



Practical farm biosecurity advice for keeping the plant industries safe from biological threats

By Greg Shea, Farm Biosecurity Coordinator; Greg Power, Activity Leader, Regional and Industry Biosecurity; Nic Monzu, Project Manager, Plant Pests and Diseases; Frances Casella, GrainGuard Coordinator; Andrew Reeves, HortGuard Coordinator; and Noel Wilson, OrdGuard Coordinator.

What is farm biosecurity?

Farm biosecurity can be described as preventing the establishment of biological risks posed by the introduction of endemic and exotic animal and plant pests, diseases and weeds onto the farm.

It makes good sense to protect your livelihood from introduced pests, diseases and weeds. Simple and effective farm hygiene habits can be easily set up in the day-to-day running of your farm enterprise.

Farm hygiene practices can help protect your property from pests and diseases such as ascochyta blight, codling moth, apple scab, downy mildew, anthracnose, brown rot, Queensland fruit fly, potato spindle viroid, skeleton weed, ergot, and wheat stripe rust.

As well, good farm hygiene will help to minimise the likely introduction and spread of weeds such as jointed goat grass and branched broomrape; diseases such as Karnal bunt and fusarium head blight; and insects such as the Khapra beetle, melon and papaya fruit flies and the glassy-winged sharpshooter.

Benefits to producers

Interstate and overseas buyers demand produce that is free of pests and diseases because they plainly do not wish to introduce those organisms to their own country or region.

The recognised 'cleanliness' of Western Australia's produce is a distinct marketing advantage. Maintaining high standards of farm hygiene is one way of making sure that your produce remains sought-after in an increasingly competitive marketplace.

As well, a clean property makes for more pleasant working conditions for you, your family and your employees.

Getting started

The greatest risk of spreading pests, diseases and weeds is when people, machinery, livestock, fodder, plant materials and seed are moved from farm to farm and from region to region.

Explain to family and staff the farm hygiene principles that you want to employ on your property. Coach them in good hygiene methods and encourage them to keep records for their areas of responsibility.

The following practical ideas will reduce the risk to your property and help to sustain our 'clean and safe' reputation in the market.

Adopting workable practices

Farm biosecurity is about taking steps that closely monitor and control potentially harmful pests and diseases to your farm and livelihood.

This starts at the farm gate. Put up signs at the main entrances to your property that spell out your biosecurity requirements. For example,

'Biosecurity area: do not proceed beyond the farmhouse without permission.'



Biosecurity starts at the farm gate

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

People

Risk is presented when people enter paddocks and carry out manual weed control, pest scouting, or harvesting as they may carry disease or weed seeds on their clothes, tools or footwear. Make sure that all visitors' footwear, clothing and tools are free of any loose dirt or plant matter before coming onto your property, and when leaving.

Restrict access of visitors to areas close to the homestead and limit their travel to central laneways.

Set up a concrete wash-down area at the property entrance and near the main buildings, with a sump that can be easily inspected for signs of weeds or weed seeds. Provide scrubbing brushes and footbaths for people entering or leaving the farm or moving from contaminated to clean areas.



Ensure visitors have clean footwear before entering farm paddocks

Animals

Isolate new livestock for 7 to 14 days and regularly check for any signs of disease.

Inspect animals and holding pens for exotic weeds, seeds and burrs.

Vehicles

Keep your farm ute and truck clean by frequently cleaning floor mats of soil, grass and weed seeds, insects and other residues.

Wash down vehicles entering the property and direct the water into the sump. Regularly check the sump for weeds. For example, if Noogoora burr is washed off vehicles, it could easily grow near the sump, producing and spreading more burrs.

Where possible, use your vehicle to carry visitors around the property.

Machinery and equipment

Keep vehicle movement to a minimum in the production areas of the property, especially when the soil is wet.

Hose off machinery tyres before moving from an infested to a clean area. Work clean areas first and contaminated areas last.

Use high-pressure water to wash down all tools and equipment such as secateurs, grafting knives, pallets and palecons (harvesting bins), bin exteriors, boxes, bags, harvesters, sprayers, seeding machinery, trimmers, leaf pluckers, trailers, tractors, trucks, tankers, post hole rammers, and any other items used on your farm. Apply the same principles to borrowed equipment and agricultural machinery purchased at clearing sales. Check that all items are clean before putting them out into the field, orchard, vineyard or market garden.

Used vineyard machinery from overseas and interstate is restricted entry into Western Australia. Entry is only permitted subject to a permit under prescribed conditions.

