

Victoria's Small Caladenias



*Aquatic
Photographics*

Rudie H Kuiter

Aquatic Photographics



Cover: *Caladenia catenata*. Variable White Fingers. Yarram.

Victoria's Small Caladenias
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Victoria's Small Caladenias

Introduction

Small caladenias are the small-flowered members of the highly diverse terrestrial orchid genus *Caladenia*. Being of Gondwana origin and as the *Sahul*-part drifted north, the species near the most similar and stable habitats of the southern forests and rocky ranges in Australia survived best. Some species occur in New Zealand and New Caledonia, and a few exceptions further north in the cooler highlands of New Guinea and Indonesia. When or how much *Caladenia* species evolved and changed into today's forms over millions of years is difficult to judge, but this seems to be relatively little.

Sibling species shared ancestors in Gondwana and changed as their populations divided and land-masses drifted apart. Habitats can be stable and ecosystems remain virtually unchanged when having room to move and migrate under the same conditions. Orchids are quite mobile and species staying in touch with their ideal habitat would not need to change at all. They could easily adjust to slow and minor changes, but those trapped in quickly changing habitats had to adapt or would vanish. Some of the species found in the coastal Bass Strait or alpine habitats have not changed much at all since the last ice-age. New Zealand's caladenias are very similar to those in Australia, and in other genera some of the alpine orchids seem identical. Most of the differences between the close siblings have evolved in the regions where they occur now. Distribution of many different *Caladenia* species in Australia suggests that their seed dispersal is relatively local. If carried far away by storms or birds, chances of any seeds arriving in a suitable habitat are super-slim indeed. Present has to be special *Mycorrhiza* fungi for germination and further plant development, and in addition pollinators may be needed when in flower for future generation.

About the genus

Robert Brown named *Caladenia* based on specimens collected near Sydney and *C. carnea* was probably the type. Descriptions were basic and if not the exact species it would be a very similar small-flowered caladenia from the region. The genus *Caladenia* could be divided into several sub-genera taxonomically and species-complexes. The evolutionary levels of taxons depend on adaptations made during their journey along lineages from the moment they separated into different directions at various points in time. The common simple looking flowers are probably the least changed, and the most primitive. The most specialised members have flowers with very long tepals which are further extended with scent-producing osmophoric sections to attract specific male-wasp pollinators. In our eyes close relatives can look very different from each other, but this may be superficial. New, but unwarranted genera were proposed recently based on such superficial differences for many forms of *Caladenia*, not having any real genetical significance. At the most a subgenus would be appropriate for a group, such as the spider-orchids, which appears to have evolved along a relatively long lineage, but not many new names based on minor differences.

Flowers and their variability

The small caladenias have on average much smaller flowers compared to the spider-orchids, and they are generally simple looking. It appears that the smaller flowers are less specialised, attracting pollinators with visual means, but plants more tolerant or adaptable to changes in their habitats. Most are widespread geographically, have multiple flowers, and when in colonies they are usually very numerous. A few have developed a particular character, such as modified calli on the labellum, prominent for visual mimicry. However, like their larger cousins, most species are highly variable in colour, height of plants and sometimes the number of flowers per stem.

The colouration and size variations in species is due to a very rich gene-pool and their dependence on various forms or species of *Mycorrhiza* fungi. This association is effected by available moist in the long or short term, amounts of light, and temperatures. Freshly opened flowers can look quite different from those a few weeks old, in both shape and colour. Colour often darkens with age and the shape of the labellum may change around its edges or the tip of the midlobe curves more under. After pollination the ovary begins to swell and the flower finishes quickly.

Widespread species are the most variable in colour and size. Many variations of a species can be seen centrally in its geographical range in a single large population, but at the extremes variations are typically reduced into dominant local forms. Such forms are usually treated as separate species, but are variations only.

