HIGH PRIORITY EXOTIC/REPORTABLE ENDEMIC PLANT PESTS AND DISEASES									
		Name	**Type**	**Characteristic symptoms**	**Vine impact**	**Other**	**Status in Australia[1]**	**Location of characteristic symptoms[2]**	**Monitoring Period[3]**
1		*Xylella fastidiosa (*causes Pierce's Disease in grapevines)	Xylem-inhabiting gram-negative, rod-shaped bacterium	Water stress and leaf scorch.	Vine death within 1-2 years.	Australia's No. 1 plant pest affecting more than 560 plant species. Must be vectored into the host plant. Vectors are xylem-feeding sucking insects including spittlebugs, froghoppers and sharpshooters.		③	F ➡ H
2		Glassy-winged sharpshooter	Xylem-feeding leafhopper	Adults 12-14 mm long with dark brown/black colouring and a lighter underside, upper head and back with ivory/yellowish spots, wings partly transparent with reddish veins. White-washing of leaves, stems and fruit from excrement.	Vector transmission of *Xylella fastidiosa.*			②③⑦	F ➡ H
3		Spotted-winged drosophila	Insect	Adult vinegar flies 2-3 mm long, with wing span 6-8 mm, golden brown with dark contiguous bands on abdomen and prominent red eyes, males have characteristic small dark spots on wing tips. Unique egg deposition and larval feeding in firm fruit Infested fruit surface shows small scars and indented soft spots.	Fruit rot.			⑦	V ➡ H
4		Grape phylloxera	Soil-borne insect	Adults 1mm long, yellow in summer, tending to brown in winter. Galls appear on fibrous roots and in some cases, on leaves Infested vines will show low vigour during spring/early summer, then yellowing and/or marginal reddening of the leaves during late summer/early autumn.	Symptoms may appear within 3 years, with death of the European grapevine, *Vitis vinifera* within 5-6 years.	Several hundred strains documented worldwide; 115 endemic strains.		①③	F ➡ H

5		Black rot	Fungus	Attacks green tissue. Leaf symptoms most apparent on upper surface - round, reddish-brown spots max 3-7 mm diameter with black margins and small, blackish pimples (pycnidia) in centre. Shoots, bunchstem, tendril symptoms – purple/black cankers with pycnidia, sunken and elongated, splitting longitudinally. Fruit symptoms – sunken brown spots with necrotic margins that expand to involve the entire berry. Individual berries rot and shrivel into black, wrinkled mummies covered with pycnidia.	Complete crop loss possible.	Warm, humid growing regions most susceptible.		②③④⑤ ⑥⑦⑧⑨	F ➡ H
6		Grapevine leaf rust	Fungus	Primarily affects leaves. Can affect berries, bunchstems and shoots. Leaf symptoms - small, dark, angular necrotic lesions on upper surface covered by orange to yellow sporulating pustules on lower surface.	Weakened vines with early senescence and leaf drop, reduced fruit quality and quantity.	Only known rust on grapevines, mainly occurring in warm temperate and subtropical regions.		②③⑤⑦	F ➡ H
7		Grapevine red blotch virus	Geminivirus	Red blotch symptoms at interveinal margins of leaves, generally starting in autumn as irregular blotches on leaf blades and basal portions of shoots. Primary and secondary veins on leaves turn red (unlike green veins of Leafroll virus) and leaves do not roll in at the margins.	Reduced capacity to ripen grapes.			③ ⑦	V ➡ H
8		Angular leaf scorch and Rotbrenner	Two separate fungus species with similar symptoms	Predominant leaf lesions typically confined by major veins and leaf margins first appear as faint, yellowing spots on white varieties or bright red spots on red varieties. Lesions enlarge to several centimetres wide, changing to reddish-brown before tissue death. Can also affect inflorescences at or pre-flowering, causing flowers to rot, then dry out.	Premature leaf senescence and/or severe crop loss.	Infection and spread promoted by heavy rainfall and prolonged wetting periods.		③⑥	F ➡ H

