Species profiles

Genus Acianthus

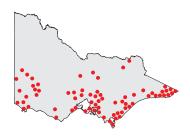
Mosquito orchids, mayfly orchids

A genus of ~15 species occurring in e Australia and New Zealand, with five species occurring in Vic. Terrestrial deciduous orchids with a single, basal, heart-shaped or angular, dark green leaf on a short stem. Flowers 2-14, generally small, greenish to brownish. Dorsal sepal ovate, lateral sepals and petals usually short and mostly slender, rarely long and very slender. Labellum tiny, triangular, with short, raised side lobes and a smooth to warty surface. Acianthus species usually grow in moist, sheltered sites and can multiply vegetatively, sometimes forming large colonies, although often with only a small proportion of plants flowering. Pollination is by tiny flies attracted to flowers by scent and nectar.

Acianthus pusillus

SMALL MOSQUITO ORCHID

Description: Plant to 20 cm tall, dorsal sepal to 8 mm long. Flowers 2–12, tiny, light to dark brown (rarely greenish) with fine purplish stripes. Dorsal sepal narrowly ovate with a short, fine tip and obliquely erect, lateral sepals slender, parallel to narrowly spreading with long outcurved tips, petals short, narrowly triangular and backswept. Labellum mostly smooth with a warty apex. Flowers April–September. Distribution & Habitat: Widespread across Vic., extending from coast to ranges and inland plains. Altitude: 0–600 m. Grows in a variety of habitats including coastal scrub, heathy woodland and open





Acianthus pusillus

forest, in moist, shady situations under shrubs, often with a thick leaf litter layer. Also occurs in NSW, Qld, SA, Tas. **Notes**: Widespread and often common. Can form extensive colonies containing many hundreds to thousands of plants, with leaves often carpeting ground. Similar to *A. exsertus*, which is more robust with larger, darker, more widely spaced, more

open forest. Also occurs in NSW, Tas. Notes: Widely but sporadically distributed, localised and rare. A fire-following species that flowers only in season following summer bushfire, very rarely flowering in absence of fire. Flowers only expand fully on warm, humid days, remaining almost totally closed on cold, wet days. Flowers also shortlived, lasting only a few days before collapsing. Plants apparently spend years, possibly decades, beneath ground as dormant tubers between fire events, and are often submerged for several months over winter and spring.





Burnettia cuneata

Genus Caladenia

Finger orchids, cap orchids, wax-lip orchids, spider orchids

A large genus of over 350 species of orchids mostly endemic to Australia, with several species in New Zealand and a single widespread species extending to New Caledonia, Papua New Guinea and Indonesia. At least 100 species occur in Vic., including 21 yet to be named and described. All are terrestrial deciduous orchids with a single, basal, short to long, ovate to lanceolate to very slender green leaf and 1-8 white to purple to crimson flowers with short and ovate to very long and slender, narrowly to widely spreading sepals and petals. Labellum usually tri-lobed, with multiple rows of small calli and smooth to toothed margins. Pollination is by flies, bees and wasps through food deception and by male thynnine wasps through sexual deception, with several species primarily self-pollinating. Caladenia orchids exhibit several different flower forms that have been proposed as separate genera or subgenera, and can be readily divided into four distinct groups in Vic.

Finger orchids

Plants have a slender basal leaf and 1–5 tiny to small white to pink to blue flowers with prominent pink to maroon bars on labellum and yellow to orange tips on calli, teeth and apex. Sepals and petals usually short and broad, dorsal sepal erect to incurved, petals and lateral sepals narrowly spreading and pointing more or less forwards. Labellum distinctly tri-lobed, with erect and rounded side lobes, a small downcurved mid-lobe with several pairs of tiny teeth or irregular serrations, and two rows of lamina calli.





Caladenia pusilla

and a narrow mid-lobe usually with irregular serrations, sometimes with a few very short teeth. Flowers September-November. Distribution & Habitat: Widely distributed across Vic., extending from coast to inland plains. Altitude: 5-300 m. Grows in a variety of habitats from wet coastal heath to dry inland woodland. Also occurs in NSW, SA, Tas. Notes: Locally common but often overlooked due to its tiny size. Best recognised by short, thick stem, petals and sepals with rounded rather than pointed tips and often partially joined lateral sepals. Frequently confused with C. mentiens, which is taller with a thinner stem, more upright dorsal sepal and more pointed sepals and petals.