Habitats

Small caladenias occur in many habitats from coastal heath, forests and scrubs to the alpine regions. Most of them are very sensitive to conditions and prefer a certain range in altitude. Regular rainfall is important for their success, which is evident in the short term as in dry periods flowering is poor or aborted. Their tubers can survive underground and seeds remain dormant for many years. When conditions are favourable and their associating *Mycorrhiza* fungi has recovered, the flowers can return in large numbers. However, supporting buffer zones are often gone due to clearing and, not having any room to move, even the effect of a short-term drought could finish an orchid population. The small suburban bush blocks are especially vulnerable to droughts or any kind of disturbance, as dependable *Mycorrhiza* fungi or pollinators may have vanished and these can not recover from clearings.

Distribution

Diversity of *Caladenia* is the greatest in the coastal regions which receive regular rain. The number of species progressively declines when going inland. Some of the widespread east-coast species range well north and south. E.g. *Caladenia catenata*, ranges north into Queensland, south to the Bass Strait region, but west to Anglesea only. The widespread *Caladenia carnea* occurs from New South Wales to South Australia, very broadly along the whole of Victoria's coast, and can be found far inland, including in near alpine habitats. However, some populations are very localised and may represent variations or different species. Species in the south of Victoria are generally found in all the coastal parts of the Bass Strait region, including Tasmania, but may show slight differences with other populations in northeastern Victoria. Some of the South Australian species and the southwestern Victorian region range far east, a few reaching Wilsons Promontory, Bass Strait islands and into northern Tasmania.

Summary

Being small, some flowers really tiny (less than 10 mm across), they don't create as much interest as the larger spider-orchids do. Like all our wild orchids, *Caladenia* members are finely tuned to an ecosystem and sensitive to environmental alterations.

Orchid populations are important, as each indicates a special and healthy habitat that needs to be cared for. Earth is over-populated by people, natural habitats are being destroyed at an alarming rate. Development has become a negative growth, which is spreading like a cancer and it has to be arrested ... if we want a future. We need to preserve and fix what is left, looking better after common species rather than concentrating on the endangered ones.

Endangered are habitats ... all species

Diagnostic features of selected *Caladenia* species

Lateral lobe front extended well forward.
Tip of labellum usually not yellow or only at extreme point folded under.

Lateral lobe rounded, front not extended forward. Tip of labellum usually yellow.



Caladenia fuscata
About 15 mm across.
White to deep pink.
Early Spring.

Caladenia carnea
About 20–25 mm across.
White to vivid red.
Mid Spring.

fuscata versus *carnea*

Often asked: how to tell these two common species apart. When found in the same place the smaller *C. fuscata* usually flowers earlier by a few weeks than *C. carnea*. Diagnostic details are mainly in the labellum, but also the tepals of *C. fuscata* are more pointed. *C. fuscata* usually has a small single flower on a dark feeble stem. In *C. carnea* double flowers are common and can have up to four on a more solid greenish stem. BUT, hybrids do occur.



Labellum details of hooded caladenias



Caladenia cucullata



Caladenia praecox



Caladenia clarkiae



Caladenia gracilis



Caladenia alpina (Grampians)



Caladenia alpina (Mt Hotham)

Actual sizes of some of the smallest species



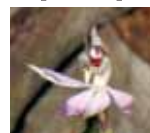
Pygmy Fingers
Caladenia pygmaea



Tiny Fingers
Caladenia pusilla



Open Tiny Fingers
Caladenia pusilla var.



Narrow-lip Fingers
Caladenia mentiens



Lesser Caladenia
Caladenia vulgaris



Pointed Pink Fingers
Caladenia subulata



Stawell



Dadswells Bridge

Dusky Fingers *Caladenia fuscata*

Widespread in Victoria and locally abundant in hinterland dry forest habitats. Early flowering in Spring with a small and single flower, in groups and often forms large dense colonies. Colour from pinkish white to deep crimson and inside of column and labellum with red stripes across the calli section. Side-lobes of labellum extends forward, as shown well in flower in the image on the far left, and calli with yellow tops. Tip of labellum fairly broad and usually white with no yellow or very little on margins. Stem usually reddish brown. Plants to about 12 cm high. At low altitude it flowers from about late August to September and into October in the hills.

Type-locality: near Sydney, NSW.

May hybridise with several other *Caladenia* spp and double headers are usually a cross with *C. carnea*, lacking the forward projecting side lobes of the labellum and the tip often yellow.



