

CENTRO AGRONOMICO TROPICAL DE INVESTIGACION Y ENSEÑANZA
Program of Annual Crops
CATIE

// **PROVISIONAL LIST OF INSECT AND MITE PESTS OF**
FOOD CROPS IN CENTRAL AMERICA

✓
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Second part of the progress report of the entomologist
attached to the CATIE cropping systems programme to the
Ministry of Overseas Development of the UK Government.

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SUMMARY

This paper presents a provisional list of common insect and mite pests found by the author on some crops grown by small farmers in Costa Rica, Nicaragua and Honduras from 1975 to 1977. Details of the regions where they were found and of the type of damage are included for the following crops: maize, vinya, sweet potato, cassava, curcubitae, tomato and egg-plant, dasheen and pigeon pea. Although this list is incomplete, it was nevertheless considered useful in giving a working base, and to serve as a provisional index to the insect pest reference collection at CATIE.

This publication forms the second part of the progress report of the entomologist, attached to the CATIE small farmer cropping systems programme, for the UK government Ministry for Overseas Development.

RESUMEN

Se presenta una lista provisional de las plagas más comunes, encontradas por el autor, en algunos cultivos producidos por pequeños agricultores en Costa Rica, Nicaragua y Honduras desde 1975 hasta 1977. Se incluye información de las regiones donde se los ha encontrado y del tipo de daño causado en los siguientes cultivos: maíz, frijol, caupí, camote, yuca, repollo, rábano, pepino, tomate y berengena, taro y gandúl. Esta lista no es completa, sin embargo se considera que podría ser una base útil para el trabajo de entomología y servir como índice provisional para la colección de referencia de insectos del CATIE.

Esta publicación es la segunda parte del informe de progreso del autor, quien trabaja para el programa de Sistemas de Cultivos para Pequeños Agricultores del CATIE; para el Ministerio de Desarrollo Ultramarino del Gobierno de Gran Bretaña.

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** Second part of the progress report of the entomologist attached to the CATIE cropping systems programme submitted to the Ministry of Overseas Development of the U.K. Government.

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PROVISIONAL LIST OF INSECT AND MITE PESTS OF
FOOD CROPS IN CENTRAL AMERICA*

A.B.S. King**

1. INTRODUCTION

Insects found damaging crop plants in the areas visited in Costa Rica, Nicaragua and Honduras were collected, larvae reared to adult where possible and specimens sent to the Commonwealth Institute of Entomology or to the Systematic Entomology Laboratory, USDA, Florida for identification. Basic biological data were recorded and specimens mounted for the CATIE reference collection.

Major and/or important pests are marked with an asterisk. Those marked CA (Central America) are known to be well distributed through out the region. The letters CR, Nic, Hond, indicate the countries (Costa Rica, Nicaragua and Honduras) where this insect was found damaging a specific crop but does not necessarily mean geographical restriction to that country. Altitude or climate specific pests are so indicated meaning greater abundance at, not necessarily restriction to that altitude or climatic zone. The part of the crop attacked is indicated by the following key:

Leaves (L), Stem cut (C), Roots (R), Tubers (T), Stem-borer (S), Fruit or seed (F), Shoot borer (Sh), Virus transmission (V), Flowers (Fls)

2. LIST OF PESTS

2.1 MAIZE (Zea mays) Maíz

Lepidoptera

Agrotis ipsilon Hufn.	(Noctuidae)	C.A.	C.
A. subterranea F.		C.A.	C.
Heliothis zea Boddie		C.A.	F
Mocis latipes (Gn)		Hond.	L
* Spodoptera frugiperda Smith & Abbott		C. A.	CLF

