# Chrysocephalum apiculatum

**Synonyms:** Gnaphalium apiculatum, Helichrysum apiculatum

**Common names:** Yellow Buttons, Common Everlasting

#### Family: Asteraceae

Similar species:

Calocephalus citreus (Lemon Beautyheads), Calotis lappulacea (Yellow Burr-daisy), Helichrysum rutidolepis (Pale Everlasting), Leptorhynchos squamatus (Scaly Buttons), Euchiton gymnocephalus (Creeping Cudweed)

**Conservation status:** Not listed as there are no known threats.

# Description

Chrysocephalum apiculatum is a herb which can vary, according to the growing conditions, from a sparse erect plant up to 60 cm high to a much lower sprawling plant to 7 cm high. The morphological (form and structure) variations suggest that there may be several species included within the complex.

**Stems**: with silver woolly hairs. They occasionally form roots where they touch the ground, though only in the most favourable conditions

**Leaves**: elongated, narrow, grey-green, 1-6 cm long, 1-2.5 cm wide, alternate, sessile, covered with dense whitish hairs, ending in a pointed tip, margins flat or down-curved. Photo by Greening Australia

# Distribution



Map from Australia's Virtual Herbarium: http://avh.chah.org.au/

# Ecology

Habit	Perennial herb
Growth period	Mainly during spring and autumn; the plant dies back in summer if dry conditions prevail.
Life expectancy	2-5 years.
Habitat	Grasslands, open sites on the edges of woodlands or heathlands. Found in many pastures as scattered plants or in dense small colonies. Often in disturbed sites.
Site tolerance	Full sun and dry position. Plants growing close to large trees tend to be sparser than those in open areas.
Soil tolerance	Found on a wide range of soils: sandy to clay loam, textured red earths, clay soils. Prefers well-drained soils.
Drought tolerance	Tolerant.
Frost tolerance	Hardy.
Fire tolerance	There is moderate confidence that a population of <i>Chrysocephalum apiculatum</i> would survive a fire event, even if only by regrowing from seeds.
Grazing tolerance	Susceptible to overgrazing.
Pests	Caterpillars (in flower buds and leaves), aphids (in new shoots), slugs and snails.

# Reproduction

## **Flower heads**

Several to numerous yellow to deep gold flowers in tight clusters at ends of almost leafless stems, 5-8 mm long, 7-15 mm diameter.

Flowering occurs throughout the year but mostly in late winter and spring.

Hover flies, small beetles, native bees pollinate the flowers.

## Fruit: cypselas

Cylindrical, brown, 1 mm long, tightly clustered in the old dried flower heads. Each head contains many cypselas that loosen in the head and develop a fluffy appearance as they mature.

## Seeds

Small, fine, warty and crowned with a tuft of 5-12 golden feathery bristles called the pappus. The mature seeds are dispersed by wind and by ants and other insects. There are approximately 11 600 seeds per gram.



## **Germination requirements**

No pre-treatment is required for germination. The seeds germinate in 2 to 5 weeks at 20 °C and need light to germinate.

## **Genetic seed viability**

No chromosomal differences were detected for C. apiculatum; however, variation in form within *C. apiculatum* may have a genetic basis. As a precaution, mixing of forms is not recommended. Large populations should be used as the primary seed source to ensure that enough genetic diversity is held within the Seed Production Area to ensure viable seeds are set. When collecting or sourcing seed for restoration or propagation, it is recommended that local variation is taken into account.

# How to grow the species in a Seed Production Area (SPA)

#### Seed collection and storage

Collect light dry seeds in summer and early autumn. The fruits must be collected when the yellow disc centres of the flowerheads loosen and are easily removed. Seed can be collected by hand or with small portable vacuum cleaners into large paper bags then allowed to dry. Cut back the stem when harvesting. Break up the seedheads and sieve to remove any large material. Keep dry and add small amount of insecticide to collected material.

The seeds can be stored in air tight containers or in paper bags. A period of storage at room temperature is needed to break dormancy; it varies from 2 to 3 months.

The results of germination tests done at the National Seed Bank showed that the viability and germinability of the seed is very low regardless of the age of the seed. It is thought that there is a high percentage of non viable seed in the seed mix harvested; further study is needed on this topic.

Do not collect seeds in wet weather or after rain, as they readily retain moisture and can develop fungal problems.

## **Propagation**

*C. apiculatum* can be propagated form seed or division.

The seeds can be sown from mid-winter to early spring. It is best to sow heavy amounts of seed in trays filled with potting mix, scatter seeds and press in lightly. Direct seeding is possible for this species.

Some forms spread by suckering; cuttings usually give more reliable results and produce plants that are true to type. Dig up the plant and divide the root with a sharp knife. The divisions must be large. Propagation by cuttings can be done at any time of the year.

The space between plants should be 20 cm in potting mix.





#### Growth at the SPA

It is best to prepare the soil several weeks before planting.

The most heavily watered batches mature first.

To encourage growth, the plants can be fertilised with slow-release fertiliser and seaweed fertiliser in spring. Seaweed fertiliser can also be combined with a water-soluble fertiliser and applied during establishment.

## Uses

- Horticulture: *C. apiculatum* is an ornamental plant for ground cover, rockery slopes, containers or hanging baskets. It can be used in massed plantings or scattered among other plants and to soften the edges of paths.
- **Fodder:** *C. apiculatum* was used by European settlers to kill intestinal worms in stock. The plants are moderately to very palatable to stock and are often utilised heavily during the autumn months when other forage is in short supply.
- Widlife value: the nectar of the flowers is an important food source for butterflies such as *Vanessa kershawi*, the Australian Painted Lady butterfly.
- The suckering forms of *C. apiculatum* are soil- and sand binding, which is useful for erosion control.
- Floral art: the species is excellent for dried arrangements and posies.

#### References

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#### Internet links

Australian Native Plants Society: http://asgap.org.au/c-api.html

Botanic Gardens Trust: http://www.rbgsyd.nsw.gov.au/annan/the\_garden/Plant\_of\_the\_Month/chrysocephalum\_apiculatum

Friends of Black Hill and Morialta Incorporated: http://www.fobhm.org/noframes/chrysocephalum.htm

PlantNET-National Herbarium of New South Wales: http://plantnet.rbgsyd.nsw.gov.au/