The Pines



Langwarrin



Nhill



Nhill

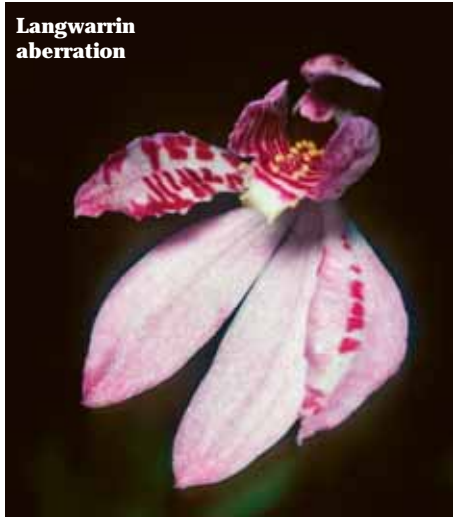


Yarram

Stawell
albino



Langwarrin
aberration



Langwarrin
aberration



Yarram
X carnea



Stawell
mixed with *Caladenia caerulea*



**Castlemaine
common form**



**Langwarrin
crimson form**



Common Pink Fingers *Caladenia carnea*
Common and variable in Victoria from coastal to near Alpine altitudes and flowering from about September to November, in low to high altitudes respectively. Often has multiple flowers and three can be common. Colour varies from white to very crimson and labellum can be the same as well as having contrasting colours. The labellum usually has red bars across the calli section. Calli have yellow tops, tip of labellum has a medium width with a broad yellow margin and curls under. Like many other species of *Caladenia*, in the west of the Victoria the colours are much more variable, generally more pink, ranging to very crimson and pink usually darkens with age. Some of the varieties have been named as different species in NSW, Tasmania and South Australia. The white albino form was confused with *C. alba*, a synonym of *C. catenata*.
Type-locality: Port Jackson, New South Wales.

