tingidae	Minor	
Grass-hopper	<i>Atractomorpha psittacina</i> De Haan	Orthoptera	Acrididae	Minor	
Leaf beetle	<i>Luperomorpha birmanica</i> (Jacoby)	Coleoptera	Chrysomelidae	Minor	
Leaf beetle	<i>Luperomorpha vittata</i> Duvivier	Coleoptera	Chrysomelidae	Minor	
Leafhopper	<i>Nirvana</i> sp.	Homoptera	Jassidae	Minor	
Stem borer	<i>Euzophera perticella</i> Ragonot	Lepidoptera	Pyralidae	Minor	
Grass-hopper	<i>Orthacris</i> sp.	Orthoptera	Acrididae	Minor	
Lace wing bug	<i>Urentius sentis</i> Distant	Hemiptera	Tingidae	Minor	
Lace wing bug	<i>Urentius</i> sp.	Hemiptera	Tingidae	Minor	
Leaf feeder	<i>Euproctis virguncula</i> Walker	Lepidoptera	Lymantriidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Leaf feeder	<i>Cryptothrips aculta</i> L.	Lepidoptera	Noctuidae	Minor	
Brown grasshopper	<i>Crotogonus</i> sp.	Orthoptera	Acrididae	Minor	
Leaf beetle	<i>Monolepta signata</i> (Olivier)	Coleoptera	Chrysomelidae	Minor	
Hooded hopper	<i>Oxyrhachis tarandus</i> Fab.	Homoptera	Membracidae	Minor	
Mite	Tetranychid mite (unidentified)	Acarina	Tetranychidae	Minor	
<b>Potato</b>					
Black cutworm	<i>Agrotis ipsilon</i> (Hufnagel)	Lepidoptera	Noctuidae	Major	Alam <i>et al.</i> , 1964; Alam, 1969;
Field cricket	<i>Brachytrypes portentosus</i> Licht.	Orthoptera	Gryllidae	Minor	Ahmed <i>et al.</i> , 1991; Karim, 1993; Das, 1995, 1997a; Das, 2003
Small red ant	<i>Dorylus orientalis</i> Westwood	Hymenoptera	Formicidae	Minor	
Black ant	<i>Pheidologeton diversus</i> (Jerdon)	Hymenoptera	Formicidae	Minor	
Green peach aphid	<i>Myzus persicae</i> (Sulzer)	Homoptera	Aphididae	Major	
Aphid	<i>Aphis gossypii</i> Glover	Homoptera	Aphididae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Aphid	<i>Macrosiphum euphorbiae</i> (Thomas) (= <i>Macrosiphum solanifolii</i> Ashmead)	Homoptera	Aphididae	Minor	
Leafhopper	<i>Amrasca devastans</i> (Distant)	Homoptera	Cicadellidae	Major	
Whitefly	<i>Bemisia tabaci</i> (Gennadius)	Homoptera	Aleyrodidae	Minor	
Epilachna beetle	<i>Henosepilachna</i> (= <i>Epilachna</i> ) <i>vigintiotopunctata</i> (Fab.)	Coleoptera	Coccinellidae	Minor	
Epilachna beetle	<i>Epilachna dodecastigma</i> (Wied.)	Coleoptera	Coccinellidae	Minor	
Hairy caterpillar	<i>Dasychira mendosa</i> Hubner	Lepidoptera	Lymantriidae	Minor	
Jute hairy caterpillar	<i>Spilarchtia</i> (= <i>Spilosoma</i> ) <i>obliqua</i> (Walker)	Lepidoptera	Arctiidae	Minor	
Leaf beetle	<i>Monolepta signata</i> Olivier	Coleoptera	Chrysomelidae	Minor	
Leaf beetle	<i>Monolepta orientalis</i> (Jacoby)	Coleoptera	Chrysomelidae	Minor	
Mealy bug	<i>Pseudococcus nipae</i> Maskell	Homoptera	Pseudococcidae	Minor	
Potato tuber moth (in home storage)	<i>Phthorimaea operculella</i> (Zeller)	Lepidoptera	Gelechiidae	Major	
White mite	<i>Hemitarsonemus latus</i> Banks	Acarina	Tetranychidae	Minor	
