

# Asplenium haurakiense

## COMMON NAME

Hauraki Gulf spleenwort

## SYNONYMS

*Asplenium flaccidium* subsp. *haurakiense* Brownsey

## FAMILY

Aspleniaceae

## AUTHORITY

*Asplenium haurakiense* (Brownsey) Ogle

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

ASPHAU

## CHROMOSOME NUMBER

2n = 288

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand, Manawatāwhi / Three Kings Islands, North Island (northern areas to Waitakere coastline in the west and Moutohora (Whale) Island in the east.

## HABITAT

Strictly coastal. Mostly terrestrial, growing in exposed or sheltered sites, often in positions subject to salt spray, also in petrel scrub and on small offshore islands it frequently grows around petrel burrows in dense forest.

## DETAILED DESCRIPTION

Mostly terrestrial. **Rhizome** short, stout, erect, bearing dark brown ovate scales with very thick cell walls, up to 20 × 2 mm. **Stipes** 50–200 mm (or more) long, brown on underside, green above, firm and erect, sparingly covered in small ovate scales with very thick walls. **Laminae** oblong to elliptic, 100–400 (or more) × 40–200 mm, ± dull or more often glossy green, thick, leathery, stiff and erect, pinnate to bipinnate. **Raches** green, sparingly scaly. **Pinnae** in 5–20 (or more) pairs, linear to narrowly ovate, acuminate, long stalked, 20–150 × 5–20 mm; degree of dissection very variable, sometimes only divided into very short obtuse segments, sometimes pinnate. **Pinnules** oblong and obtuse to linear and acute, up to 8 × 2 mm; basal acroscopic pinnule frequently much longer than that next to it, up to 40 mm long, and itself pinnatifid. **Sori** submarginal, linear, 2–7 mm long. **Spores** (38)–43–49–(54) × (20)–26–31–(38) μm.



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At Motuokino, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## SIMILAR TAXA

Allied to *Asplenium flaccidum* G.Forst. from which it differs by its mostly terrestrial growth habit, restriction to coastal areas, octoploid ( $2n = 288$ ) rather than tetraploid ( $2n = 144$ ) chromosome number, ovate rhizome and stipe scales (with very thick cell walls); stiffly erect rather than pendulous, usually glossy green rather than dull green, oblong to elliptic fronds; by the basal acroscopic pinnule which is frequently much longer than that next to it, up to 40 mm long, and itself pinnatifid; and by the larger spores. *Asplenium appendiculatum* subsp. *maritimum* (Brownsey) Brownsey occupies similar coastal habitats and is somewhat similar. It can be distinguished from *A. haurakiense* by its allopatric distribution, and by the lack of a greatly elongated basal acroscopic pinnule on each pinna.

## FLOWER COLOURS

No flowers

## LIFE CYCLE

Healthy plants produce spores throughout the year. Minute spores are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easily grown. A very attractive fern which can be rather slow growing. Best in a large pot or planted in a deep, rich, moist soil in semi-shade. Prone to scale and mealy bug infections. A very variable species which could benefit from critical horticultural selection.

## ETYMOLOGY

**asplenium:** From the Greek a- 'without' and splene 'spleen', a northern hemisphere species, the black spleenwort (*Asplenium adiantum-nigrum*), was once believed to be a cure for diseases of the spleen.

## WHERE TO BUY

Occasionally sold by plant and specialist native plant nurseries.

## NOTES ON TAXONOMY

Brownsey (1977) treated this fern as a subspecies. However, it is frequently sympatric with *A. flaccidum* s.s., and on occasion hybridises with it, producing sterile hybrids. Accordingly NZPCN prefer species rank. Kermadec Island group plants referred to *A. flaccidum* are perhaps closer to *A. haurakiense*. Further study is needed.

## ATTRIBUTION

Description modified from Brownsey (1977)

## REFERENCES AND FURTHER READING

Brownsey PJ. 1977. A taxonomic revision of the New Zealand species of *Asplenium*. *New Zealand Journal of Botany* 15(1): 39–86. <https://doi.org/10.1080/0028825X.1977.10429618>.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/asplenium-haurakiense/>