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<i>S. sunia</i> Gn.		C.A.	4000 ft.	L
<i>Diatraea lineolata</i> Wlk.	(Pyralidae)	C.A.		S
<i>D. guatemalensis</i> Schaus		C.R.		S
<i>Elasmopalpus lignosellus</i> Zeller		C.A.		S, Sh
<u>Hemiptera</u>				
<i>Aphis maidis</i> (Fitch)	(Aphididae)	C.A.		L
<i>Cyrtomenus</i> sp	(Cynidae)	C.R.		R
<i>Dalbulus maidis</i> (DeLong & W.)	(Cicadellidae) Nic.			LV
<u>Coleoptera</u>				
<i>Anomala cincta</i> Say.	(Scarabaeidae)	C.A.		R
<i>A. discoidalis</i> Bates		C.R.		R
<i>A. forminosa</i> Bates		C.R., Hond.		R
<i>Cyclocephala lunulata</i> Burm.		C.R.		R
<i>Ligyris nasutus</i> Burm.		Nic.		R
* <i>Phyllophaga</i> sp (S 23A)		C.A.		R
<i>Ph. obsoleta</i> Blanch.		C.R.	6000 ft.	R
* <i>Ph. parvisetis</i> ?		C.A.	low rainfall	R
* <i>Diabrotica balteata</i> (LeConte)	(Chrysomelidae)	C.A.		LR
<i>D. porracea</i> Har.		C.R.	6000 ft.	LR
<i>D. viridula</i> (F)		C.R.		L
<i>Epitrix</i> sp.		C.R.		L
<i>Metachroma variabile</i> Jac.		Nic.		L
<i>Colopterus posticus</i> (Er.)	(Nitidulidae)	C.R.		F
<i>C. stenoides</i> Murr.		C.R.		F

2.2 BEANS (*Phaseolus vulgaris*) Frijol, (*Vigna sinensis*) caupí

Lepidoptera

* <i>Agrotis ipsilon</i> Hufn.	(Noctuidae)	C.A.	C
* <i>A. subterranea</i> F.		C.A.	C
<i>Spodoptera eridania</i> Stoll.		C.R. Low rainfall	CL
<i>S. frugiperda</i> (Sm. & Abb.)		C.A.	C
<i>Lamprosema indicata</i> (F)	(Pyralidae)	Hond.	L
<i>Maruca testulalis</i> Geyer		C.R.	F
* <i>Estigmene acraea</i> Ivory	(Arctiidae)	Hond.	LF
<i>Urbanus</i> sp nr <i>esmeraldus</i> Butler	(Hesperiidae)	C.R.	L
<u>Hemiptera</u>			
<i>Aphis fabae</i> (Scop)	(Aphididae)	C.R.	L
<i>Myzus persicae</i> (Sulzer)		C.R. (4000 ft)	L
* <i>Empoasca</i> sp. sensu lat.	(Cicadellidae)	C.A. (C.R.)	L
<i>Spissistilus festina</i> (Say)	(Membracidae)	C.R.	L
<i>Stricticephala</i> sp.? <i>bubalus</i> (Fabr)		C.R.	L(R)
<i>Strictolobus</i> sp.		C.R.	L
<i>Halticus bracteatus</i> (Say.)	(Miridae)	C.R., Hond.	L
<i>Prepops latipennis</i> (Stal)			L
<i>Nezara viridula</i> (L)	(Pentatomidae)	C.A.	FL
<u>Coleoptera</u>			
<i>Altica</i> sp	(Chrysomelidae)		Nic
<i>Ceratoma atrofasciata</i>		Hond. Nic. Low rain- CR(NW) fall	LV
<i>C. ruficornis</i> (Oliv.)		C.A. Low rainfall	LV
<i>C. ruficornis rogersi</i> Jac.		C.R. high rainfall	LV
<i>C. salvini</i>		C.R. (SW)	L
<i>Diabrotica adelpha</i> Har.		C.R.	LV

