Noogoora burr (Xanthium strumarium)

Noogoora burr is one of the most serious and widespread weeds in the world. It is mainly found in areas with high rainfall and a temperate climate but it may also persist in arid environments, where the seeds may remain dormant for years and then take advantage of occasional rainfall to reproduce.

Noogoora burr is a declared plant for the whole of Western Australia with a control category of C3 (Management) in the Kimberley and C2 (Eradication) for the remainder of the state.

Four closely related species (Noogoora, Hunter, South American and Californian burr) are generally referred to as Noogoora burr. They each differ in the size of the burr, the shape of the two terminal spines on each burr and the leaf shape. Bathurst burr (Xanthium spinosum) is a related weed.

Why Noogoora burr matters to you.

Noogoora burr is often abundant after spring or summer floods in the far north. It can be found along river and creek flats, on roadsides and in pasture land. Noogoora burr spreads by seed located in the burrs. Burrs are spread by attaching to animals, clothing and bags. Burrs can also float on water.

Supporting your success
Noogoora burr is poisonous to stock at the seedling stage. Due to the hooked spines on the burr which tangle in wool it impacts on production costs. Burr infested wool fetches less at auction due to the high processing cost of burr removal. The dry burrs may also cause discomfort and injury, particularly to sheep. The weed’s growth is sometimes so dense along riverbanks that cattle and sheep cannot get to watering places.

It is a major weed of irrigated soya beans, maize, sunflowers and cotton. Noogoora burr reduces production in crops and pasture by competing for moisture, nutrients and light.

**What to look for.**

Noogoora burr stems normally grow up to 2.5 m in height but occasionally reach four metres. Isolated plants have a branched stem, but plants growing in a clump are usually single stemmed. The stems lack spines, unlike Bathurst burr, but have a fine bristly covering. Stems are often arranged in a zigzag manner and usually carry purplish blotches or streaks in young plants.

Noogoora burr flowering bush

Noogoora burr has a deep taproot and an extensive root system. The leaves are similar in shape to a grapevine leaf with prominent veins. They have minute bristles on both surfaces and jagged edges. The upper surface of the leaf is dark green while the under surface is pale green.

The flowers are green and inconspicuous. Male flowers form in clusters at the ends of branches, but soon drop off. Female flowers form on short stalks at the base of the leaf and at the ends of the main stem and side branches. The female flowers develop into green burrs that turn brown when ripe. The ripe burr is an elongated egg shape. It is woody, 10 to 20 mm long and four to eight mm wide. The burr is densely covered with hooked spines and has large hornlike projections at the tip. Two seeds are produced in each burr. They are brown, four to eight mm long and flattened on one side.

**Life history of Noogoora burr.**

Noogoora burr is a summer growing annual plant. Germination usually occurs between August and December in temperate climates but can occur at any time of year under favourable conditions. In the Kimberley germination occurs in the wet season, from December to March and the plant flowers from April to May. Ripe burrs begin to appear in June and continue until the plants die off, usually due to lack of moisture.

A single plant can produce as many as 11,000 burrs. It has been calculated that provided no new burrs are introduced to an area, it would take six years to reduce the viable seed population in the soil to less than one per cent. Therefore, any control site must be monitored for at least 7 years.

**What you can do about Noogoora burr.**

Practice good biosecurity to keep Noogoora burr and other weeds off your property. Take particular care when purchasing fodder to avoid buying anything contaminated with weed seeds or toxic plants. Ensure
contractors entering your property have clean equipment to avoid the introduction of new weeds.

It is an offence under Western Australian legislation to sell or transport produce or other material contaminated with declared plants. All offences regarding declared plants should be reported to the nearest office of the Department of Agriculture and Food.

Prompt action is necessary to eradicate new and/or isolated patches of Noogoora burr and to prevent the weed becoming established in new areas.

Report suspected Noogoora burr or any other unusual weeds as soon as possible. In country areas, contact the Department of Agriculture and Food, or the Pest and Disease Information Service by email info@agrlic.wa.gov.au or Freecall 1800 084 881.

For identification of suspected Noogoora burr or any other new or unusual weeds, please take a sample to the nearest office of the Department of Agriculture and Food. Alternatively download the MyWeedWatcher app agric.wa.gov.au/apps/myweedwatcher or report weeds using MyWeedWatcher online www.agric.wa.gov.au/myweedwatcher.

For further information on Noogoora burr identification or control, go to www.agric.wa.gov.au and type “Noogoora burr” in the search box or contact your local Biosecurity Officer.

Where can I get more information about Noogoora burr?

The book Noxious Weeds of Australia, by W.T. Parsons and E.G. Cuthbertson (2001, CSIRO Publishing) has detailed information about all species that are declared plants or noxious weeds in every State.

A useful source of weed information is the Weeds Australia webpage www.weeds.org.au.

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