



Australia's National Priority Plant Pests (2024) playing cards

Cards developed by Carol Quashie-Williams, MSc (Entomology), DIC FRES, STEM Professionals in Schools,
Assistant Director, Department of Agriculture, Fisheries and Forestry
Email: Carol.Quashie-Williams@aff.gov.au

This STEM (Science, Technology, Engineering and Maths) Professionals in Schools project could not have been achieved without the support of the staff of the Plant Health Policy Branch, Plant Protection and Environmental Biosecurity Division and commitment from Farrer and Mawson Primary Schools 2019 students and teachers, Ms Kate Elliot (Farrer Primary School) and Mrs Kathryn Glanville (Namadgi Primary School, ex-Mawson).

Main sources of references

- National Priority Plant Pests (2024) <https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/plant/national-priority-plant-pests>
 - Plant pests and diseases <https://www.agriculture.gov.au/pests-diseases-weeds/plant>
 - Bugwood <https://www.bugwood.org/> & <https://www.insectimages.org/index.cfm>
 - CABI Invasive Species Compendium <https://www.cabi.org/ISC>

Printing instructions

Print single-sided on A4 paper or card 200-300 gsm:

1. Pages 3-10 playing card fronts (8 pages)
2. Page 11 playing card backs (1 page)
 - copy onto the backs of play cards
3. Page 12 playing card box template (1 page)
4. Page 13 NPPP game instructions (1 page)

A

Varroa mite on bee

Varroa jacobsoni

RATING 9

COUNTRIES 15

HOSTS 2

Source: Scott Bauer,
USDA Agricultural Research Service, Bugwood.org**K**

Giant African snail

Lissachatina fulica

RATING -

COUNTRIES 74

HOSTS 160



Source: Pest and Diseases Image Library, Bugwood.org

Q

Tomato/potato psyllid

Bactericera cockerelli

RATING -

COUNTRIES 12

HOSTS 36



Source: Pest and Diseases Image Library, Bugwood.org

J

Golden apple snail

Pomacea canaliculata

RATING -

COUNTRIES 34

HOSTS 54



Source: Pest and Diseases Image Library, Bugwood.org

10

Tracheal mite in bees

Acarapis woodi

RATING 9

COUNTRIES 28

HOSTS 3

Source: Phylloxera adults, nymphs and eggs.
Image courtesy Agriculture Victoria**9**

Silver leaf whitefly (exotic)