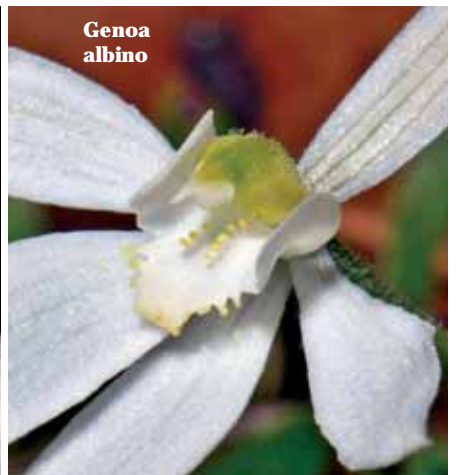
Frankston



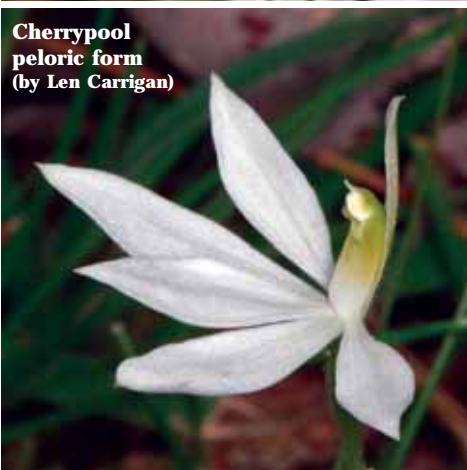
**Welshpool
albino**



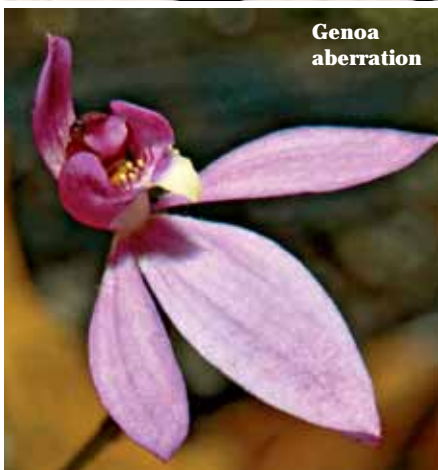
**Genoa
albino**



**Cherrypool
peloric form
(by Len Carrigan)**



**Genoa
aberration**



**Gurdies
aberration**



**Tallageira
aberration**



**Mallacoota
aberration**



**Mallacoota
aberration**



Gurdies



Grampians
ornata form



Tallageira



Tallageira



Stawell



Mt Eliza



Won Wron



Cobungra



Long Fingers *Caladenia carnea* var. 1

A variation and may be only a late flowering form of *Caladenia carnea*. It shows similarities with *C. fuscata* in the shape of the lateral-lobes of the labellum. Occurs widespread in sandy soils from low altitudes to mountain habitats up to about 1000 m. Known from Langwarrin and Yarram, ranging north well into NSW, as the one shown in photograph from near Yass appears to be identical.

It flowers about late October & November in Langwarrin and Gippsland and at higher altitudes into early December (Cobungra). Most flowers somewhat hooded with short dorsal sepal and moderately long lateral sepals. Labellum narrow with large lateral lobes, curving up and forming an almost tubular shape, and forward extended front like in *C. fuscata*. Tip is broad at base, long and usually only the end part is recurved, pink with variable amount of marginal yellow. Marginal teeth on tip and calli moderately long. Flowers overall pale pink, rarely whitish, usually single, but occasionally double. Leaf very long and narrow.

Langwarrin



Kay Hill



Genoa Peak







Rosebud White Fingers *Caladenia carnea* var. 2
 An undetermined species, known only from the Rosebud area on the Mornington Peninsula. A single colony with about 20 plants occurs in a well shaded area under coastal tea-trees with leaf-litter and little undergrowth. Has large white flowers, comparable to *Caladenia catenata*, to 32 mm across and a fleshy leaf which is broad and long. Plants up to about 15 cm tall and larger ones usually with two flowers. Labellum relatively broad with large lateral lobes and tip is similar to *C. carnea*. Flowers mainly white, but some have a hint of pink and labellum is distinctly marked with crimson lobes and crimson stripes across in calli region. Flowers in September.

Note: common form *Caladenia carnea* occurs in the same general area, but flowers are smaller and have the normal more pinkish colouration. Searches for intermediates were negative.



Striped White Fingers

Caladenia carnea var. 3

Undetermined species, known mainly from the Mornington Peninsula, but may be wide-spread. Flowers in September. Possible it is only a variety of *Caladenia carnea*, but some flowers can get moderately large and usually their colour is very white. Labellum usually has dark-red to purple stripes on the inside as well as on the outside. Tip on labellum fairly broad with pale to bright yellow. Plants grow fairly tall and leaf is long and thick compared to most of the similar and the more common forms of *C. carnea*.



Nirranda



Broad-lip Caladenia *Caladenia vulgaris*

Coastal to hinterland areas of southern Victoria and southeastern SA. Occurs in moist sandy soils and regularly wetted areas. Some plants were standing in water in Swamp-Gum Forest on French Island. Flowers up to 22 mm across and plants can reach 30 cm in height. The larger plants usually have double flowers. Leaf to 24 cm long. Colour usually white to pale-pink in open habitat. Crimson form in shaded habitats. Flowers late, mainly during October and November.

Type-locality: Glencoe, South Australia.

Hinterland populations often identified as *Caladenia prolata*.

Nirranda



Tallageira



Dergholm



Dergholm



Dergholm





Nelson



Pointed Pink Fingers *Caladenia subulata*

Southwestern Victoria and southeastern SA. All specimens in the images on this page were found in limestone-based heath-habitat shared by the spider-orchid *Caladenia calcicola*. Occurs singly or in small colonies and often has double flowers, rarely three (one plant with 3 buds was seen in Nelson). Colour pinkish white to pale-pink and labellum with crimson to purple stripes, its midlobe mostly yellow. Flowers distinct in having a broad tongue-like labellum tip, which is not curved under in fresh flowers, and tepals being very pointed. Labellum tip may curl under in some of the older flowers. A second flower on long stem. Prior to pollination, ovary relatively large and long. Very similar to *C. vulgaris* which has shorter less pointed tepals, more numerous close-set calli and its second flower usually on a shorter stem. Flowering time late September and October.