Fly (sorghum shoot fly)	<i>Atherigona excisa</i> Thomas	Diptera	Muscidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
<b>Sweet potato</b>					
Sweet potato weevil	<i>Cylas formicarius</i> (Fab.)	Coleoptera	Curculionidae (Apionidae)	Major	Alam <i>et al.</i> , 1964; Alam, 1969; Das and Islam, 1985a; Das, 1994
Sweet potato weevil	<i>Blosyrus asellus</i> Marshall	Coleoptera	Curculionidae	Major	
Sweet potato weevil	<i>Manophyas</i> sp.	Coleoptera	Curculionidae	Major	
Jute hairy caterpillar	<i>Spilarchtia</i> (= <i>Spilosoma</i> ) <i>obliqua</i> (Walker)	Lepidoptera	Arctiidae	Occasional	
Black hairy caterpillar	<i>Estigmene chinensis</i> Hope	Lepidoptera	Arctiidae	Minor	
Sweet potato vine borer	<i>Omphisa anastomosalis</i> (Guenee)	Lepidoptera	Pyralidae	Minor	
Sweet potato horn worm (sphinx moth)	<i>Herse convolvuli</i> (Linn.)	Lepidoptera	Sphingidae	Minor	
Sweet potato hairy caterpillar	<i>Pericallia ricini</i> (Fab.)	Lepidoptera	Arctiidae	Minor	
Sweet potato leaf caterpillar	<i>Euchromia polymena</i> Linn.	Lepidoptera	Syntomidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Sweet potato tortoise beetle	<i>Aspidomorpha dorsata</i> Fab.	Coleoptera	Chrysomelidae	Minor	
Sweet potato tortoise beetle	<i>Metriona circumdata</i> Herbst	Coleoptera	Chrysomelidae	Minor	
Sweet potato bug	<i>Oliarus lodgarti</i> Distant	Hemiptera	Cixiidae	Minor	
Sweet potato hopper	<i>Exitianus indicus</i> Distant	Homoptera	Cicadellidae	Minor	
Sweet potato beetle	<i>Carphurus</i> sp.	Coleoptera	Melanchiidae	Minor	
<b>Aroids</b>					
Red spider mite	<i>Tetranychus</i> sp.	Acarina	Tetranychidae	Major	Das, 1995, 1997b, 1998
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Occasional	
Taro hornworm	<i>Hippotion celerio</i> (Linn.)	Lepidoptera	Sphingidae	Major	
Leafhopper	<i>Amrasca</i> (= <i>Empoasca</i> ) sp.	Homoptera	Cicadellidae	Minor	
Whitefly	<i>Bemisia tabaci</i> (Gennadius)	Homoptera	Aleyrodidae	Minor	
Aphid	<i>Aphis gossypii</i> Glover	Homoptera	Aphididae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
<b>Yams</b>					
Leaf and bulbil feeder	<i>Lilioceris impressa</i> (Fabricius)	Coleoptera	Chrysomelidae	Major	Das and Islam, 1984
<b>Cabbage</b>					
Black cutworm	<i>Agrotis ipsilon</i> (Hufnagel)	Lepidoptera	Noctuidae	Minor	Alam <i>et al.</i> , 1964; Alam, 1969; Ali and Karim, 1995; Biswas <i>et al.</i> , 1996; Das, 1998
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Major	
Diamond-back moth	<i>Plutella xylostella</i> (Linn.)	Lepidoptera	Yponomeutidae (Plutellidae)	Major	
Semilooper	<i>Plusia orichalcea</i> (Fab.)	Lepidoptera	Noctuidae	Minor	
Aphid	<i>Lipaphis erysimi</i> (Kaltenbach)	Homoptera	Aphididae	Minor	
Butterfly	<i>Pieris brassicae</i> (Linn.)	Lepidoptera	Pieridae	Minor	