<i>D. balteata</i> (Le Conte)		C.A.	LV
<i>D. nigrofasciata</i> Jac.		(Guat)	L
<i>D. octoplagiata</i> Jac.		Nic.	L
<i>D. pulchella</i> Jac.		C.R.	L
<i>D. variabilis</i> Jac.		C.R.	L
<i>Diphaulaca</i> nr. <i>panamae</i> Barber		C.R. (SW), Nic.	LR
<i>Nodonota</i> spp		C.A.	L
<i>Paranapiacaba waterhousei</i> (Jac)		C.R.	L
<i>Promecosoma viride</i> Lef.		Nic.	L
<i>Systema S-littera</i> (L)		C.R.	LV
<i>Exophthalmus jekelianus</i> White	(Curculionidae)	C.R.	L
(* <i>Aplon godmani</i> (Wagner)	(Aplonidae)	Hond., Nic.	F
<i>Phyllophaga</i> spp	(Scarabaeidae)	C.A.	R
(* <i>Epilachna varivestis</i> Muls.	(Coccinellidae)	(El Salvador) C.A.	L
<u>Hymenoptera</u>			
<i>Atta</i> spp (Cowpea only)	(Formicidae)	C.R.	L
<i>Solenopsis geminata</i> group		C.R.	Ring-barking
<u>Diptera</u>			
<i>Hylemya platura</i> (Meyer)	(Anthomyiidae)	C.R.	Sh
<u>Acari</u>			
<i>Oligonychus</i> sp	(Tetranychidae)	C.R.	L
<i>Polyphagotarsonemus latus</i>	(Tarsonemidae)	C.R.	L
2.3 <u>SWEET POTATO</u> (<i>Ipomoea batatas</i>)	Camote		
<u>Lepidoptera</u>			
<i>Agrius cingulatus</i> F.	(Sphingidae)	C.R.	L

<i>Agrotis ipsilon</i> Hufn.	(Noctuidae)	C.A.	L,C
<i>A. repleta</i> Walk.		C.R.	L,C
<i>A. subterranea</i> F.		C.A.	L,C
<i>Bleptina confusalis</i> Gn.		C.R.	L
<i>Eriopyga</i> spp.		C.R.	L
<i>Monodes deltoides</i> Möschl.		C.R.	L
<i>M. nucicolora</i> Gn.		C.R.	L
<i>Spodoptera dolichos</i> F.		C.R.	L
<i>S. eridania</i> Stoll.		C.R.	L
<i>S. latifascia</i> Walk		C.R.	L
<i>Trichoplusia ni</i> Hb.		C.A.	L
<i>Ecpanthenia caudata</i> Walk.	(Arctiidae)	C.R.	L
<i>Estigmene columbiana</i> Roths.		C.R.	L
<i>Compacta hirtalis</i> Gn.	(Pyralidae)	C.R.	ST
<i>Megastes</i> sp.		C.R.	S
* <i>Polygrammodes elevata</i> F.		C.R.	ST
<u>Hemiptera</u>			
Complex of Cicadellidae:			L
<i>Empoasca</i> , <i>Tylozygus</i> , <i>Catagonia</i> spp.		C.A.	L
<u>Coleoptera</u>			
<i>Diabrotica adelpha</i> Har.	(Chrysomelidae)	C.A.	L
<i>D. balteata</i> (Le Conte)		C.R.	L
<i>Typhorus chalceus</i> Jac.		C.R.	L
(* <i>T. nigrinus</i> (F)		C.R.	L,T
<i>Stenygra hystria</i> Serv.	(Cerambycidae)	Hond.	S
(* <i>Rhyssomatus subcostatus</i> Fahr.	(Curculionidae)	C.R.	T,S

