



Gardennote

Common lawn problems

By Chris Castalanelli, Darlene Mallett-Johnson, Mike Littlely, Pest and Disease Information Service

Maintaining the general health of a lawn and the soil beneath it is by far the best way to prevent common problems occurring in the first place. If a lawn does develop a problem, though, treatment is required. Unhappily, many people misdiagnose the cause of a brown or dead area and apply pesticide unnecessarily. Pesticides should be the last resort after the true reason for the problem has been identified and every other remedial action has been explored.

Dry patch

Cause and symptoms

The hydrophobic (non-wettable) nature of many Western Australian soils, particularly the sandier types, means that once they dry out, they are very difficult to re-wet thoroughly. During the hot months, waxy substances that emerge from the soil's organic matter form a coating

on the surface and this can prevent water from penetrating to the root zone.

The result is that dry patch develops on the lawn. Water droplets falling onto it simply run off to the side, and the water begins to establish a preferred pathway – so bordering areas of the lawn receive more of a drink and become greener just as the dry patch becomes browner. Too often, dry patch is blamed on African black beetles when, in fact, they are not present at all. Gardeners then pour on pesticide, to no avail.

Treatment

Remedying the water repellence of the surface is not quite as simple as applying a soil-wetting agent, because the wetting agent will immediately run off in the same way the water does.

First, therefore, it is wise to aerate the surface, either with a mechanical or manual aerator or with a garden fork. Then soak the area with water, and then apply the wetting agent. Read the



Dry patch on lawn

Important disclaimer

The Chief Executive Officer of the Department of Agriculture and Food 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.

directions on the label and follow up with another application after the recommended interval to prevent repellence building up again.

In the meantime it is worth checking to see whether a fault was responsible for the dry patch forming in the first place. If the reticulation is programmed to come on early in the morning before the household is awake, a broken sprinkler may have gone undetected. Even if all the sprinklers are working, a strong easterly wind may be diverting the spray, especially if it is in the form of a fine mist.

African black beetle

Symptoms



Adult African black beetle

The main difference between dry patch and lawn heavily infested by African black beetle (*Heteronychus arator*) is that, in the latter case, the damaged turf can be rolled back like carpet. It is the grubs, not the adult beetles, which are the more voracious feeders, literally cutting the grass off at its roots.

Treatment

No products are registered for killing the grubs, but nursery and garden centre staff can recommend a suitable pesticide to kill the adults. A repeat application will be necessary to kill the next generation that hatches, before more eggs are laid.

In any case, pesticide should be used only for severe infestations where lawn damage is unquestionably due to African black beetle. There is some debate about how many beetles



Larva of the African black beetle

per square metre constitute a severe infestation, but certainly it is possible to have quite a large number of beetles living in the lawn without seeing any damage.

There are two environmentally safe methods of testing for the presence of African black beetle and disposing of them. A bucket of soapy water poured onto the affected areas will flush the beetles and their larvae to the surface, where birds often will eat the larvae.

Alternatively, placing a moistened hessian bag or an old piece of carpet on the lawn will attract the adults to congregate under it. When the matting is lifted next morning, the beetles can be collected, put in a sealed bag, and thrown in the bin. The adult beetles are nocturnal and are often drawn to garden lights where, again, they are easy targets for collection.

Dollar spot

Cause and symptoms



Dollar spot

A fungal disease causes dollar spot, particularly in Queensland Blue couch or Saltene lawns, both of which have quite high watering needs. The disease can develop rapidly in humid weather, and is most prevalent from November to March. Often, soils deficient in nitrogen favour the development of the fungus.

Although each individual brown spot rarely exceeds the size of a 50-cent piece (or a US dollar, hence the common name), often the spots can merge to create larger patches, and the fungus bites deeply into the mat of turf. The markings on the grass blades are tan coloured with a brown border. Another feature of the disease is fine webbing, which may be seen early in the morning when the lawn is covered in dew.

Treatment

Fungicide is best used as a preventative rather than as a cure. Sometimes fungicides need to be alternated because the fungus can develop resistance to the chemicals in the first product used. Nursery and garden centre staff can recommend a suitable fungicide.

Prevention also relies on other factors such as thatch control, moderate fertilising, attention to watering frequency, and – very importantly – growing the grasses that are most suited to Western Australian conditions.

Like other fungal diseases, dollar spot can take off much more easily in a moist environment. For this reason it is recommended that watering should be done in the morning rather than evening. The lawn surface then has a chance to dry out during the day.

Mullumbimby couch and other sedges

Identification

Common names are often misleading. Mullumbimby couch (*Cyperus brevifolius*) is not a couch, and other members of the *Cyperus* genus commonly called nut-grasses are neither grasses nor nut-bearing plants. In fact, all these plants are sedges, which invade stealthily because their fine foliage makes it hard for gardeners to detect them until they have gained a major foothold.

Most other lawn weeds are annuals and therefore appear as seasonal problems, but *Cyperus* species are perennial. They are so vigorous that they can rob the lawn of water and nutrients, and eventually they will take over completely. Being prolific seed producers, they also spread quickly to other areas of the garden.

Treatment

Once Mullumbimby couch and other sedges are well established, they are difficult to eradicate. Hand-weeding or spot-painting with certain systemic herbicides can halt a small invasion – but it is important to note that not all herbicides are compatible with all lawn types, and the wrong one may actually harm a lawn quite seriously. Nursery and garden centre staff can recommend a suitable product if they are told the lawn type and the specific weed.

As is so often the case, prevention is better than cure. A robust lawn is less susceptible to invasion by any weed, including *Cyperus* species.

General lawn care

Establishing a healthy lawn involves a lot of preparation, but the good-looking and fairly trouble-free results will be the reward.

On a new site, once the ground has been cleared and levelled, we advise spraying a herbicide to kill existing and opportunistic weeds. A repeat treatment is usually necessary a few weeks later, to kill any seeds that have germinated in the interim.

An organic soil improver, to help retain moisture, should be dug in together with a lawn starter food



Mullumbimby couch, a sedge that can invade lawns.

that contains special nutrients. The area should then be cultivated with a corer or rotary hoe to improve drainage and reduce compaction.

When new lawn is needed to replace an old one, the steps are the same except that any remnant runners or stolons belonging to the previous lawn have to be removed, too; otherwise they will sprout afresh and contaminate the new turf.

To maintain the vigour of an established lawn, keep it watered regularly (within mandatory watering restrictions) and feed it regularly – nursery and garden centre staff can recommend a suitable fertiliser. Putting in a little regular effort is far better than spending weeks or months trying to rectify a problem.

Specimen identification requirements

When sending or delivering samples, the following information is required:

- Collector's name, location (where the specimen was found), full address, telephone number and e-mail address, description of the damage and date collected.

Department of Agriculture and Food
Pest and Disease Information Service
3 Baron-Hay Court, South Perth WA 6151
Freecall: 1800 084 881
E-mail: info@agric.wa.gov.au