Butterfly	<i>Pieris canidia</i> (Sparrman)	Lepidoptera	Pieridae	Minor	
Butterfly	<i>Pieris hecabe</i> Linn.	Lepidoptera	Pieridae	Minor	
Butterfly	<i>Prioneris sita</i> Linn.	Lepidoptera	Pieridae	Minor	
Leaf beetle	<i>Lema coromendaliansis</i> Fab.	Coleoptera	Chrysomelidae	Minor	
Leaf beetle	<i>Haltica cyanea</i> Weber	Coleoptera	Chrysomelidae	Minor	



Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Fly	<i>Sciara rufithorax</i> Wulp.	Diptera	Sciaridae	Major	
Cabbage borer	<i>Hellula undalis</i> (Fab.)	Lepidoptera	Pyralidae	Major	
Aphid	<i>Brevicoryne brassicae</i> (Linn.)	Homoptera	Aphididae	Major	
Mustard caterpillar	<i>Crocidolomia binotalis</i> Zeller	Lepidoptera	Pyralidae	Minor	
Bug	<i>Murgantia histrionica</i> (Hahn)	Hemiptera	Pentatomidae	Minor	
Epilachna beetle	<i>Epilachna dodecastigma</i> (Wied.)	Coleoptera	Coccinellidae	Minor	
Leafhopper	<i>Nephotettix bipunctatus</i> Fab.	Homoptera	Cicadellidae	Minor	
Grasshopper	<i>Atractomorpha crenulata</i> Fab.	Orthoptera	Acrididae	Minor	
Leaf miner	<i>Phytomyza horticola</i> Goureau	Diptera	Agromyzidae	Minor	
Flea beetle	<i>Phyllotreta cruciferae</i> (Goeze)	Coleoptera	Chrysomelidae	Minor	
<b>Cauliflower</b>					
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Major	Alam <i>et al.</i> , 1964; Alam 1969; Ali and Karim, 1995; Rashid and Singh, 2000
Diamond-back moth	<i>Plutella xylostella</i> (Linn.)	Lepidoptera	Yponomeutidae (Plutellidae)	Major	
Aphid	<i>Lipaphis erysimi</i> (Kaltenbach)	Homoptera	Aphididae	Major	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Butterfly	<i>Pieris brassicae</i> (Linn.)	Lepidoptera	Pieridae	Minor	
Butterfly	<i>Pieris canidia</i> (Sparrman)	Lepidoptera	Pieridae	Minor	
Butterfly	<i>Pieris hecabe</i> Linn.	Lepidoptera	Pieridae	Minor	
Fly	<i>Sciara rufithorax</i> Wulp.	Diptera	Sciaridae	Major	
<b>Knolkhol</b>					
Aphid	<i>Lipaphis erysimi</i> (Kaltenbach)	Homoptera	Aphididae	Major	Alam <i>et al.</i> , 1964; Alam, 1969; Ali and Karim, 1995
Mustard caterpillar	<i>Crocidolomia binotalis</i> Zeller	Lepidoptera	Pyralidae	Major	
Diamond-back moth	<i>Plutella xylostella</i> (Linn.)	Lepidoptera	Yponomeutidae (Plutellidae)	Minor	
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Major	
Butterfly	<i>Pieris brassicae</i> (Linn.)	Lepidoptera	Pieridae	Minor	
Beetle	<i>Phyllotreta chotanica</i> Duvivier	Coleoptera	Chrysomelidae	Minor	
<b>Radish</b>					
Leaf beetle	<i>Haltica cyanea</i> Weber	Coleoptera	Chrysomelidae	Minor	Alam <i>et al.</i> , 1964; Alam, 1969; Ali and Karim, 1995; Rashid and Singh, 2000
Leaf beetle	<i>Phyllotreta brassicae</i> Alam	Coleoptera	Chrysomelidae	Minor	
Leaf beetle	<i>Phyllotreta</i> sp.	Coleoptera	Chrysomelidae	Minor	
Bug	<i>Eurydema pulchrum</i> Westw.	Hemiptera	Pentatomidae	Minor	
