# Colobanthus squarrosus subsp. squarrosus

# **COMMON NAME**

colobanthus

#### **SYNONYMS**

None (described in 1999)

#### **FAMILY**

Caryophyllaceae

#### **AUTHORITY**

Colobanthus squarrosus Cheeseman subsp. squarrosus

# **FLORA CATEGORY**

Vascular - Native

#### **ENDEMIC TAXON**

Yes

#### **ENDEMIC GENUS**

No

# **ENDEMIC FAMILY**

No

# STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

#### **NVS CODE**

**COLSSS** 

#### **CURRENT CONSERVATION STATUS**

2017 | At Risk - Naturally Uncommon | Qualifiers: RR

# **PREVIOUS CONSERVATION STATUSES**

2012 | At Risk - Naturally Uncommon | Qualifiers: RR

2009 At Risk - Naturally Uncommon

2004 | Range Restricted

# PLANT CONSERVATION AND SERVATION AND SERVATI



Mt Arthur, Kahurangi National Park. Photographer: Melissa Hutchison, Date taken: 16/01/2019, Licence: CC BY-NC.



Mt Arthur, Kahurangi National Park. Photographer: Melissa Hutchison, Date taken: 16/01/2019, Licence: CC BY-NC.

# **DISTRIBUTION**

Endemic. New Zealand: South Island (north-west Nelson, Kahurangi National Park).

#### **HABITAT**

Alpine. On limestone-marble rock outcrops, cliffs, and talus slopes; less commonly found on skeletal, stony soils in sparse grassland.

#### **DETAILED DESCRIPTION**

A compact multi-branched cushion up to 700 mm diameter and 50-75 mm high (large cushions may be formed from the coalescence of several individuals). Branches leafy for much of length with c.5-8 pairs of green leaves and numerous persistent, pale brown dead leaves below; internodes 0.1-10.5 mm long. Leaves rigid, spreading to ascending and ± imbricate; sheath 0.6-2.5 mm long; blade subulate, 1.4-9.0 mm long (including the translucent tip), 0.6-1.4 mm wide, with colourless borders c.0.1 mm wide, becoming ± channelled when dry, gradually narrowed into a shortly acicular tip 0.3-0.9 mm long. Inflorescence a solitary flower on a bracteolate peduncle, lateral near branch apex. Flowers predominantly 5-merous, 3.5-5.5 mm diameter. Sepals 4-5, persistent, ovate, ovate-triangular or broadly ovate-triangular, 2.5-3.5 x 1.2-2.6 mm, margins ± membranous, keel not thickened, inconspicuous, predominantly white at anthesis (with a pale green median strip below) but becoming pale green at fruiting, the apex acute, occasionally cucullate, often with a small apiculus 0.1-0.4 mm long. Petals 0. Stamens 4-5, 3.0-7.8 mm long; anthers pale yellow. Ovary ovoid, white to yellowish at flowering becoming pale green at fruiting, ovules 9-44; styles 4 or 5, 1.5-3.5mm long. Peduncles ± hidden amongst leaves or shortly exserted at fruiting, 1.1-12.7mm long, with 1-3 pairs of foliose bracteoles; bracteoles 1.4-3.7 mm long with a short apiculate tip 0.1-0.4 mm long. Capsule splitting to c.½, 4- or 5-valved, valves from 1 mm shorter to 1.5 mm longer than sepals. Seeds brown, shiny, colliculate dorsally to ± smooth laterally, ± obliquely reniform, 0.5-0.85 × 0.4-0.7 mm.

#### **SIMILAR TAXA**

The subspecies forms larger cushions than any other New Zealand species of *Colobanthus*, with the possible exception of *C. muscoides*. The predominantly white sepals of the flowers, together with the usually strongly exserted stamens, distinguish this subspecies from subspecies *drucei* and all the other New Zealand species of *Colobanthus*.

#### **FLOWERING**

November - January

#### **FLOWER COLOURS**

Green, White

#### **FRUITING**

January – March

#### LIFE CYCLE

Winged seeds are dispersed by water and possibly also wind and ballistic projection (Thorsen et al., 2009).

#### **PROPAGATION TECHNIQUE**

Unknown in cultivation.

#### **THREATS**

A Naturally Uncommon, range-restricted, endemic of limestone/marble mountain ranges within Kahurangi National Park. There are no known threats.

## **ETYMOLOGY**

colobanthus: Mutilated flower wth no petals

#### **ATTRIBUTION**

Description modified from Sneddon (1999).

# REFERENCES AND FURTHER READING

Sneddon B.V. 1999: The taxonomy and breeding system of *Colobanthus squarrosus* (Caryophyllaceae). *New Zealand Journal of Botany 37*: 195-204.

Thorsen, M.J.; Dickinson, K.J.M.; Seddon, P.J. 2009: Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285-309.

# **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/colobanthus-squarrosus-subsp-squarrosus/