Type-locality: Portland.

The original description of *Caladenia carnea* var. *subulata* is based on a teratological specimen, a stunted form in which the labellum had only 3 calli basally. It was named later as *C. prolata*, regarded here as a junior synonym.

Interestingly, found in the same region: a specimen of *C. flavovirens* also lacking all calli on its labellum and another with an entire margin on the lateral lobes of the labellum.

Nelson



Portland



Nelson



Portland



Nelson



Nelson



Pygmy Fingers *Caladenia pygmaea*

Southern Victoria from Mornington Peninsula to SA. The smallest caladenia flower, measuring up to 9 mm width. Colour of tepals white or pink and labellum white with red bars. In relation to flower, plants very tall, ranging about 12–20 cm in height. Apart from the small size, labellum is most similar to *Caladenia carnea*. Inside column barred or solid red, similar to in *C. catenata*. Occurs on sandy or rocky ridges in semi-open habitats. White flowered form can be very common amongst *Drosera* which has similar sized white flowers. Pink form found in more shaded area. Flowering about second week in October in Langwarrin and usually are quickly pollinated.

Type-locality: Lofty Ranges, South Australia.

All images Langwarrin.

Nicholls illustrated a specimen from the Grampians, but the others shown are *Caladenia pusilla* var.



French Island



Narrow-lip Caladenia *Caladenia mentiense*

Bass Strait coastal regions ranging into low foothill habitats. Flower nearly always pale pink and single, very rarely two. Small, usually about 14 mm across, occasionally to 16 mm, but one 'giant' in Langwarrin measured 24.5 mm. Plant height to about 12 cm. Usually occurs in small colonies with plants scattered singly in bracken and grassy woodland habitats. Distinguished from similar pink species by its larger size and narrow labellum tip. It has dark-crimson stripes inside column, on the area at the base of the calli of the labellum, and intermittently on the outside of the labellum. Often just one thick stripe on the outside, as shown in picture to the left, but occasionally with several additional stripes which may become diffused along centre part. Calli close-set, yellow with stalks variable from white to red. Flowering time is from late October into December. Maybe confused with a small pink individual of *Caladenia vulgaris*, which can flower about the same time, but this species has generally larger, paler and often two flowers, which have a much broader labellum tip. Several names are used for variations in Tasmania.

Type-locality: Launceston, Tasmania.

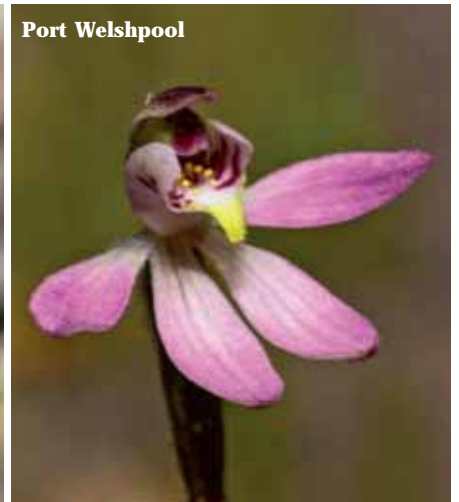
Gurdies



Belgrave



Port Welshpool



French Island



Belgrave



The Pines







Tiny Fingers *Caladenia pusilla*

Bass Strait coastal regions only. Common, but easily overlooked. Plant very small to about 10 cm in height and with a single flower. Flowers are deep-crimson and this semi-hooded species is usually about 10 mm across with incurving sepal ends, but its labellum is proportionally large. Lateral sepals often joined or present as a single broad one. In image below they are joined to near the end, showing two tips, and image next to it 3 flowers, each with a single broad central sepal. Like *Thelymitra*, the sun-orchids, flowers open mainly on hot days and closes when the temperatures drop. Occurs in moist sand habitats and in Langwarrin small colonies are often near black-ant nests or along their tunnels. Flowering time is from about the 2nd week of October.

Type-locality: King Island, Bass Strait.
Images this page: Langwarrin.