Aphid	Unidentified	Homoptera	Aphididae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Major	
Diamond-back moth	<i>Plutella xylostella</i> (Linn.)	Lepidoptera	Yponomeutidae (Plutellidae)	Major	
<b>Turnip</b>					
Leaf beetle	<i>Haltica cyanea</i> Weber	Coleoptera	Chrysomelidae	Minor	Alam <i>et al.</i> , 1964; Alam, 1969; Ali and Karim, 1995
Diamond-back moth	<i>Plutella xylostella</i> (Linn.)	Lepidoptera	Yponomeutidae (Plutellidae)	Minor	
Aphid	<i>Lipaphis erysimi</i> (Kaltenbach)	Homoptera	Aphididae	Major	
<b>Lady's finger</b>					
Shoot and fruit borer	<i>Earias vittella</i> (Fab.)	Lepidoptera	Noctuidae	Major	Alam <i>et al.</i> , 1964; Alam, 1967; Alam, 1969; Karim, 1993; Das, 1998
Leafhopper	<i>Amrasca (=Empoasca) devastans</i> (Distant)	Homoptera	Cicadellidae (=Jassidae)	Major	
Whitefly	<i>Bemisia tabaci</i> (Gennadius)	Homoptera	Aleyrodidae	Major	
Leaf roller	<i>Syllepte derogata</i> (Fab.)	Lepidoptera	Pyralidae	Major	
Leaf roller	<i>Syllepte</i> sp.	Lepidoptera	Pyralidae	Minor	
Red cotton bug	<i>Dysdercus cingulatus</i> (Fab.)	Hemiptera	Pyrrhocoridae	Major	
Aphid	<i>Aphis gossypii</i> Glover	Homoptera	Aphididae	Major	
Leaf beetle	<i>Pachnophorus bretinghami</i> Baly	Coleoptera	Chrysomelidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Leaf beetle	<i>Formiconus antiquus</i> Kerr	Coleoptera	Anthicidae	Minor	
Shoot borer	<i>Atmetonychus peregrinus</i> Olivier	Coleoptera	Curculionidae	Major	
Root feeder	<i>Mylocerus 11-pustulatus</i> Faust	Coleoptera	Curculionidae	Minor	
Leaf feeding beetle	<i>Heminodes indicus</i> Jacoby	Coleoptera	Eumolpidae	Minor	
Leaf feeding beetle	<i>Monolepta orientalis</i> (Jacoby)	Coleoptera	Chrysomelidae	Minor	
Leaf feeding beetle	<i>Melanepthalma distinguenda</i> C.	Coleoptera	Lathridiidae	Minor	
Spittle bug	<i>Ptyelus nebulosus</i> Fab.	Homoptera	Cercopidae	Minor	
Spittle bug	<i>Rhopalus macropictus</i> Distant	Homoptera	Cercopidae	Minor	
Lygaeid bug	<i>Paromius exiguus</i> Distant	Hemiptera	Lygaeidae	Minor	
Pentatomid bug	<i>Dolycoris indicus</i> Stal	Hemiptera	Pentatomidae	Minor	
Leaf roller	<i>Syllepte</i> sp.	Lepidoptera	Pyralidae	Minor	
Mite	<i>Lasioselus</i> sp.	Acarina	Aceosejidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
<b>Tomato</b>					
Fruit borer	<i>Helicoverpa armigera</i> (Hubner)	Lepidoptera	Noctuidae	Minor	Alam <i>et al.</i> , 1964; Alam, 1969; Islam, 1999; Kabir <i>et al.</i> , 1991; Rashid and Singh, 2000
Aphid	<i>Aphis craccivora</i> Koch	Homoptera	Aphididae	Major	
Epilachna beetle	<i>Henosepilachna</i> (= <i>Epilachna</i> ) <i>vigintioctopunctata</i> (Fab.)	Coleoptera	Coccinellidae	Major	
Epilachna beetle	<i>Epilachna dodecastigma</i> (Wied.)	Coleoptera	Coccinellidae	Major	
Leafhopper (Jassid)	<i>Amrasca</i> (= <i>Empoasca</i> ) <i>devastans</i> (Distant)	Homoptera	Cicadellidae (= Jassidae)	Major	