Caladenia species 'cupped flowers' CUPPED FINGERS

Description: Plant to 12 cm tall, sepals and petals to 7 mm long. Flowers 1–3, tiny, pink to

white, with broad, concave sepals and petals with bluntly pointed tips. Dorsal sepal strongly incurved, lateral sepals and petals usually overlapping. Labellum with straight, clubbed calli, narrow side lobes with rounded front margins, and a short, narrow mid-lobe usually with irregular serrations, sometimes with a few very short teeth. Flowers September. **Distribution & Habitat**: Known from a single locality near Kaniva in w Vic. Altitude: 175 m. Grows in shrubby woodland. **Notes**: A distinctive little orchid discovered in 2006 and still unnamed. Extremely rare, known from





Caladenia species 'cupped flowers'

12

of habitats, from coastal scrubs to semidesert mallee woodland to damp open forest. Also occurs in ACT, NSW, Qld, SA, Tas., Indonesia, Papua New Guinea, New Caledonia, possibly New Zealand. Notes: Widespread and often common. Variable in leaf character, flower size and colour, labellum barring, sepal and petal shape, habitat preferences and flowering time, and possibly comprises a taxonomically difficult species complex with several undescribed taxa. Often grows with C. fuscata, which has a single, smaller flower with projecting front margins on labellum side lobes, and flowers two or three weeks earlier than C. carnea. Similar to C. ornata, which has crimson labellum side lobes, and to C. species 'large scented flowers', which has larger, highly fragrant flowers.

Caladenia species 'large scented flowers'

SCENTED FINGERS

Description: Plant to 25 cm tall, sepals and petals to 20 mm long. Flowers 1-3, relatively large, white to pale pink with strong crimson barring on labellum and with long, broad sepals and petals. Dorsal sepal erect to incurved, lateral sepals and petals usually not overlapping. Labellum with straight, clubbed calli, broad side lobes with bluntly rounded to straight front margins, and a fairly broad mid-lobe with 2-6 pairs of short, slender teeth, sometimes reducing to irregular serrations. Flowers September-October. Distribution & Habitat: Western Vic. between Ararat and St Arnaud. Altitude: 250-375 m. Grows in open shrubby and grassy woodland. Notes: Localised and fairly rare, although undoubtedly overlooked or mistaken for C. carnea. Fairly readily identified by relatively large, pale flowers with a strongly marked labellum. Also has a strong fragrance that is most noticeable on warm,





Caladenia species 'large scented flowers'

humid, still days. Similar to *C. carnea*, which has smaller, usually unscented or faintly scented flowers.

Caladenia ornata

ORNATE FINGERS

Description: Plant to 20 cm tall, sepals and petals to 15 mm long. Flowers 1–5, smallish, pale to deep pink with contrasting crimson side lobes and fairly broad sepals and petals. Dorsal sepal erect, lateral sepals and petals sometimes overlapping. Labellum with straight, clubbed calli, broad side lobes with bluntly rounded front margins, and a narrow to broad mid-lobe with 2–6 pairs of short,



Caladenia maritima

reserve on outskirts of Anglesea. Distinctive and easily recognisable by white flowers with crimson markings on labellum. Hybridises with *C. carnea* and hybrid plants have become more prevalent in colony in recent years. Similar to *C. catenata*, which has larger flowers usually lacking any red barring on labellum.

Caladenia catenata

WHITE FINGERS

Description: Plant to 30 cm tall, sepals and petals to 25 mm long. Flowers 1-2, relatively large, usually reclining, white (occasionally pale pinkish) with orange labellum tip. Sepals and petals rather narrow, dorsal sepal erect, lateral sepals and petals usually not overlapping. Labellum with tall, slender, curved calli, narrow, obliquely erect side lobes with bluntly rounded front margins, and a broad mid-lobe with 2-6 pairs of longish, slender teeth. Flowers August-October. Distribution & Habitat: Southern Vic. e from Anglesea, extending from coast to foothills. Altitude: 0-250 m. Grows in a variety of habitats from coastal heath and heathy woodland to moister foothill forest. Also occurs in NSW, Old. Notes: Distinctive and easily recognisable by white flowers with forward-pointing petals and lateral sepals.





Caladenia catenata

Most common in lowland heaths and heathy open forest but also occurs in moister foothill forest. Most similar to *C. maritima*, which has smaller flowers with red barring on labellum.

