



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 RICE OF CAMBODIA

(Based on Pest Surveillance in 2003 and some References)

1. ENDEMIC PEST LIST OF RICE (*Oryza sativa*) IN CAMBODIA

Genus and species	Family	Order	Common Name	Distribution	Plant Part Affected	References
INSECTS						
<i>Ahasverus advena</i> (Waltl.)	Silvanidae	Coleoptera	Foreign grain beetle	The whole country	Grains	Haines,C.P.1991
<i>Alphitobius diaperinus</i> (Panz.)	Tenebrionidae	Coleoptera	Lesser meal worm	The whole country	Grains	Hill,D.S.1983
<i>Alphitobius laevigatus</i> (Fab.)	Tenebrionidae	Coleoptera	black fungus beetle	The whole country	Grains	Hill,D.S.1983
<i>Corycta cephalonica</i> (Stainton)	Galleriidae	Lepidoptera	Rice moth	The whole country	Grains	Corbet,A.S.1943
<i>Cryptolestes pusillus</i> (Steph.)	Cucujidae	Coleoptera	Flat grain beetle	The whole country	Grains	Hill,D.S.1983
<i>Ephestia cautella</i> (Walker)	Pyralidae	Lepidoptera	Tropical warehouse moth	The whole country	Grains	Corbet,A.S.1943
<i>Latheticus oryzae</i> (Waterhouse)	Tenebrionidae	Coleoptera	Long-head flour beetle	The whole country	Grains	Hill,D.S.1983
<i>Lophocateres pusillus</i> (Klug.)	Lophocateridae	Coleoptera	Siamese grain beetle	The whole country	Grains	Hill,D.S.1983
<i>Oryzaephilus surinamensis</i> (L.)	Silvanidae	Coleoptera	Saw-toothed grain beetle	The whole country	Grains	Weidner,H.1982
<i>Palorus ceylonoides</i> (Pascoe.)	Tenebrionidae	Coleoptera	Small-eye flour beetle	The whole country	Grains	Hill,D.S.1983
<i>Palorus forveicolis</i> (Blai.)	Tenebrionidae	Coleoptera	Small-eye flour beetle	The whole country	Grains	Hill,D.S.1983
<i>Palorus ratzeburgi</i> (Wissm.)	Tenebrionidae	Coleoptera	Small-eyes flour beetle	The whole country	Grains	Hill,D.S.1983
<i>Palorus subdepressus</i> (Woll.)	Tenebrionidae	Coleoptera	Depressed flour beetle	The whole country	Grains	Hill,D.S.1983
<i>Rhizopertha dominica</i> (Fab.)	Bostrichidae	Coleoptera	Lesser grain borer	The whole country	Grains	Hill,D.S.1983
<i>Setomorpha rutella</i> (Zell.)	Pyralidae	Lepidoptera	Tropical moth	The whole country	Grains	Corbet,A.S.1943
<i>Sitophilus oryzae</i> (Linne)	Curculionidae	Coleoptera	Rice weevil	The whole country	Grains	Hill,D.S.1983
<i>Tenebroides mauritanicus</i> (L.)	Trogositidae	Coleoptera	Cadelle	The whole country	Grains	Hill,D.S.1983
<i>Tribolium castaneum</i> (Herbst.)	Tenebrionidae	Coleoptera	Red flour beetle	The whole country	Grains	Hill,D.S.1983
FUNGI						
<i>Aspergillus niger</i>	Moniliaceae	Moniliales	Grain discoloration	Widespread	seed	Roger L. 1954
<i>Aspergillus oryzae</i>	Moniliaceae	Moniliales	Grain discoloration	Widespread	seed	Roger L. 1954
<i>Bipolaris oryzae</i>	Dematiaceae	Moniliales	Brown spot	Widespread	Shell of seed	Mew,T.W. 1954
<i>Cercospora oryzae</i>	Dematiaceae	Moniliales	Narrow brown leaf spot	Widespread	Shell of seed	Mew,T.W. 1954
<i>Curvularia lunata</i>	Dematiaceae	Moniliales	Black kernel	Widespread	Shell of seed	Ou S.H., 1987
<i>Diplodia oryzae</i>	Sphaeropsidaceae	Sphaeropsidales	Gtain spot	Japan, India, S. Africa	Shell of seed	Ou S. H. 1987
<i>Fusarium moniliforme</i>	Turbulariaceae	Moniliales	Bakanae disease	Widespread	Seed	Mew, T.W.,1994
<i>Nigrospora oryzae</i>	Dematiaceae	Moniliales	Grain spot	Widespread	Shell of seed	Ou S. H.,1987
<i>Penicilium sp.</i>	Moniliaceae	Hyphales	Grain discoloration	Widespread	Sseed	Ou S. H.,1987
<i>Pyriculariaoryzae</i>	Moniliaceae	Moniliales	Blast	Widespread	Shell of seed	Mew T.W.,1994
<i>Rhizoctonia solani</i>	Mycelia serilia	Moniliales	Sheath blight	Widespread	Shell of seed	Mew T. W., 1994
<i>Tilletia barclayana</i>	Tilletiaceae	Ustinaligales	Kernel smut	Widespread	Shell of seed	Mew T. W., 1994