Common cutworm	<i>Spodoptera litura</i> (Fabricius)	Lepidoptera	Noctuidae	Major	
Fruit fly	<i>Dacus cucurbitae</i> (Coquillett)	Diptera	Tephritidae	Minor	
Aphid	<i>Geoica lucifugas</i> (Zhut.)	Homoptera	Aphididae	Minor	
Aphid	<i>Rhopalosiphum maidis</i> (Fitch)	Homoptera	Aphididae	Minor	
Aphid	<i>Rhopalosiphum rufi-abdominalis</i> (Sasaki)	Homoptera	Aphididae	Minor	
Aphid	<i>Schizaphis minuta</i> (V.d.G.)	Homoptera	Aphididae	Minor	
Aphid	<i>Tetraneura hirsuta</i> (Baker)	Homoptera	Aphididae	Minor	
Aphid	<i>Tetraneura nigriabdominalis</i> (Sasaki)	Homoptera	Aphididae	Minor	
Mealy bug	<i>Pseudococcus virgatus</i> (Cockerell)	Homoptera	Pseudococcidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
<b>Cucurbits</b>					
Pumpkin beetle	<i>Aulacophora</i> (= <i>Raphidopalpa</i> ) <i>foveicollis</i> (Lucas)	Coleoptera	Chrysomelidae	Major	Alam <i>et al.</i> , 1964; Alam, 1967; Alam, 1969; Kabir <i>et al.</i> , 1991; Karim, 1993; Ahmed <i>et al.</i> , 1996; Akhtaruzzaman <i>et al.</i> , 1999; Das, 1998; Rashid and Singh, 2000 (pers.obs. of the author)
Pumpkin beetle	<i>Aulacophora abdominalis</i> Fab.	Coleoptera	Chrysomelidae	Major	
Pumpkin beetle	<i>Aulacophora frontalis</i> Baly	Coleoptera	Chrysomelidae	Minor	
Epilachna beetle	<i>Henosepilachna</i> (= <i>Epilachna</i> ) <i>vigintioctopunctata</i> (Fab.)	Coleoptera	Coccinellidae	Major	
Epilachna beetle	<i>Epilachna dodecastigma</i> (Wied.)	Coleoptera	Coccinellidae	Major	
Epilachna beetle	<i>Epilachna varivestis</i> (= <i>corrupta</i> ) Mulsant	Coleoptera	Coccinellidae	Minor	
Epilachna beetle	<i>Epilachna sparsa</i> (Hbst.)	Coleoptera	Coccinellidae	Minor	
Epilachna beetle	<i>Epilachna septima</i> Dieke	Coleoptera	Coccinellidae	Minor	
Fruit fly	<i>Bactrocera</i> ( <i>Dacus</i> ) <i>cucurbitae</i> (Coquillett)	Diptera	Tephritidae (Trypetidae)	Major	
Fruit fly	<i>Dacus caudatus</i> Fab.	Diptera	Tephritidae	Major	
Flea beetle	<i>Phyllotreta chotanica</i> Duvivier	Coleoptera	Chrysomelidae	Minor	
Stem fly	<i>Lasioptera falcata</i> Felt	Diptera	Ceceidomyiidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Flower beetle	<i>Carpophilus cylindricus</i> Mur.	Coleoptera	Nitidulidae	Minor	
Shoot borer	<i>Apomecyna neglecta</i> Pasc.	Coleoptera	Cerambycidae	Minor	
Pentatomid bug	<i>Aspongopus</i> (= <i>Coridius</i> ) <i>janus</i> Fab.	Hemiptera	Pentatomidae	Minor	
Pentatomid bug	<i>Aspongopus</i> sp.	Hemiptera	Pentatomidae	Minor	
Mirid bug	<i>Nesidiocoris</i> (= <i>Cyrtopeltis</i> ) sp.	Hemiptera	Miridae	Minor	
Coreid bug	<i>Leptoglossus australis</i> (= <i>membranaceus</i> ) (Fab.)	Hemiptera	Coreidae	Minor	
Leaf hopper	<i>Exitianus indicus</i> (Distant)	Homoptera	Cicadellidae	Minor	
Shoot borer	<i>Melittia indica</i> Butl.	Lepidoptera	Sesiidae	Minor	