Caladenia caerulea

EASTERN BLUE FAIRIES

Description: Plant to 15 cm tall, sepals and petals to 17 mm long. Flower single, smallish, violet–blue (rarely white) with reddish-purple labellum bars. Sepals and petals narrowish,





Caladenia cucullata

narrow. Labellum with four irregular rows of short to tall, slender calli extending to apex, smooth side lobe margins, and mid-lobe with several pairs of short, thick, irregular teeth reducing to serrations. Flowers September—October. **Distribution & Habitat**: Widely distributed across inland Vic., occasionally near coast. Altitude: 100–400 m. Grows in drier woodland, mallee woodland and open forest habitats. Also occurs in ACT, NSW, SA. **Notes**: Widespread and often common in drier woodlands on inland slopes and plains. Flowers well after good winter rains but more sporadically in dry years, when plants are smaller and have fewer flowers. Has highest

flower count of any cap *Caladenia* species. Flowers have a faint citrus fragrance.

Caladenia alpina

MOUNTAIN CAPS

Description: Plant to 20 cm tall (rarely taller), with a broad basal leaf, sepals and petals to 15 mm long. Flowers 1–4, small, unscented, white with yellow-tipped labellum calli and broken, dark maroon bars. Sepals and petals broad, dorsal sepal much broader than labellum. Labellum with 4–6 rows of tall, slender, spaced calli extending to apex, mostly smooth side lobe margins, and mid-lobe with several pairs of short, slender, irregular teeth reducing to serrations. Flowers November-February. Distribution & Habitat: Mountains of Vic., e from Mount William in Grampians. Altitude:





Caladenia alpina

uncommon to rare. Most often encountered in foothills around Melbourne. Very similar to and sometimes difficult to distinguish from *C. clarkiae*, which has a shorter leaf and usually more colourful flowers, and flowers slightly later.

Caladenia hildae

BLUSHING CAPS

Description: Plant to 25 cm tall, sepals and petals to 15 mm long. Flowers 1–4, small, scented, greenish-yellow sometimes with brownish tips and pinkish petal and sepal





Caladenia hildae

bases, labellum white with a maroon apex. Sepals and petals moderately broad, lateral sepals and petals with downcurved tips. Labellum with four rows of short, thick calli extending almost to apex and side lobe margins with several pairs of long, thick teeth reducing to irregular serrations on mid-lobe. Flowers October-December. Distribution & Habitat: Ranges of e Vic. e from Seaton. Altitude: 600-1400 m (rarely down to 75 m). Grows in open shrubby and heathy forest, generally on drier slopes and ridge tops. Also occurs in ACT, NSW. Notes: Sporadically distributed although can be locally common. Highly distinctive in appearance and unlikely to be confused with any other cap Caladenia species. Although almost always occurring in mountains, in October 2020 a single plant was found near coast at Newmerella, at only 75 m elevation.

Caladenia congesta

BLACK-TONGUE CALADENIA

Description: Plant to 50 cm tall, sepals and petals to 20 mm long. Flowers 1-4, moderately large, pale to deep pink with blackish-maroon labellum calli. Sepals and petals fairly narrow. Labellum with a band of congested calli covering lamina and extending to apex, smooth side lobes with pointed front margins, and mid-lobe lacking teeth. Flowers November-January. Distribution & Habitat: Widely distributed across Vic., extending from near coast to mountains and inland slopes. Altitude: 50-1100 m. Grows in heathy and shrubby woodland and open forest. Also occurs in ACT, NSW, SA, Tas. Notes: Widely distributed but generally uncommon and sporadic. An unmistakable, highly distinctive orchid immediately recognisable by bright pink flowers with long, narrow labellum covered by congested dark calli. It is unclear if calli mass serves as a sexual attractant for insect



Caladenia deformis

and immediately recognisable by crowded slender labellum calli. Flowers partially close in cold, wet weather. Most common in w and rare and sporadic in e. Hybridises with *C. major* to form named hybrid *C. ×tutelata*. Originally described in *Caladenia*, then placed in *Pheladenia* for several decades, but now back in *Caladenia* again.