Open Tiny Fingers *Caladenia pusilla* var.

Appears to be widespread in coastal and hinterland areas, heath and woodlands. Flowers are consistent in their colour, mostly pink. Labellum proportionally very large with red bars, calli yellow tipped on pink stalks. Similar to *Caladenia pusilla* but flowers slightly larger, about 10–12 mm across, and open until pollinated. Plants up to about 14 cm in height, usually a bit over 10 cm. May occur in small close groups and seems to do well after fires. Flowering from mid-September to late October.

Maybe a form of *Caladenia pusilla* adapted to dry habitats.

Gurdies



Grampians



Wilson's Promontory



Yarram



Wilson's Promontory



Yarram



Variable White Fingers *Caladenia catenata*

Eastern Victoria coastal to foothill habitats, usually in semi-dry forest, and ranging west to about the Otways. Very variable in colour in the Gippsland region, but some forms range further away from the region. Most widespread is the white form which has an orange tip on the labellum and is red on the inside of the column, and it ranges far north into New South Wales from where it was named, and reported from New Caledonia (but doubtfully the same). Some forms have become localised in isolated populations, such as in Anglesea, named *Catenata maritima*, but these can be found amongst all the variable populations which have a more normal and richer gene-pool. Many forms were named from NSW and Tasmania, based on differences in colour and flowering times which are region and habitat related, thus probably are variations of one species only. Flowering time from Autumn to early Summer, depending on region, but mainly September and early October in most areas in Victoria.

Type-locality: Port Jackson, NSW.

Langwarrin



Langwarrin (widespread form)



Langwarrin (monitored, flower turned white after several years)



Anglesea



Won Wron



Langwarrin



Anglesea





Yarram



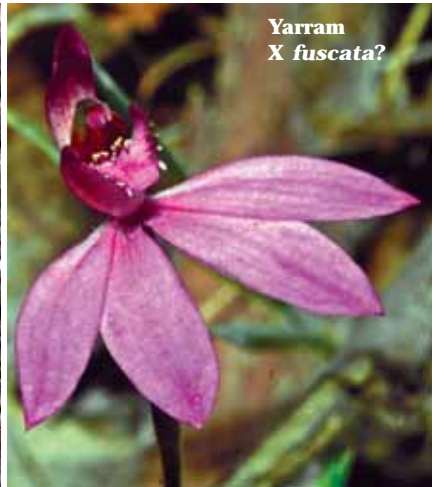
Yarram
X gracilis?



Yarram
X clarkiae?



Yarram



Yarram
X fuscata?

Peloric *Caladenia catenata*

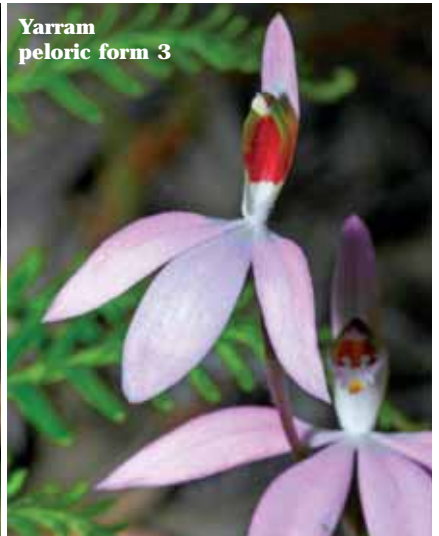
A number of peloric flowers were first noticed in the Gurdies in 2004. They were mixed with normal ones in a typical colony in about equal numbers, including some double flowers. Peloric are throwbacks and instead of an labellum have an anterior tepal instead. The column comes in various forms with normal looking reproductive parts. Some were cross-pollinated by hand and produced a seedpod, but were small and empty. If seeds can be produced and viable is not yet known. No pods were produced naturally, suggesting that pollinators are no longer around. Similar pelorics have been found in a number of *Caladenia* spp, and in New Zealand such a form was the type for the genus *Petalochilus*, thus is a synonym of *Caladenia*. Normally pelorialism effects the entire plant, but as the below-right photo shows, there can be exceptions. One flower was normal, whilst the second was incomplete and appeared to be peloric. A labellum was not produced (it was carefully examined) and lateral sepals were combined as one, whilst the column had retained the reproductive parts.



