



**KINGDOM OF CAMBODIA**  
Nation Religion King

DEPARTMENT OF AGRONOMY AND AGRICULTURAL LAND IMPROVEMENT (DAALI)

PLANT PROTECTION AND PHYTOSANITARY INSPECTION OFFICE

## ENDEMIC AND QUARANTINE PESTS OF ORANGE FRUIT OF CAMBODIA

(Based on Pest Surveillance in 2003 and some References)

### 1. ENDEMIC PEST LIST OF ORANGE (*Citri aurantium*) IN CAMBODIA

Genus and species	Family	Order	Common name	Distribution	Parts affected	References
<b>INSECTS</b>						
<i>Bactrocera dorsalis</i> Hendel	Tephritidae	Diptera	Oriental fruit fly	S.E.Asia	-	-
<i>Phyllocoptruta oleivora</i> Asmed	Eriophyidae	Acarina	Citrus rust mite	Cosmopolitan	Fruit	D.S.Hill, 1983
<i>Planococcus citri</i> (Risso.)	Pseudococcidae	Homoptera	Citrus mealy bug	S.Africa, Asia, America	-	-
<i>Pseudococcus</i> sp.	Pseudococcidae	Homoptera	Mealy bug	S.Vietnam	Leaf, fruit	D.S.Hill, 1983
<i>Pulvinaria psidii</i> Mask	Coccidae	Homoptera	Bug miller	S.Vietnam	-	-
<i>Unaspis yanonensis</i> Kuwara	Diaspididae	Homoptera		Pantropical	-	-
<b>FUNGI</b>						
<i>Meliola citricola</i> Sydow.	Erysiphaceae	Erysiphales	Black mildew	Widespread	Fruit	D.S.Hill, 1983
<i>Penicillium italicum</i> Wehmer	Moniliaceae	Moniliales	Blue mold	Widespread	Foliage	NIPP, 67 - 68
<i>Pestalozzia</i> sp.	Melanconiaceae	Melanconiales	Leaf blight	Widespread	Sap- sucker, leaf	NIPP, 67 - 68
<i>Phytophthora citrophthora</i> Leonian	Pythiaceae	Peronosporales	Brown rot	Widespread	Foliage	D.S.Hill, 1983
<i>Phytophthora</i> sp.	Pythiaceae	Peronosporales	Root rot	Widespread	-	-
<i>Septobacidium reinkingii</i> Past.	Septobasidiaceae	Auriculariales	Felty fungus	Widespread	-	-
<b>BACTERIA</b>						
<i>Meliola citricola</i> Sydow.	Erysiphaceae	Erysiphales	Black mildew	Widespread	Fruit	D.S.Hill, 1983
<i>Xanthomonas campestris</i> pv. <i>citri</i> Dye	Pseudomonadaceae	Pseudomonadales	Canker	Asia, Africa, Oceania	-	-
<b>VIROIDS</b>						
<i>Citrus exocortis</i>	-	-	Exocortis	S. America, N. Africa	Stem	H.M.Trung,1992
<b>ALGAE-LICHENS</b>						
<i>Helicotylenchus ferus</i> E.et Ng.	Hoplolaimidae	Tylenchida	-	Africa, California	Leaf	D.S.Hill, 1983;H.M.Trung,92
<i>Helicotylenchus laevicaudatus</i> E. et Ng	Hoplolaimidae	Tylenchida	-	-	Fruit	D.S.Hill, 1983
<i>Helicotylenchus</i> sp.	Hoplolaimidae	Tylenchida	-	-	Fruit	N.T.G.Van,1992
<i>Helicotylenchus vietnamiensis</i> E.	Hoplolaimidae	Tylenchida	-	-	Leaf, fruit	D.S.Hill, 1983
<i>Hoplolaimus chambus</i> Jairaipuret	Hoplolaimidae	Tylenchida	-	-	Fruit	T.V.Hoi & H.Lam, 1991
<i>Macroposthonia curvata</i> (Ras.) Gri.	Criconematidae	Tylenchida	-	-	Fruit	South RIFAP,1991
<i>Macroposthonia magnifica</i> E. et Ng.	Criconematidae	Tylenchida	-	-	Leaf, stem	Agricultural University IV
<i>Macroposthonia medani</i> P. et S.	Criconematidae	Tylenchida	-	-	Leaf, fruit, branches	Agricultural University IV

