

BATHURST BURR



1. Mature plant.
 2. Male flower.
 3. Female flower.
 4. Rosettes.
 5. Developing burrs.
- (Photos: Sue Wilkins)



(continued overleaf)

BATHURST BURR

Bathurst burr (*Xanthium spinosum*) is a shrubby plant originating in South America. It has spread to become a major weed in many countries of the world.

Bathurst burr is believed to have first arrived in Australia as burrs tangled in the tails of horses imported from Chile.

It is widespread in the eastern states, but in W.A. is confined to pockets in the Eastern Goldfields and occasional outbreaks elsewhere. Infestations in agricultural areas have been rare in recent years due to vigorous action taken to prevent the spread of the weed once found.

Bathurst burr is a declared plant in W.A. All plants found must be eradicated.

Imports of livestock, wool and agricultural produce from other states are carefully inspected to reduce the risk of further introductions of the weed.

Significance

Bathurst burr seedlings are poisonous, especially the cotyledons (seed leaves). At this stage it is quite

palatable, however older plants are not eaten. The main problem caused by the weed is burr contamination of wool. The burrs are difficult to remove during processing; therefore buyers pay lower prices for infested fleeces.

Burrs also make stock unpleasant to handle.

Ecology

Bathurst burr is a summer-growing annual plant. It reproduces only from seed. In south-western Australia, some mature plants survive well into winter, with the result that burrs may be found for most of the year.

The plant flowers from January until autumn, producing up to 150 burrs per plant. Each burr contains two seeds, one of which is capable of immediate germination, but the second may stay dormant in the soil for several years.

Dormancy depends on the permeability of the seed coat. This is broken down by high temperatures. Germination may also be controlled by daylength and

daytime temperatures. The result is a staggered germination which makes seedlings difficult to control and allows the plant to exploit the variable environmental conditions under which it grows.

Bathurst burr is mainly a pasture weed. However, it is also found in summer-growing crops such as soya beans and maize. The weed spreads entirely by seeds. Burrs are usually carried by people or animals, attached to clothes, fur or other fibre by their hooked spines. They may also be dispersed by water or as a contaminant in seeds and hay.

Appearance

Bathurst burr is an erect, much-branched, bushy plant. It usually grows about 45 cm high but may reach 1.2 metres. It is best recognised by the presence of three-pronged greenish-white spines set in the angle between leaf stalk and stem. These spines are up to 25 mm long.

The leaves are arranged alternately on the stem. They

are thick in texture with three lobes; a large central lobe and two smaller side lobes. The upper surface is dark green with prominent veins, while the lower surface is pale with downy hairs. The stem is hairless.

Bathurst burr flowers are small and inconspicuous. They are greenish white and set in the angle of the leaves. Those near the top of the stem are mostly male while female flowers form further down.

Egg-shaped burrs about 10 mm long form from the female flowers. These are covered with numerous hooked spines. Each burr is two celled. Each cell contains one brown, flattened seed about 9 mm long.

For further information on Bathurst burr recognition and for help in drawing up a control programme, contact the Agriculture Protection Board, Baron-Hay Court, South Perth 6151 (Telephone (09) 368 3333) or the nearest district office of the Department of Agriculture or the A.P.B.