Genus and species	Family	Order	Common Name	Distribution	Plant Part Affected	References
<i>Trichosporon padwickii</i>	Moniliaceae	Hyphomycetes	Stack burn	Widespread	Seed	Mew T. W., 1994
<i>Ustilaginoides virens</i>	Ustilaginaceae	Ustilaginales	False smut	Widespread	Shell of seed	Mew T. W., 1994
BACTERIA						
<i>Xanthomonas campestris</i> pv. <i>oryzae</i>	Pseudomonadaceae		Bacterial leaf blight	Widespread	Seed	Bradbury 1986.
WEED						
<i>Dactyloctenium aegyptium</i>	Poaceae	Graminales	Coast button grass	Tropics	It is an host of the virus.	D.F.Waterhouse,1993
<i>Echinochloa colona</i>	Poaceae	Graminales	Barnyard grass,Jungle rice	Asia	Competitives with plant	D.F.Waterhouse,1993
<i>Echinochloa crusgalli</i>	Poaceae	Graminales	Water grass	a range extanding from 50° N to 40° S	Competitives with plant	LeRoy G. Holm,1977

2. CAMBODIAN QUARANTINE PEST LIST OF RICE (*Oryza sativa*)

Genus and species	Family	Order	Common Name	Distribution	Plant Part Affected	References
<i>Caulophilus latinnasus</i>	-	-	-	-	-	-
<i>Anomala antiqua</i> Gyllenhal	Scarabaeidae	Coleoptera	Groundnut chafer	Thailand	Grains	CABI
<i>Anomala pallida</i> Fabricius	Scarabaeidae	Coleoptera	-	Thailand	Grains	CABI
<i>Callosobruchus chinensis</i>	Bruchidae	Coleoptera	Cowpea bruchid	Thailand	Grains	CABI
<i>Carpophilus stephens</i>	Nitidulidae	Coleoptera	-	Thailand	Grains	CABI
<i>Cirsium arvense</i>	Asteraceae	Asterales	Canada thistle	Canada	-	http://www.google.com
<i>Ephelis oryzae</i>	Poacea	Graminales	Bermudagrass	-	-	http://www.google.com
<i>Lolium temulentum</i>	Cyperaceae	Cyperales	Ryegrass	Canada, North Central state	-	http://www.google.com
<i>Oryzaephilus mercator</i> (Fauvel)	Silvanidae	Coleoptera	Merchant grain beetle	Thailand	Grains	CABI
<i>Prostephanus truncatus</i>	Brostrichidae	Coleoptera	Large grain borer	USA	Grains	http://www.google.com
<i>Rice hoja blanca virus</i>	Bunyaviridae	-	-	-	-	http://www.google.com
<i>Sitophilus granarius</i>	Curculionidae	Coleoptera	Granary weevil	-	-	http://www.google.com
<i>Striga augustifolia</i>	Scrophulariaceae	Scrophulariales	-	-	-	http://www.google.com
<i>Striga densiflora</i>	Scrophulariaceae	Scrophulariales	Benth	South Africa	-	http://www.google.com
<i>Striga hermonthica</i>	Scrophulariaceae	Scrophulariales	Witchweed	Sudan, Africa	-	http://www.google.com
<i>Striga lutea</i>	Scrophulariaceae	Scrophulariales	Vining weed	-	-	http://www.google.com
<i>Tagosodes cubanus</i> D. L. Crawford	Delphacidae	Homoptera	-	-	-	http://www.google.com
<i>Tagosodes orizicolus</i> Muir	Delphacidae	Homoptera	-	-	-	Muir, 1926
<i>Tribolium confusum</i> Duval	Tenebrionidae	Coleoptera	Flour weevil	-	Grains	
<i>Trogoderma granarium</i>	Dermestidae	Coleoptera	Khapra beetle	India	Grains	http://www.google.com
<i>Trogoderma inclusum</i>	Dermestidae	Coleoptera	Large cabinet beetle	Africa, California	Grains	http://www.google.com

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

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

PEN VUTH

DR. HEAN VANHAN