Bemisia tabaci

RATING -

COUNTRIES 40

HOSTS 117

Source: Scott Bauer,
USDA Agricultural Research Service, Bugwood.org**8**

Cape honeybee

Apis mellifera capensis

RATING -

COUNTRIES 1

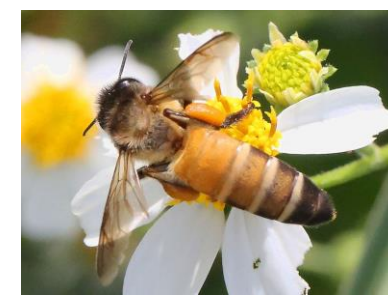
HOSTS 0



Source: Bugwood.org

7

Giant honeybee

Apis dorsata

RATING -

COUNTRIES 5

HOSTS 0

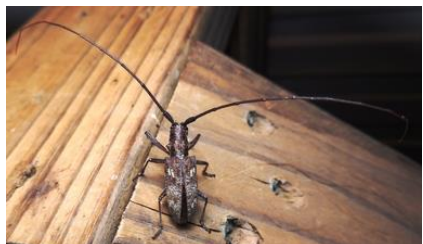


Source: Pest and Diseases Image Library, Bugwood.org

6

Carolina pine sawyer

Monochamus carolinensis



RATING -

COUNTRIES 3

HOSTS 10

Source: Pest and Diseases Image Library, Bugwood.org

5

Black & white citrus longhorn

Anoplophora chinensis



RATING -

COUNTRIES 13

HOSTS 159

Source: Pest and Diseases Image Library, Bugwood.org

4

Japanese sawyer beetle

Monochamus alternatus



RATING -

COUNTRIES 7

HOSTS 32

Source: Pest and Diseases Image Library, Bugwood.org

3

Southern armyworm

Spodoptera eridania



RATING -

COUNTRIES 41

HOSTS 169

Source: Pest and Diseases Image Library, Bugwood.org

2

Asian citrus psyllid

Diaphorina citri



RATING 6

COUNTRIES 71

HOSTS 15

Source: Pest and Diseases Image Library, Bugwood.org

J

O

K

E

R

R

R

R

R



Source: CQW, DAFF staff and students

R

E

K

O

J

J

A

Khapra beetle

Trogoderma granarium



RATING	2	♦
COUNTRIES	39	
HOSTS	18	W

Source: Pest and Diseases Image Library, Bugwood.org

K

Oriental fruit fly

Bactrocera dorsalis



RATING	4	♦
COUNTRIES	75	
HOSTS	174	Y

Source: DAFF NARQS

Q

Spotted wing drosophila

Drosophila suzukii



RATING	3	♦
COUNTRIES	58	
HOSTS	140	O

Source: John Davis

J

Asian spongy moth

Lymantria dispar asiatica



RATING	7	♦
COUNTRIES	11	
HOSTS	110	P

Source: Pest and Diseases Image Library, Bugwood.org

10

Mexican fruit fly

Anastrepha ludens



RATING	4	♦
COUNTRIES	9	
HOSTS	47	OL

Source: Pest and Diseases Image Library, Bugwood.org

9

Spotted lantern fly

Lycorma delicatula



RATING	-	♦
COUNTRIES	4	
HOSTS	160	6

Source: Marja van der Straten, NVWA Plant Protection Service, Bugwood.org

8

Brown marmorated stink bug

Halyomorpha halys



RATING	8	♦
COUNTRIES	48	
HOSTS	170	8

Source: Ken Walker, PaDIL

7

Glassy winged sharpshooter

Homalodisca vitripennis



RATING	1	♦
COUNTRIES	5	
HOSTS	50	L

Source: Reyes Garcia III, USDA Agricultural Research Service, Bugwood.org

6

Yellow-spotted stink bug

Erthesina fullo



RATING 8
COUNTRIES 14
HOSTS 51



9

Source: Shutterstock

5

Melon fruit fly

Zeugodacus cucurbitae



RATING 4
COUNTRIES 59
HOSTS 101



9

Source: Pest and Diseases Image Library, Bugwood.org

4

Fruit fly

Bactrocera kirki



RATING 4
COUNTRIES 7
HOSTS 32



7

Source: Pest and Diseases Image Library, Bugwood.org

3

Sugarcane stem borer

Chilo terrenellus



RATING
COUNTRIES 1
HOSTS 1



8

Source: Natural History Museum, London

2

Meadow spittlebug

Philaenus spumarius



RATING 1
COUNTRIES 61
HOSTS 26



7

Source: Pest and Diseases Image Library, Bugwood.org

A

Xylella

Xylella fastidiosa

RATING 1

COUNTRIES 11

HOSTS 700+



Source: Statewide IPM Project, University of California

K

Karnal
bunt*Tilletia indica*

RATING 5

COUNTRIES 9

HOSTS 3



Source: L.A. Castlebury USDA-ARS SBML, PaDIL

Q

Huanglongbing

*Candidatus Liberibacter
asiaticus*

RATING 6

COUNTRIES 52

HOSTS 29



Source: Citrus Research International

J

Zebra chip

*Candidatus Liberibacter
solanacearum*

RATING -

COUNTRIES 31

HOSTS 12



Source: Joseph E Munyaneza, USDA-ARS

10

Ug99

wheat stem rust

Puccinia graminis f. sp. *tritici*

RATING -

COUNTRIES 13

HOSTS 5



Source: David Mowbray (CIMMYT)

9

Citrus canker

Xanthomonas citri
subsp. *citri*

RATING -

COUNTRIES 61

HOSTS 29



Source: CitrusAustralia

8

Myrtle (eucalyptus)
rust (exotic strains)*Austropuccinia psidii*

RATING 10

COUNTRIES 29

HOSTS 300+



Source: Dr Silvaldo F. Silveira UENF, PaDI

7

Phytophthora
blight*Phytophthora kernoviae*

RATING -

COUNTRIES 11

HOSTS 43

Source: Forest Research,
United Kingdom Forestry Commission, Bugwood.org

6

Sudden oak death



Phytophthora ramorum



RATING -
COUNTRIES 24
HOSTS 161



9

Source: Bruce Moltzan, USDA Forest Service, Bugwood.org

5

Pine pitch canker



Fusarium circinatum



RATING -
COUNTRIES 13
HOSTS 52



9

Source: Bugwood.org

4

Fire blight



Erwinia amylovora



RATING -
COUNTRIES 64
HOSTS 41



7

Bruce Watt, University of Maine, Bugwood.org

3

Texas root rot



Phymatotrichopsis omnivora



RATING -
COUNTRIES 2
HOSTS 2000+



8

Source: The University of Arizona Cooperative Extension

2

Barley stripe rust



Puccinia striiformis
f. sp. *hordei*



RATING -
COUNTRIES 99
HOSTS 5



7

Source: Frank Pears, Bugwood.org

J

O

K

E

R



R

E

K

O

J

Source: CQW

A

Sharka

Plum pox virus



RATING -
COUNTRIES 52
HOSTS 75

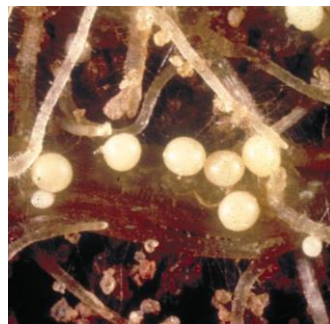


Source: Bugwood.org.