Hooded hopper	<i>Leptocentrus taurus</i> (Fab.)	Homoptera	Membracidae	Minor	
Thrips	<i>Thrips flavidus</i> Bagnall	Thysanoptera	Thripidae	Minor	
Pumpkin caterpillar	<i>Diaphania indica</i> (Saunders)	Lepidoptera	Pyralidae	Minor	
Leaf hopper	<i>Exitianus</i> sp.	Homoptera	Cicadellidae	Minor	
Pentatomid bug	<i>Aspongopus brunneus</i> Thunberg	Hemiptera	Pentatomidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Fly	<i>Sciara rufithorax</i> Wulp.	Diptera	Sciaridae	Major	
Skipper	<i>Gegines gullatus</i> B. & G.	Lepidoptera	Hesperiidae	Minor	
Bug	<i>Agonoscelis nubila</i> Fab.	Hemiptera	Pentatomidae	Minor	
Ant	<i>Phedologeton diversus</i> (Jerdon)	Hemiptera	Formicidae	Minor	
Vine boring beetle	<i>Apomecyna saltator</i> Fab. (= <i>pertigera</i> Thomson)	Lepidoptera	Lamiidae	Minor	
Aphid	<i>Aphis gossypii</i> Glover	Homoptera	Aphididae	Minor	
Fruit fly	<i>Bactrocera tau</i> (Walker)	Diptera	Tephritidae (Trypetidae)	Minor	
Fruit fly	<i>Dacus ciliatus</i> (Loew)	Diptera	Tephritidae	Minor	
Fruit fly	<i>Dacus diversus</i> (Coquillett)	Diptera	Tephritidae	Minor	
Mite	<i>Tetranychus</i> sp.	Acarina	Tetranychidae	Minor	
<b>Beans</b>					
Aphid	<i>Aphis craccivora</i> Koch*	Homoptera	Aphididae	Major	Alam <i>et al.</i> , 1964; Alam, 1967; Alam, 1969; Das and Islam, 1985b,c; Ahmad and Sardar, 1994;
Aphid	<i>Aphis medicaginis</i> Koch*	Homoptera	Aphididae	Major	Das, 1998; Islam, 1999;
Flower and pod borer	<i>Maruca vitrata</i> (= <i>testulalis</i> ) (Geyer)	Lepidoptera	Pyralidae	Major	Rashid and Singh, 2000
Flower and pod borer	<i>Helicoverpa armigera</i> (Hubner)	Lepidoptera	Noctuidae	Minor	
Flower and pod borer	<i>Euchrysops cnejus</i> (Fab.)	Lepidoptera	Lycaenidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Leaf miner	<i>Cosmopteryx</i> sp.	Lepidoptera	Cosmopterygidae	Major	
Country bean leaf paster	<i>Hedylepta</i> (=Laprosema) <i>indicata</i> (Fab.)	Lepidoptera	Pyralidae	Minor	
Bug	<i>Coptosoma cribarium</i> (Fab.)	Hemiptera	Pentatomidae	Major	
Green semilooper	<i>Plusia orichalcea</i> (Fab.)	Lepidoptera	Noctuidae	Minor	
Hooded hopper	<i>Leptocentrus taurus</i> (Fab.)	Homoptera	Membracidae	Minor	
Shoot borer	<i>Sagra carbunculus</i> Hope	Coleoptera	Chrysomelidae	Minor	
Moth	<i>Amata pasalis</i> Fab.	Lepidoptera	Syntomidae	Minor	
Pod borer	<i>Adisura atkinsoni</i> Moore	Lepidoptera	Noctuidae	Minor	
Leaf weevil	<i>Colposcelis kanarensis</i> Jacoby	Coleoptera	Chrysomelidae	Minor	
Cowpea bug	<i>Riptorus fuscus</i> (Fab.)	Hemiptera	Alydidae	Minor	
Bean fly	<i>Ophiomyia phaseoli</i> (Tryon) (= <i>Agromyza phaseoli</i> (Tryon))	Diptera	Agromyzidae	Minor	

\* In the economic literature *Aphis craccivora* occurs for many decades under the name of *Aphis medicaginis*, both of them are now recognized as distinct species (Ilharco and Van Harten, 1987).

