

Isolepis basilaris

COMMON NAMES

pygmy clubrush

SYNONYMS

Scirpus basilaris (Hook.f.) C.B.Clarke, *Isolepis novae-zelandiae* Colenso

FAMILY

Cyperaceae

AUTHORITY

Isolepis basilaris Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Sedges

NVS CODE

ISOBAS

CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: EF, RR, Sp

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: EF, RR, Sp

2009 | Threatened – Nationally Endangered | Qualifiers: De

2004 | Serious Decline

DISTRIBUTION

Endemic. North Island and South Island from Hawke's Bay to Southland.

HABITAT

Coastal, lowland to upland habitats, up to 700 m a.s.l. On damp, sandy or silty margins of lagoons, tarns, ephemeral lakes and rivers, freshwater or brackish.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).



Close up of plants. Photographer: A. J. Townsend, Licence: CC BY-NC.




Herbarium specimen: AK 298647.

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DETAILED DESCRIPTION

Minute, moss-like, densely tufted plant forming circular patches 10–100 mm diameter and up to 60 mm tall, bright green above, reddish brown below. **Rhizome** < 1 mm. diameter, much branched; sheathing bract at each node loose, membranous, with red nerves. **Culms** < 1.5 rarely up to 30 mm long, < 0.5 mm diameter. **Leaves** 1–2 on each branch, much > culms, 5–60 mm long, < 0.5 mm wide, setaceous, plano-convex; sheath membranous, red-nerved. **Inflorescence** an apparently lateral, single spikelet, or rarely 2, hidden among the leaves, pale green, occasionally with red markings; subtending bract leaf-like, channelled, very much > culm from which it arises and almost = leaves. **Spikelets** 2.5–3.5 × 1.5–2.0 mm, elliptical or oblong. **Glumes** 1–2 mm. long, ovate, elliptical, obtuse, white and membranous, or with patches of red on the sides; keel thick, green, occasionally slightly excurrent.

Hypogynous bristles 0. **Stamens** 2–3. **Style-branches** 2–3. **Nut** c. 0.5 × 0.5 mm, c.  length of glume, obovoid to suborbicular, plano-convex, dorsally rounded, noticeably apiculate, red-brown to dark brown, almost black, surface often shining but distinctly reticulate.

SIMILAR TAXA

Isolepis caligenis. *Isolepis basilaris* has 1–2 leaves per tuft, very short flower stems with spikelets hidden amongst leaves and very dark brown nuts, flat on one side. *Isolepis caligenis* has 2–5 leaves per tuft, longer flower stems and pearly grey nuts, rounded on both sides. Occasionally *Isolepis basilaris* with elongated flower stems is difficult to distinguish from *I. caligenis* if fruit is immature.

FLOWERING

September–November

FRUITING

December–April (but seedheads long persistent)

LIFE CYCLE

Nuts are dispersed by water and possibly granivory and attachment (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown from fresh seed and division of whole plants.

THREATS

Domestic and feral cattle, sheep, horses and pigs are the serious threats throughout this species range, mainly through browse, trampling, and facilitating the spread of weeds. Competition from taller vegetation is significant at many sites. Coastal development (e.g., road widening) and erosion are further common threats to most populations. In some locations plants are threatened by 4-wheel drive vehicles.

ETYMOLOGY

isolepis: From the Greek isos (equal) and lepis (scale)

basilaris: From Latin 'basis' borrowed originally from Greek, meaning basal

CULTIVATION

Not commercially available but plants are held by several Botanic Gardens and specialist growers.

ATTRIBUTION

Description adapted from Moore and Edgar (1970).

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REFERENCES AND FURTHER READING

Johnson AT, Smith HA. 1986. Plant Names Simplified: Their pronunciation, derivation and meaning. Landsman Bookshop Ltd, Buckenhill, UK.

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

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/isolepis-basilaris/>

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