

Berkheya rigida

Family: Asteraceae

Species: *Berkheya rigida* (Thunb.) Ewart et al.

Common Names: African thistle, Augusta thistle, berkheya thistle, and hamelin thistle

Synonyms: *Stobaea rigida* Thunb.

Bayer Code: BHKRI

Description: A perennial thistle, stiff and woody, up to 80 cm high with a system of rhizomes. Stems are woolly below and may become prostrate and root at nodes. Leaves are green above, white woolly below, 5–10 cm long deeply lobed with spiny points, basal leaves tapering to the base and virtually sessile, while upper leaves may clasp the stem. Flowers deep yellow, florets all tubular in heads 2–3 cm across, subtended by several rows of spiny bracts. Seed up to 3 mm long, black, smooth, conical, with terminal scales but no pappus.



Figure 1. *Berkheya rigida* from Parsons and Cuthbertson (1992)

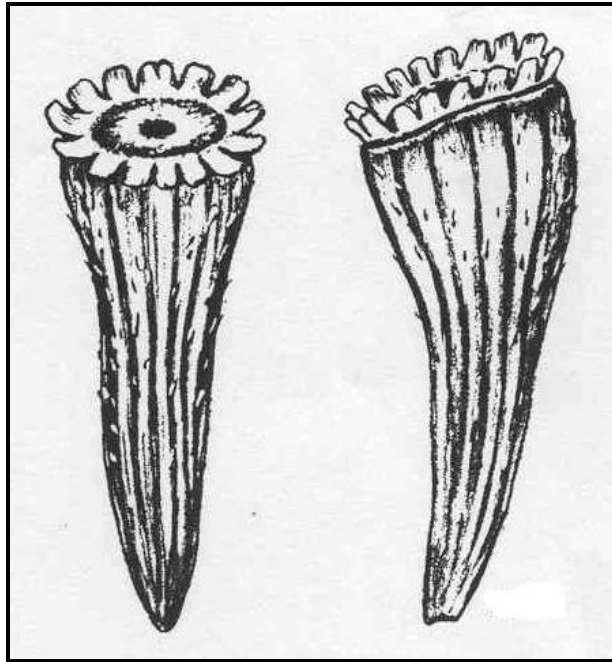


Figure 2. Fruit of *Berkheya rigida* from Reed (1977)



Figure 3. *Berkheya rigida* from Parsons and Cuthbertson (1992)



Figure 4. *Berkheya rigida* seedling from Parsons and Cuthbertson (1992)



Figure 5. Infestation of *Berkheya rigida* from Parsons and Cuthbertson (1992)

Distribution: Native in South Africa. Naturalized in Australia (NGRP, 2002).

Native and Naturalized Distribution of *Berkheya rigida* (Thunb.) Bol. & Woll. ex Adamson & Salter

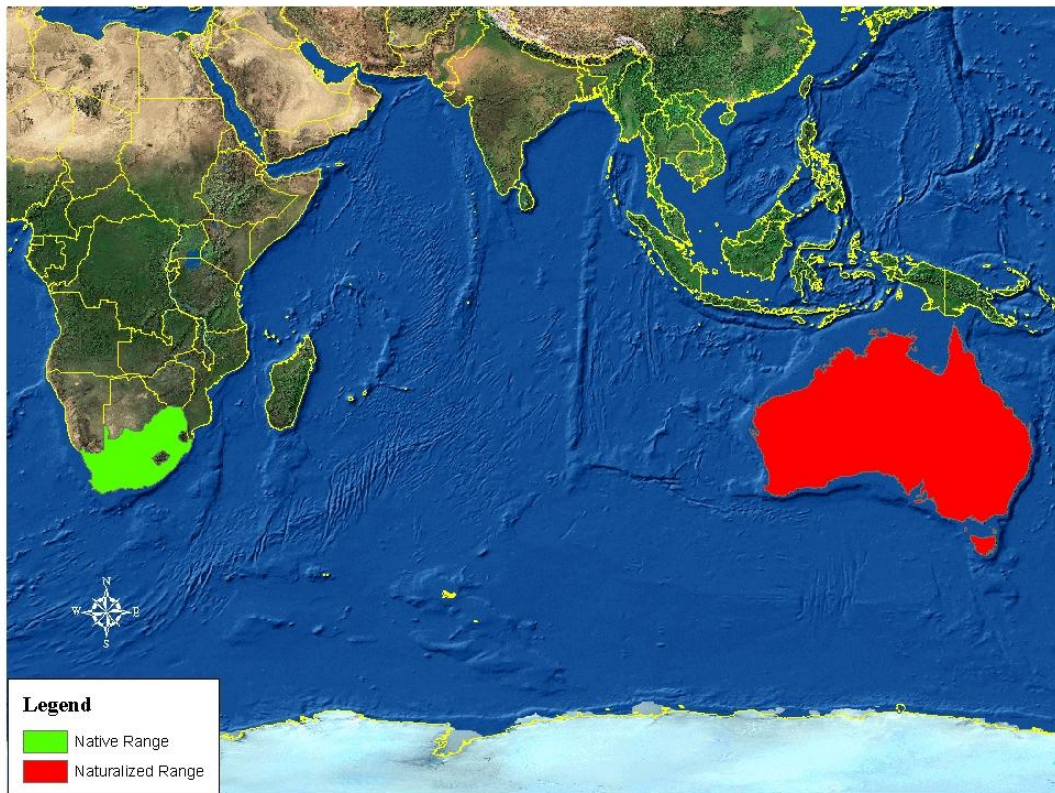


Figure 6. By Glenn Fowler, USDA APHIS PPQ CPHST, 2002 (Fowler, 2002)

Biology and Ecology: *Berkheya rigida* establishes from seed or from rhizome fragments. Germination occurs in the autumn, forming a seedling rosette of leaves. Shoots extend in late winter, and flowering begins in November in Australia and continues through the summer. Shoots die down at the end of the summer and regrow from crowns or rhizomes in late autumn. Although seeds have no pappus and are not dispersed individually, they remain in the mature flower head, which may be rolled and blown by wind. They may also be caught in animal fur and dispersed in that way.

Possible Pathways to the United States: Although mainly a weed of grassland, *B. rigida* can also occur in crops and be accidentally introduced as a contaminant of crop seed or other agricultural produce, including animal skins. *Berkheya rigida* is unpalatable to animals because of the spines.

Adverse Impact: Dense colonies may develop in pasture and other grassland, limiting grazing and access. Similar behavior could be expected across comparable ecologies in the United States, creating serious economic and environmental interference.

Literature Cited:

Fowler, G. 2002. Distribution Map. USDA, APHIS, PPQ, Center for Plant Health Science and Technology, Raleigh, NC.

- NGRP. 2002. World Economic Plants in GRIN (Germplasm Resources Information Network). United States Department of Agriculture, Agricultural Resources Service, National Germplasm Resources Program (NGRP). Beltsville. Last accessed 2009.
- Parsons, W. T., and E. G. Cuthbertson. 1992. Noxious Weeds of Australia. Inkata Press, Melbourne. 692 pp.
- Reed, C. F. 1977. Economically Important Foreign Weeds: Potential Problems in the United States. Agricultural Research Service, Animal and Plant Health Inspection Service, U.S. Dept. of Agriculture, Washington, DC. 746 pp.