Gurdies
peloric form 1



Gurdies
peloric form 2



Yarram
peloric form 3

Rosebud



Orange-tip Fingers *Caladenia alata*

Eastern Victoria, south to Wilsons Promontory and west to the Mornington Peninsula (*Caladenia alata* var. *campbellii*) and Brisbane Ranges (white form was found by Graham Trigg). Coastal to hill sites in open forest and often amongst bracken ferns. Has one or two, rarely three flowers and when common it can form dense colonies, and may flower prolifically after a burn. Near Yarram a mix of pink and white forms came up, both in equally large numbers. The white form did not appear again during the following seasons and seems more at home in coastal habitats. Rosebud flowers reported as white are now pink, and have an mostly orange labellum-tip like seen in some populations in Tasmania. Hybridises with *C. fuscata* and *C. gracilis* in the Yarram region. Flowers in September and early October. White form was named as *C. aurantiaca* from Alberton.

Type-locality: Port Jackson, NSW.



Wilsons Promontory



Port Welshpool



Rosebud



Rosebud



Rosebud
C. alata var. *campbellii*



Yarram
C. alata typical form



Yarram
C. alata var. *aurantiaca*



Rosebud



Yarram



Rosebud



Yarram
photo: Len Carrigan



Rosebud

Stawell



Blue Caladenia *Caladenia caerulea*

Widespread, but vanished from suburban areas and now mainly dry open forest. Early flowering species and in Victoria from early August on. Can be prolific in some areas such as Stawell where it mixes with *Caladenia fuscata* and makes quite a display. Colour usually overall deep-blue, very rarely white with blue labellum or as an albino form. An albino was photographed in Diamond Creek in 1995 and one in the exact same location in 2009. Two rows of calli with yellow tops, running far onto the midlobe.

Type-locality: Port Jackson, Sydney.

Diamond Creek albino



Diamond Creek aberration



Stawell



Diamond Creek albino



Blue-beard Orchid *Caladenia deformis*
 Widespread, mainly dry open forest, but often forms large clusters in low flat areas which get seasonally very wet. Once common in the area that became suburban Melbourne, but now more in forest habitats. An early flowering species and in Victoria mainly from August to October. Usually blue, rarely pink or white. Labellum is distinctive in having dense long calli in four to eight rows, covering most of its upper surface, and lateral lobes being low. Known also as Blue Fairies.

Type-locality: Launceston, Tasmania.

May share pollinator with *Glossodia major*, as hybrids are occasionally found between the two and this form was named *XGlossodia tulelata*.

Stawell



Inverleigh



Stawell
albino



Stawell





Rye



Rye

Pink Fairies *Caladenia (Elevatae) latifolia*

Widespread in coastal regions of Bass Strait, but also in damp hinterland habitats in the western part of the state. Inland form can be very small, flower almost one-third in its lateral width of the coastal forms. Normally to about 40 cm tall plants with one or two flowers, up to four, and about 40 mm across. Early flowering in most parts from about August to early October, but into November at some cool sites. Often forms very large colonies by vegetative propagation and may produce large numbers of leaves but few flowers. Flowers pink to deep crimson, but sometimes all white. Appears to be a primitive form of *Caladenia* and the name *Elevatae* was proposed as a subgenus which also includes some Western Australian species.

Type-locality: Devonport, Tasmania.



Rosebud



Rye



Tallageira



Swan Lake

Honey Caladenia *Caladenia hildae*

High country of eastern Victoria and into New South Wales, usually at altitudes above 500 m. Quite rare, but can be locally common in large spread out colonies on slopes covered with low vegetation. Spring flowering which is late in the high country from October in the warmer parts, ranging to about January. Flowers small but beautifully coloured with greenish golden yellow. Plants to about 25 cm tall. Labellum with purple tip and long marginal teeth. Tepals often strongly recurving.

Type-locality: Cobungra, Victoria.

All images from the Omeo region.