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Pea stem fly	<i>Agromyza</i> sp.	Diptera	Agromyzidae	Minor	
Stem fly	<i>Celyphus obtectus</i> Dalm.	Diptera	Celyphidae	Minor	
Shoot borer	<i>Sagra femorata</i> (Drury)	Coleoptera	Chrysomelidae	Minor	
Shoot weevil	<i>Alcides collaris</i> Pascoe	Coleoptera	Curculionidae	Minor	
Leaf weevil	<i>Blosyrus oniscus</i> Olivier	Coleoptera	Curculionidae	Minor	
<b>Kangkong</b>					
Vine borer	<i>Omphisa anastomosalis</i> (Guenee)	Lepidoptera	Pyralidae	Minor	Das and Islam, 1985a
<b>Lettuce</b>					
Leaf beetle	<i>Haltica cyanea</i> Weber	Coleoptera	Chrysomelidae	Minor	Alam et al., 1964
Aphid	<i>Lipaphis erysimi</i> (Kaltenbach)	Homoptera	Aphididae	Major	
<b>Amaranthus</b>					
Leaf roller	<i>Hymenia fascialis</i> Cramer	Lepidoptera	Pyralidae	Major	Alam et al., 1964 ; Alam, 1967 ; Alam, 1969
Leaf twisting weevil	<i>Apoderus tranquebaricus</i> Fab.	Coleoptera	Curculionidae	Minor	
Leaf eating weevil	<i>Hypolixus truncatulus</i> (Fab.)	Coleoptera	Curculionidae	Minor	
Shoot boring weevil	<i>Lixus brachyrhinus</i> Boheman	Coleoptera	Curculionidae	Minor	

Table 1. contd...

Common name	Scientific name	Order	Family	Status	Reference
Bug	<i>Cletus pugnator</i> (Fab.) (= <i>Cletus trigonus</i> (Thunberg))	Hemiptera	Coreidae	Minor	
Lygaeid bug	<i>Nysius incospicuous</i> Distant	Hemiptera	Lygaeidae	Minor	
Leaf roller	<i>Hymenia recurvalis</i> Fab.	Lepidoptera	Pyralidae	Minor	
Thrips	<i>Aeolothrips collaris</i> Priesner (= <i>Aeolothrips fulvicollis</i> Bagnall)	Thysanoptera	Aelothripidae	Minor	
Thrips	<i>Frankliniella intonsa</i> (Trybom)	Thysanoptera	Thripidae	Minor	

### Conclusion

Many insect and mite pest species recorded by different authors as key / major pests have now attained the status of minor pests as revealed by the practical field experiences. Similarly, many major / minor insect and mite pest species have now become occasional pests. Even the existence of some early recorded insect and mite pest species of vegetables crops is now doubtful and it is expected that some are now extinct species. This is due to the changing cropping pattern, cropping intensity, prophylactic use of insecticides, change of climate, etc. However, a comprehensive country wide survey for a duration of at least three years is necessary to ascertain the present diversity of the insect and mite pest species of the vegetable crops ecosystems in this country.

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