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<b>WEEDS</b>						
<i>Ageratum conyzoides</i> L.	Asteraceae	Asterales	-	-	Competitive with plant	LeRoy G.Holm, 1977
<i>Amaranthus viridis</i> L.	Amaranthaceae	Chenopodiales	-	-	Competitive with plant	D.F.Waterhouse, 1993
<i>Cyperus rotundus</i> L.	Cyperaceae	Cyperales	-	-	Competitive with plant	Ernst H'fliger, Basel,1982
<i>Imperata cylindrica</i> (L.) Raeusch.	Poaceae	Poales	-	-	Competitive with plant	Ernst H'fliger, Basel, 1981
<i>Mimosa pudica</i> L.	Mimosaceae	Leguminales	-	-	Competitive with plant	LeRoy G.Holm, 1977

## 2. CAMBODIAN QUARANTINE PEST LIST OF ORANGE (*Citri aurantium*)

Genus and species	Family	Order	Common Name	Distribution	Plant Part Affected	References
<i>Anastrepha ludens</i>	Tephritidae	Diptera	Mexican fruit fly	Mexico	Fruit	-
<i>Anastrepha fraterculus</i>	Tephritidae	Diptera	South America fruit fly	South America	Fruit	-
<i>Anastrepha fraterculus</i>	Tephritidae	Diptera	South american fruit fly	Mexico, Central and South America	Fruit	creatures.ifas.ufl.edu/fruit
<i>Anastrepha lubens</i>	Tephritidae	Diptera	Mexican fruit fly	Mexico, Central America, Texas	Fruit	creatures.ifas.ufl.edu/fruit
<i>Anastrepha obliqua</i>	Tephritidae	Diptera	West indian fruit fly	USA, Mexico, Central, South America	Fruit	creatures.ifas.ufl.edu/fruit
<i>Aonidiella citrina</i>	Diaspididae	Hemiptera	Yellow scal	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Argyrotaenia citrana</i>	Tephritidae	Diptera	Orange tortrix	Australia	Fruit	creatures.ifas.ufl.edu/fruit
<i>Aspidiotus hederae</i>	Diaspididae	Homoptera	Chiefly	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Atherigona orientalis</i>	Muscidae	Diptera	Maize shoot fly	Thailand	Fruit	CABI
<i>Bactrocera carambolae</i>	Tephritidae	Diptera	Carambola fruit fly	Thailand	Fruit	CABI
<i>Bactrocera tsuneonis</i>	Tephritidae	Diptera	Japanese orange fly	Japan	Fruit	-
<i>Bactrocera cucurbitae</i>	Tephritidae	Diptera	Melon fruit fly	Thailand	Fruit	CABI
<i>Bactrocera dorsalis</i>	Tephritidae	Diptera	Oriental fruit fly	Thailand	Fruit	CABI
<i>Bactrocera papaya</i>	Tephritidae	Diptera	Papaya fruit fly	Thailand	Fruit	CABI
<i>Brevipalpus lewisi</i>	Tenuipalpidae	Acarina	Citrus flat mite	Australia, California	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Ceratitidis capitata</i>	Tephritidae	Diptera	Mediterranean fruit fly	Europe, Africa, W. Australia, Hawaii, S. Americ	Fruit	-
<i>Ceratitidis cosyra</i>	Tephritidae	Diptera	Natal fruit fly	Africa	Fruit	creatures.ifas.ufl.edu/fruit
<i>Chloropulvinaria aurantii</i>	Coccidae	Homoptera	Citrophilus mealy bug	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Chrysomphalus dictiospermi</i>	Tephritidae	Diptera	Florida red scal	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Citripestis sagittiferella</i>	Pyralidae	Lepidoptera	Citrus fruit borer	Thailand	Fruit	CABI
<i>Cocus pseudomagno liaram</i>	Coccidae	Homoptera	-	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Cocus viridis</i>	Coccidae	Hemiptera	Green coffee scal	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Collectotrichum gloeosporioides</i>	Melanconiaceae	Melanconiales	-	Tropic and sub-tropic	Fruit, leaf, stem	Y-I Pomazkov, 1989
<i>Dacus tryoni</i>	Tephritidae	Diptera	Queensland fruit fly	Australia, French, Polynesia, Madagascar	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Deutorophoma tracheiphila</i>	Sphaeropsidaceae	Sphaeropsidales	-	-	-	-
<i>Dialeurodes citri</i>	Aleyrodoidae	Hemiptera	Citrus white fly	Thailand	Fruit	CABI
<i>Dialeurodes citri</i>	Aleyrodidae	Homoptera	Citrus white fly	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Diaporth citri</i>	Valsaceae	Diaporthales	Melanose of citrus	Thailand	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Diplodia notalensis</i>	Sphaeropsidaceae	Sphaeropsidales	Stem-end rot	Tropic and sub-tropic	Branch	Y-I Pomazkov, 1989
<i>Drosophila melanogaster</i> Meigen	Drosophilidae	Diptera	-	Thailand	Fruit	CABI
<i>Elsinoe australis</i>	Rutaceae	Rutales	Sweet orange scab	Italy and South America	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Eudocima fullonia</i>	Noctuidae	Lepidoptera	Fruit sucking moth	Thailand	Fruit	CABI
<i>Glomerella cingulata</i>	Phyllachoraceae	Phyllachorales	Anthraco nose	Thailand	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Guignardia citricarpa</i>	Coccoideaceae	Coccoideales	Citrus black spot	Australia, China, Indonesia, India, Newzealand Japan, Philippine, Republic of Korea, Oceania	Fruit, stem	<a href="http://www.google.com">http://www.google.com</a>