Caladenia latifolia

PINK FAIRIES

Description: Plant to 45 cm tall, sepals and petals to 30 mm long. Flowers 1-4, mediumsized, pale to deep pink (rarely white). Sepals and sepals broadly lanceolate and widely spreading. Labellum narrowly triangular with very short side lobes and several pairs of long marginal teeth reducing in size towards apex. Flowers August-October. Distribution & Habitat: Widely distributed across Vic., mostly coastal although extending well inland in w. Altitude: 0-175 m. Grows in coastal scrub, heath and heathy woodland, usually on sandy soils. Also occurs in SA, Tas., WA. Notes: Distinctive and easily recognisable by starry pink flower with narrowly triangular labellum with several pairs of long marginal teeth. Widespread and often locally common, especially in coastal scrub on sand dunes.





Caladenia latifolia

Colonies can be large but if growing in deep shade plants rarely flower.

Spider orchids

Plants have a short to long, lanceolate to broad, usually hairy basal leaf and 1–4 small to very large, creamy white to crimson to variably coloured flowers. Sepals and petals long and slender (occasionally short and broad), usually ending in thickened clubs or long, slender tails. Dorsal sepal erect to incurved, lateral sepals and petals deflexed to downcurved and spreading. Labellum is tri-lobed, with usually indistinct side lobes with short to long teeth, a broad downcurved mid-lobe with very short

Caladenia species 'Kaniva giant'

GRAND WISPY SPIDER ORCHID

Description: Plant to 45 cm tall, sepals and petals to 10 cm long. Flowers 1–3, very large, glossy dark reddish with blackish tails, labellum yellowish to red with broken, red stripes. Sepals and petals very slender, with very long, filamentous, arching to pendulous tails. Labellum small, with two rows of tall, thick calli and very short, blunt, spaced teeth. Flowers September. Distribution & Habitat:





Caladenia species 'Kaniva giant'

Western Vic. between Kiata and Kaniva. Altitude: 170–210 m. Grows in mallee heath on deep sandy soils. **Notes**: Extremely rare, known from just two sites and very few plants. A spectacular species and one of largest spider orchids in Vic., when judged by length of petals and sepals. Dorsal sepal is invariably incurved and drooping, even in freshly opened flowers. Similar to *C. filamentosa*, which has much smaller, sometimes rigid flowers.

Caladenia amoena

CHARMING SPIDER ORCHID

Description: Plant to 10 cm tall, petals and sepals to 20 mm long. Flower single (rarely two), small, green with crimson stripes and blackish-maroon labellum calli and apex. Lateral sepals and petals strongly deflexed and narrowly spreading, sepals with very short, barely thickened clubs (sometimes absent). Labellum with four rows of short, thick, curved calli extending to mid-lobe, and a few very short, bluntly pointed teeth reducing in size to irregular serrations towards apex. Flowers August-September. Distribution & Habitat: Outer ne suburbs of Melbourne between Greensborough, Yarrambat and Hurstbridge. Altitude: 110-135 m. Grows in shrubby open forest. Notes: Highly localised and extremely rare, known from just two populations with about 120 plants. A third population has been established from plants grown in cultivation and some plants translocated from wild populations. Similar to



30



Caladenia villosissima

smaller, usually single flower with more deflexed petals and lateral sepals and usually lacks petal clubs.

Caladenia verrucosa

MALLEE SPIDER ORCHID

Description: Plant to 25 cm tall, petals to 35 mm long, sepals to 45 mm long. Flower single, medium-sized, green with crimson stripes, yellow clubs and blackish-maroon labellum calli and apex. Sepals with moderately long, distinct clubs, lateral sepals often crossed. Labellum with four rows of short, thick calli that have dimpled heads and extend onto mid-lobe, and long, pointed teeth reducing to irregular serrations towards apex. Flowers August-October. Distribution & Habitat: North-western Vic. from Murtoa and Minimay to Carwarp. Altitude: 45-175 m. Grows in mallee heath, mallee woodland and sparsely shrubby dry woodland. Notes: Patchily distributed although sometimes locally common. Flowers well in years of good





Caladenia verrucosa

winter rainfall but flowers sporadically or not at all in dry years. Extends into drier habitats than does any other spider orchid in Vic. Although somewhat similar to several other small green and red spider orchids, can be readily recognised by labellum calli having dimpled rather than smooth heads.

Caladenia atrovespa

MOUNTAIN MANTIS ORCHID

Description: Plant to 40 cm tall, petals to 40 mm long, sepals to 50 mm long. Flowers 1–2, moderately large, green with crimson