



Government
of South Australia

Plant Policy

Spear Thistle (*Cirsium vulgare*)

Spear thistle is a conspicuous annual pasture weed with a widespread distribution in the southern part of South Australia.

Weed Risk

Invasiveness

The seed is not readily spread for any distance by wind, and has generally been brought to properties in fodder or on machinery. Seed production can be high in dense infestations, but there is no means of vegetative spread. Spear thistle establishes on soils of high fertility, especially where grazing management removes perennial grasses from perennial pastures.

Impacts

Grazing and pasture management is reflected in spear thistle abundance; dense stands of spear thistle indicate lack of perennial grasses and a decline in legumes. The major loss due to thistles occurs where dense infestations restrict access to adjacent pasture. It is not found as large infestations in well-managed pastures, but remains as a weed of waste areas, drains and road verges.

Potential distribution

Spear thistle is native to most of Europe including the Mediterranean basin. It can be expected to grow throughout the agricultural zone of South Australia. Like most thistles, it has a high requirement for soil nitrogen and is found mainly on soils of high fertility.

Feasibility of Containment

Control costs

Extension of techniques for pasture management offer an efficient method of spear thistle control. It is easily controlled in crops as germination is encouraged by cultivation, and the rosettes are susceptible to herbicides normally used in cereals. A biological control agent, the gall mite, is now widespread in the South East and has an impact on seed viability.

Persistence

Spear thistle is an annual with few seeds surviving more than twelve months. It therefore thistle does not accumulate a seed bank in the soil.

Current distribution

It is widespread across the agricultural zone of South Australia, restricted to damp places and roadsides in the lower rainfall areas of the State where it extends to the northern Flinders Ranges, but more common above 500 mm rainfall.

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
Crop/pasture rotation	low 25	high 25	monitor
Grazing - southern	medium 88	medium 36	manage sites
Vegetables	low 25	high 23	monitor
Perennial horticulture	negligible 11	high 30	limited action
Forestry	negligible 7	medium 45	limited action

Considerations

The highest level of management action indicated by the risk assessment is managing sites in southern grazing areas. This is done as necessary by land owners. None of the Natural Resources Management Boards now require enforced control of spear thistle to implement their weed management plans.

Therefore, spear thistle is not declared under the *Natural Resources Management Act 2004* in South Australia.

Synonymy

Cirsium vulgare (Savi) Tenore, Fl. Napol. 5: 209 (1836).

Basionym:

Carduus vulgaris Savi., Fl. Pisana 2: 241 (1798)

Taxonomic synonyms:

Carduus lanceolatus L., Sp. Pl. 821 (1753)

Cirsium lanceolatum (L.) Scop., Fl. Carniolica ed 2, 2: 130 (1798)

Other common names include black thistle, bull thistle, fullers' thistle, scotch thistle and swamp thistle.

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Minister for Sustainability, Environment and
Conservation

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