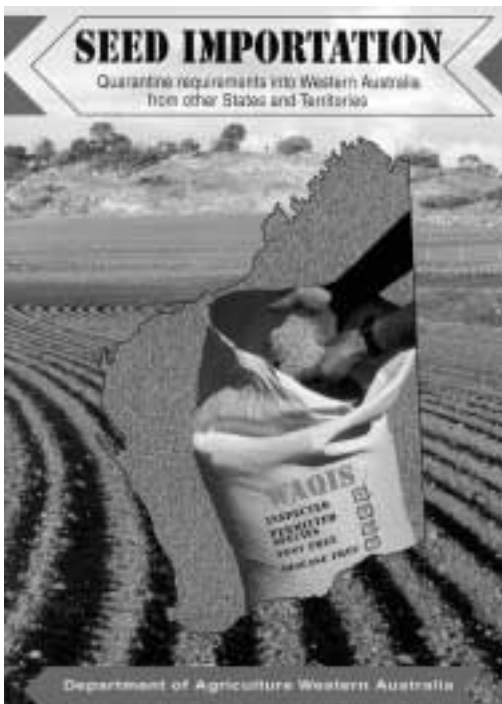
Quarantine restrictions apply to the importation of machinery, vineyard equipment and plants, nursery stock and seed from interstate or overseas. Further information on quarantine restrictions for interstate importation can be obtained from the Western Australian Quarantine and Inspection Service (WAQIS) on 9311 5333. International importation enquiries can be directed to the Australian Quarantine and Inspection Service (AQIS) on 9311 5333.

Crop seed, planting and propagation material

Use seed or propagation stock that is free of pests, diseases and weeds and regularly check your crops for signs of pests, diseases and weeds.

Always buy seed from a registered grower or reputable supplier and ask for a Seed Analysis Statement to confirm seed quality. Check batches of seed for any unusual seeds. Identification can be carried out by the AGWEST Plant Laboratories.

Grapevine planting material from overseas and interstate is prohibited except by permit and is subject to conditions including growth in post entry quarantine, and screening for diseases before release. Make sure that planting material grown in Western Australia has been grown and prepared with the aim of reducing the risk of spread of pests and diseases in the area. 'A class' propagating material of known virus and disease status can be



Quarantine requirements apply for seed importation

purchased through the Western Australian Vine Improvement Association (WAVIA).

Obtain contact details for WAVIA from the Bunbury office of the Department of Agriculture on 9780 6100.

Fruit and fruit by-products

Fruit, juice and the by-products of juicing are often moved from one region to another.

Protect your property and industry by maintaining an effective monitoring/pest management program. A 'spray diary' record should accompany each consignment of fruit and all fruit products.

Fruit should be loaded onto trucks on a concrete or tarmac pad located outside the property's production area.

Waste from fruit and juice should not be disposed of close to fruit trees on the property but should be taken to a site at least 100 metres from the nearest fruit trees. Alternatively, hot-compost any waste from fruit or juice by-products.

Take extra care to ensure that no soil, leaf material or insects are left adhering to, or are left in the crate, carton or other type of container when fruit is packed in the field.

Weed and herbicide control

Collect seed heads, burrs and weed seedlings in a container with a fitted lid as this helps to reduce the spread of herbicide-resistant weeds and other weeds such as doublegee or caltrop on the property.

Control water runoff and soil erosion from contaminated areas and dispose of crop and plant residues promptly.

Control weeds before they set seed.

Do not use aquatic weeds such as salvinia and water hyacinth in ponds, waterways and aquariums. These plants have the potential to block rivers, waterways, irrigation channels and dams. Declared weeds under the *Agriculture and Related Resources Protection Act 1976* must be reported to the Department of Agriculture.

Water features are a common method of spread for aquatic weeds, so make sure that water features are not located in areas prone to flooding.

When purchasing garden or water plants, ask the supplier if they have the potential to establish in the wild as an agricultural and/or environmental pest.



Cleaning harvesters between paddock movements will reduce weed spread on the property

Grain silos

The storage of grain for seed or stock feed is a part of any farm enterprise. It is important to keep all grain in a sealed silo that has been pressure-checked to ensure the seals are adequate for fumigation of grain storage insects.

Clean up any spilt grain immediately. Grain residues might become infested by grain insects and can attract rats, mice and birds to the grain storage area.

Keep surrounding areas free from grass, weeds, wood and general rubbish that provide a habitat for grain insects, rats and mice.

Safe use of chemicals

Everyone undertaking spraying activities should complete the ChemCert Farmcare chemical user's course. (See Bulletin 4560

Code of Practice – for the use of agricultural and veterinary chemicals in Western Australia.)

Contact your local re-seller, chemical company, industry body or the Department of Agriculture, if you are unsure about chemical residues on produce.

Remember the golden rule of biosecurity

Look, Check and Ask the Expert

An AGWEST Plant Laboratories Sampling Kit is available from your district office of the Department of Agriculture for those occasions when you need to identify an unfamiliar plant, weed, seed, disease or insect. This identification service is free when any of these biological organisms are suspected of being a new threat to agricultural industries.

For further information on services provided by the AGWEST Plant Laboratories, call 9368 3721.

Unfamiliar pests, diseases and weeds may also be reported to CROPLINE on 1800 068107, fax 1902 290 535.

