

Plant Policy

galvanised burr (*Sclerolaena birchii*)



Government
of South Australia

Galvanised burr (*Sclerolaena birchii*) is a native perennial shrub of New South Wales, Northern Territory and Southern Queensland. It is also native to chenopod shrublands in far northern South Australia, and has been recorded as adventive further south.

Weed Risk

Invasiveness

Galvanised burr has low to medium seed production and poor mechanisms for seed dispersal. The seed is carried in burrs, which remain firmly attached to the stem segments of the parent plant. The plant must die or stems be broken off before seeds can be dispersed. Unlike burrs which can attach firmly to wool, the seed is not readily spread over long distances on sheep.

The slow growth rate of seedlings limits their establishment to specialised environments that lack other plant growth in years of high rainfall, such as the overgrazed zone around a bore.

Enforced control is unlikely to prevent its establishment. It takes many years to dominate and as it is similar to many other native plants pastoralists are not likely to notice it until large areas are established. However, further land degradation in southern grazing regions could increase the risk of invasion by unpalatable shrubs such as galvanised burr. This needs to be addressed by integrated land management.

Galvanised burr is unlikely to establish as a weed within the agricultural areas of South Australia although it may extend its range in small areas of the pastoral zone where soils are denuded.

Impacts

Galvanised burr has not increased its original range significantly in NSW, with the only growth of infestation being due to increased density of plants rather than increased extent. This is a part of a general problem in rangelands where unpalatable native shrubs such as *Dodonaea* become dominant as more palatable plants are selectively grazed.

Mature plants are unpalatable to sheep except for the shoot tips. Consequently selective grazing allows it to dominate, especially in overgrazed pastures during drought. It is often associated with other shrubs having similar properties, and is part of the issue of native woody vegetation increasing in density on some rangeland. However, in heavily overgrazed areas galvanised burr may prevent complete denuding of ground and erosion of soil; the bushes collect windborne grass seed and organic debris. This aids colonisation by more desirable plants.

The burrs are a vegetable fault in wool, but rarely cause a significant problem in NSW or Queensland because the sections of fleece most contaminated, the neck and belly wool, are skirted and the large diameter of fault fragments enables easy removal in wool processing.

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Potential distribution

The range of galvanised burr appears to be limited by climatic requirements of warm winter temperatures and the need for evenly seasonal spread of rainfall. It has been reported at localities outside its native range in the northern pastoral zone but has not become established there.

Feasibility of Containment

Control costs

Spot infestations of galvanised burr that may appear in the southern grazing areas are readily controlled with non-selective herbicides if they are become a problem for the land owners.

Persistence

The plant is not likely to be deliberately transported or planted.

Current distribution

Galvanised burr remains a localised and uncommon species in its native range within north-eastern SA. The only established adventive population in the southern part of the State is on marginal land in the Yongala-Jamestown area, with previous records from Bibliando, Orroroo, Crystal Brook, Balaklava, Wudinna and Pinnaroo.

State Level Risk Assessment

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment scores by land use:

Land use	Weed Risk	Feasibility of control	Response at State Level
Grazing - southern	low 28	very high 1	monitor
Grazing - rangeland	medium 51	high 15	protect sites

Considerations

Galvanised burr is the only plant native to South Australia that has been declared under the *Natural Resources Management Act 2004* or the former *Animal and Plant Control Act 1986*. No co-ordinated control program on this species has ever been implemented.

Only two new infestations, at Wudinna and Pinnaroo, has been recorded since it was declared in 1981. In the 1990 review of the declared plant schedule, galvanised burr was retained as a notifiable weed but with no provision for enforced control. However, no infestations have ever been notified to authorities by landholders. It unlikely to become a problem for primary production or the environment.

Declaration as notifiable under section 180 is ineffective in monitoring any changes in the distribution of this native plant, which is not of concern to land owners. Therefore, galvanised burr is not declared under the *Natural Resources Management Act 2004* in South Australia.

Synonymy

Sclerolaena birchii (F.Muell.)Domin, Bibliotheca Botanica 89: 623 (1921).

Nomenclatural synonyms:

Anisacantha birchii F.Muell., Fragm. Phyt. Aust. 8:163 (1874).

Bassia birchii (F.Muell.)F.Muell., Syst. Census Aust. Pl. 1:30 (1882).

Taxonomic synonyms:

Bassia filiformis Ising, Trans. & Proc. Roy. Soc. SA 88: 73 (1964).

Sclerolaena filiformis (Ising) A.J.Scott, Feddes Repert. 89: 112 (1978).

References

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