Genus and species	Family	Order	Common Name	Distribution	Plant Part Affected	References
<i>Icerya purchasi</i>	Margarodidae	Homoptera	Ladybird beetle	Tropic and sub-tropic	Fruit, branch	<a href="http://www.google.com">http://www.google.com</a>
<i>Lepidosaphes gloverii</i>	Diaspididae	Homoptera	Rose weevil	Tropic and sub-tropic	Nut	Y-I Pomazkov, 1989
<i>Lopholencaspis japonica</i>	Diaspididae	Homoptera	-	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Macrophoma mantegazziana</i>	Sphaeropsidaceae	Sphaerosidales	-	Tropic and sub-tropic	-	Y-I Pomazkov, 1989
<i>Penicillium digitarum</i>	Moniliaceae	Moniliales	-	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Phomopsis citri</i>	Sphaeropsidaceae	Sphaerosidales	Citrus melanose	Tropic and sub-tropic	Root	Y-I Pomazkov, 1989
<i>Pseudococcus gahani</i>	Pseudococcidae	Homoptera	Citrus mealy bug	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Pseudococcus maritimus</i>	Pseudococcidae	Homoptera	Mealy bug	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Rhizopus spp.</i>	Mucoraceae	Mucorales	Moulding of stored seedlin	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989
<i>Scirtothrips citri</i>	Tripidae	Tysanoptera	Thrips	Texas	Fruit, flower	<a href="http://www.google.com">http://www.google.com</a>
<i>Septoria spp</i>	Sphaeropsidaceae	Sphaerosidales	-	Australia, USA, Newzealand, India, Africa	-	<a href="http://www.google.com">http://www.google.com</a>
<i>Spiroplasma citri</i>	Spiroplasmataceae	Spiroplasmatales	Stubborn disease	USA, Mediterranean, Middle Eastern countries	Fruit	<a href="http://www.google.com">http://www.google.com</a>
<i>Toxoptera citricidus</i>	Aphydidae	Homoptera	Citrus brown aphid	Tropic and sub-tropic	Fruit, branch	Y-I Pomazkov, 1989
<i>Trioza erytrae</i>	Triozidae	Hemiptera	Africa citrus	Tropic and sub-tropic	Fruit	Y-I Pomazkov, 1989

### 3. The owner plant quarantine materials importing into the Kingdom of Cambodia shall respect to phytosanitary condition as follows:

- 3.1. The materials must be accompanied with a phytosanitary certificate issued by Plant Quarantine Authority of country-exporter in model stipulated in International Plant Protection Convention 1951.
- 3.2. The materials must be free from plant quarantine pests and other dangerous pests of the Kingdom of Cambodia. In case of materials has damaged by the above pests, the phytosanitary treatment (includes selecting, eliminating, re-processing, and cleaning, decontaminating, retaining) shall be took place prior importing.
- 3.3. Cambodian plant quarantine authority keep it right to ask for returning back to the place of origin or destroying plant quarantine materials in case of serious damage that could not be treated.

SEEN AND AGREED  
DIRECTOR OF DAALI

PEN VUTH

PHNOM PENH, 15 JULY 2003  
CHIEF OF PLANT PROTECTION & PHYTOSANITARY OFFICE

DR. HEAN VANHAN