(*) *Phyllophaga* spp. (Scarabaeidae) C.R. R

Hymenoptera

(*) *Atta* spp. (Formicidae) C.R. L

2.4 CASSAVA (*Manihot utilissima*) Yuca

Lepidoptera

Erynnis alope Drury (Sphingidae) C.R. L

E. ello L. C.R. L

Agrotis ipsilon Hfn. (Noctuidae) C.R. C

Diptera

√ *Anastrepha manihoti* Costa Lima (Tephritidae) C.R. S

Silba? perezii Rom. & Rup. (Lonchaeidae) C.R. Sh

Eudiplosis brasiliensis Rubsaamen (Cecidomyiidae) C.A. L

Hymenoptera

(*) *Atta* sp (Formicidae) C.A. L

Coleoptera

Phyllophaga spp (Scarabaeidae) C.A. T

2.5 RICE (*Oryza Sativa*) Arroz

Lepidoptera

Rupela albipella (Cram) (Pyralidae) C.R. S

Hemiptera

* *Blissus leucopterus* Say (Lygaeidae) C.R. R

Draeculacephala sp. (Cicadellidae) C.R. L

Hortensia similis (Walk) C.R. L

Collaria oleosa (Dist.) (Miridae) C.R. L

Garganus albidivittis Stal C.R. L

Ollarus sp (Cixiidae) C.R. L

2.6 CRUCIFERAE (*Brassica oleracea*; *B. chinensis*, *Raphanus* sp.) Repollo - rábanos

Lepidoptera

(*) <i>Ascia monuste</i> L.	(Pieridae)	C.R.	L
(*) <i>Leptophobia eleusis</i> Lucas		C.R.	L
<i>Agrotis subterranea</i> F.		C.A.	L
(*) <i>Trichoplusia ni</i> Hb	(Noctuidae)	C.R., Hond.	L
<i>Hellula fidealis</i> Walk.	(Pyralidae)	C.R.	T,S, petfoles
* <i>Plutella maculipennis</i> (Curtis)	(Yponomeutidae)	C.A.	L

Hemiptera

(*) <i>Lipaphis erysimi</i> (Kattenbach)	(Aphididae)	C.A.	L
<i>Myzus persicae</i> (Sulzer)	(Aphididae)	C.R.	L

2.7 CUCURBITAEAE (*Cucurbita moschata*, *Cucumis sativus*) Ayote, Pepino, etc.

Lepidoptera

(*) <i>Diaphania hyalinata</i> L.	(Pyralidae)	C.R.	S,F
* <i>D. nitidalis</i> (Stoll)		C.A.	S,F
<i>Melittia cucurbitae</i> (Harris)	(Sesiidae)	C.R.	S

Coleoptera

<i>Phyllophaga</i> spp	(Scarabaeidae)		R
<i>Acalymma coruscum</i> (Har)	(Chrysomelidae)	C.R., Hond.	L, Fls.
<i>A. theimel</i> (Baley)		C.R.	L, Fls
<i>A. vittata</i> F.		C.R.	L, Fls
<i>Diabrotica adelpha</i> Har.		C.R.	L, Fls
<i>D. balteata</i> (Le Conte)		C.A.	L, Fls
<i>Paranapiacaba waterhousei</i> (Jac.)		C.R.	L, Fls
<i>Epilachna borealis</i> (F)	(Coccinellidae)	C.A.	L

Hemiptera

Anasa andresi Guer. (Coreidae) C.R. L

SOLANACEAE (*Lycopersicon esculentum*; *Solanum melongena* Tomate, Berengena)

Lepidoptera

Agrotis subterranea F. (Noctuidae) C.A. C
Heliothis zea Boddie C.A. F
Spodoptera frugiperda (Sm.&Abb.) C.A. F
S. latifascia Walk. C.R, Hond. F,L
S. sunia Gn. C.R. F,L
Trichoplusia ni Hb. CR. Hond. L

Coleoptera

Chaetocnema sp. C.A. L

Hemiptera

Myzus persicae (Sulz) (Aphididae) C.A. L
Phthia picta (Drury) (Coreidae) C.R., Hond. F,L
Halticus bracteatus (Say) (Miridae) C.R.,Hond. L

Acarina

Oligonychus sp? (Tetranychidae) C.R. L

2.8 L. DASHEEN (*Calocasia esculenta*) Taro

Hemiptera

Corythuca gossypii (Fabr.) (Tingidae) C.R. L

2.9 PIGEON PEA (*Cajanus cajan*) Gandúl

Lepidoptera

Anticarsia gemmatilis (Huba) (Noctuidae) C.R. L
Heliothis virescens (F) C.R. F
Maruca testulalis Geyer (Pyralidae) C.R. F

Hemiptera

<i>Leptoglossus zonatus</i> (Dallas)	(Coreidae)	C.R.	L.F
<i>Euschistus crenator</i> (Fabr.)	(Pentatomidae)	C.R	L.F
<i>Nezara viridula</i> (L.)		C.R.	L.F

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