K

Pale potato cyst nematode

Globodera pallida



RATING -
COUNTRIES 59
HOSTS 25



Source: Central Science Laboratory, Harpenden ,
British Crown, Bugwood.org

Q

Moko disease

Ralstonia solanacearum



RATING -
COUNTRIES 32
HOSTS 20



Source: H.D. Thurston

J

Potato late blight (exotic strains)

Phytophthora infestans



RATING -
COUNTRIES 138
HOSTS 45



Source: Bugwood.org

10 Aster yellows group



Phytoplasmas 16Srl group



RATING -
COUNTRIES 40
HOSTS 249



Source: Whitney Cranshaw,
Colorado State University, Bugwood.org

9

Dutch elm disease

Ophiostoma novo-ulmi



RATING -
COUNTRIES 46
HOSTS 11



Source: Pest and Diseases Image Library, www.padil.gov.au

8

Turnip mosaic virus

Tobamovirus



RATING -
COUNTRIES 50
HOSTS 88



Source: Bugwood.org

7

Pine wilt nematode

Bursaphelenchus xylophilus



RATING -
COUNTRIES 10
HOSTS 58



Source: USDA Forest Service - North Central Research Station
USDA Forest Service, Bugwood.org

6 Tobacco mosaic virus
♣ *Tobamoviruses*



RATING	-	♣
COUNTRIES	54	
HOSTS	54	9

Source: University of Florida

5 Grapevine leaf rust
♣ *Phakopsora euvitis*



RATING	-	♣
COUNTRIES	20	
HOSTS	17	5

Source: Pest and Diseases Image Library, www.padil.gov.au

4 Tomato yellow leaf curl virus
♣ *Begomovirus*



RATING	-	♣
COUNTRIES	66	
HOSTS	27	7

Source: Pest and Diseases Image Library, www.padil.gov.au

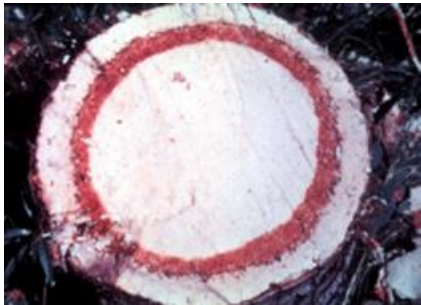
3 Banana elephantiasis disease
♣ *Candidatus Phytoplasma asteris*



RATING	-	♣
COUNTRIES	40	
HOSTS	249	8

Source: Javed Musarrat

2 Red ring nematode
♣ *Bursaphelenchus cocophilus*



RATING	-	♣
COUNTRIES	19	
HOSTS	6	2

Source: www.entomology.ifas.ufl.edu



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Adapted from:
<https://www.template.net/design-templates/box-templates/playing-card-box-template/>
Shallower box

Australia's National Priority Plant Pests 2024

Australia is lucky to be free from many of the world's most damaging plant pests. The National Priority Plant Pests (NPPPP) can damage our natural environment, destroy our food production and agriculture industries, and some could change our way of life. These playing cards promote and raise awareness of Australia's National Priority Plant Pests.

The cards include information on the National Priority Plant Pests (NPPPP) ratings (10 top are ranked only), the most important being No. 1 Xylella, plus information on the number of countries each pest is found in and the number of plant hosts the pest infests or feeds on.

INSTRUCTIONS - NPPPP GAME 2-6 Players.

Shuffle and deal out all the cards, including the Jokers, face down to each player. Players turn over their top card. The dealer starts and selects a category of Rating, Countries or Hosts and reads out the number for the category. Each player reads out their number for the chosen category. (If two or more cards have the same category number, players turn over the next top card and the same category is chosen.) The winner of the hand is the player with the highest number OR the player with a Joker card (the Joker 'trumps' or beats the highest number). The winner then collects all the cards of the games. The player to the left of the dealer then turns over their top card and selects a category. Each player has a turn to select a category. The winner of the game is the player with the most cards



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INSTRUCTIONS

National Priority Plant Pests (NPPPP) 2024 Game

For 2-6 Players

- Shuffle and deal out all the cards, including the Jokers, face down to each player.
- Players turn over their top card.
- The dealer starts and selects a category of Rating, Countries or Hosts and reads out the number for the category.
- Each player reads out their number for the chosen category. (If two or more cards have the same category number, players turn over the next top card and the same category is chosen.)
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