9		Bacterial blight of grapevine	Xylem-inhabiting bacterium	Affects all green tissues and roots. Linear reddish-brown streaks that expand upwards on the shoot, darken, crack and develop into cankers. Shoots then wilt and dry up. Cankers can also appear on sides of petioles leading to one-sided (marginal) leaf necrosis. May also appear on bunch and berry stalks. Infected immature flowers turn black and die.	Reduced vine health and major crop loss in susceptible varieties.	Associated with warm, moist conditions.		①②③④ ⑤⑥⑦⑧ ⑨	F
10		Vine mealybug and Grape mealybug	Insects	Both insects 3 mm in length and slow moving. Vine mealybug oblong-shaped, shorter body filaments, no tail filament. Grape mealybug with long tail filaments. Feed on sap, secreting honeydew, often associated with intense ant activity.	Honeydew damages fruit and foliage, often due to secondary sooty mould infections. Cause reduction in vine vigour and yield.			③⑦	D ➡ H
11		European grapevine moth and American berry moth	Insects	Both species cause nearly identical symptoms. *Lobesia botrana* 5 mm long with light brown body, and grey/brown irregular patches on the wings. *Polychrosis viteana* 6 mm long with brown body and grey-purple bands across the wings and cream with brown spots near the wing tips. Larvae primarily responsible for damage, feeding on flowers and berries, webbing them together. Tunnel and hollow out berries leaving only the skin and seeds.	Significant yield loss compounded by secondary bunch rots.			⑥⑦	F ➡ H

12		Queensland fruit fly (Qfly) and Mediterranean fruit fly (Medfly)	Insects	Qfly adults 7mm long, red/brown with distinct yellow markings. Life cycle about 2.5 weeks during summer. Adults lay a clutch of white, banana-shaped eggs just below the surface of maturing fruit. Larvae hatch in 2-3 days and feed on flesh. Skin around lay sites becomes discoloured. Most active Sep – May, widespread throughout QLD, limited distribution throughout SE Australia. Medfly adults 3-5mm long, light brown with mottled wings. Adults lay white banana-shaped eggs through tiny puncture holes in the skin. Larvae eat way to centre of fruit, starting decay from the inside with fruit appearing undamaged from the outside. Most active Oct – May, restricted to parts of WA.	Cause yield reduction due to fruit rot and affect trade to sensitive markets.			⑦	F ➡ H

Status in Australia[1] [not in Australia (white map), in Australia (black map)]
Location of characteristic symptoms[2] [roots (1), shoots (2), leaves (3), petiole (4), peduncle (bunch stem) (5), flowers (6), berries (7), pedicel (berry stalk) (8), tendril (9)]
Monitoring period[3] [dormancy to harvest (D -> V), flowering (F), flowering to harvest (F -> H), veraison to harvest (V -> H)]

Image references
1 Pierces Disease University of California
2 Glassy-winged sharpshooter Reyes Garcia III, USDA Agricultural Research Service, Bugwood.org
3 Spotted winged drosophila G. Arakelian, cisr.ucr.edu
4 Phylloxera adults, nymphs and eggs Agriculture Victoria Rutherglen
5 Black rot Matthew Zidek, Texas A&M Agrilife Extension Service, Bugwood.org
6 Grapevine leaf rust Andrew M. Daly DPIFM
7 Grapevine red blotch-associated virus M. R. Sudarshana, USDA-ARS
8 Angular Leaf Scorch Photo courtesy Rick Dunst Double A Vineyards, US
9 Bacterial blight C.G. Panagopoulos, Agricultural University, Bugwood.org
10 Grape mealybug United States National Collection of Scale Insects Photographs, USDA Agricultural Research Service, Bugwood.org
11 Grape berry moth Todd M. Gilligan and Marc E. Epstein, TortAI Tortricids of Agricultural Importance, USDA APHIS ITP, Bugwood.org
12 Mediterranean fruit fly Scott Bauer, USDA Agricultural Research Service, Bugwood.org