Dunkeld



Bronze Caladenia *Caladenia iridescens*

Widespread in coastal and into hill regions in a variety of habitats from heath to woodlands. Very variable in colour, time of flowering and behaviour. In most areas greenish and found in moist grassy habitats in sparse colonies. Flowers usually open on the first warm days and maybe short-lived depending on local pollinators. Larger flowers usually appear as time goes on. Flowering early in sunny and warmed habitats compared to cold shaded ones such as in steep mountain rocky grounds. Some of these forms are localised in certain areas. In Langwarrin all forms, from small and green to large golden, and deep crimson, occurred over a time span from October to December and various seasons, depending on their habitat and seasonal conditions.

The small early green form was named as a different species from Tasmania as *Caladenia transitoria* due to its short flowering time, but this happens with many pollinators present. Other forms of this species such as the larger golden one was also thought to be a separate taxon. A large unusual nearly-white flower was found once during December in Langwarrin, and a green flower shared the same stem with a larger crimson flower near Dunkeld (lower left) where both forms were quite common.

Type-locality: Grampians, Victoria.

Halls Gap



Langwarrin



Langwarrin



Dunkeld



Halls Gap



Langwarrin
unusual white form



Welshpool



Dunkeld



Dunkeld



Langwarrin
typical *iridescens*



Langwarrin



Langwarrin



Red Hill



Langwarrin



Langwarrin



Belgrave



Grampians



Hooded Caladenia *Caladenia cucullata*

Occurs inland from the Great Dividing Range. Very common, forming large colonies in semi-dry open forest habitats in the more western hinterland parts of Victoria. Where sympatric with *Caladenia fuscata* and *C. carnea*, it starts flowering when those two species have finished, which is from about September to November. Readily identified by the strongly hooded flower with the dense purple calli on the labellum. Plants usually have several flowers per stem, up to six, and can attain about 25 cm in height.

Type-locality: Boorawa (near Gosford), NSW.

Deep Lead



Deep Lead





Christmas Hills



Early Caladenia *Caladenia praecox*

An early flowering species and in Victoria mainly from seen from August to early October depending on altitude. Widespread, but most common in the eastern low hill country. Recognised by the hooded dorsal sepal and labellum rising upward with low lateral lobes, and with long marginal teeth on upper side. Inside colour of flower usually white to pinkish and a purple tip on the labellum. Outside of flower greenish yellow to pinkish and with numerous red granular hairs. A small, but distinct species. Plant to about 15 cm tall. Flowers one to four and usually in spread out small colonies, sometimes a few clustered together.

Type-locality: Croydon, Victoria.

Diamond Creek



Diamond Creek



Diamond Creek



Christmas Hills



Belgrave



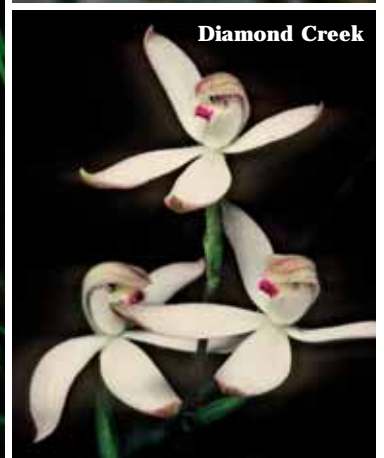
Diamond Creek



Belgrave



Diamond Creek



Clark's Caladenia *Caladenia clarkiae*
 Eastern Victoria from coastal forest into mountainous areas, ranging from about Yarram into New South Wales. Very similar to *Caladenia praecox*, but flowers later and outside of the flower usually pinkish. Flower usually white to pinkish, rarely crimson, and tepals with pink tips. Plants to about 16 cm tall and usually has 3, sometimes 4 flowers. Flowering period from about September to November, low to high altitudes respectively.
 Type-locality: Colquoun SF, Victoria.



Dunkeld



Musky Caladenia *Caladenia gracilis*

A widespread species, often locally common and can grow quite large with plants to about 45 cm high, and can have as many as 6 flowers. May form large colonies, but in some areas where uncommon, single large and typical multi-headed plants are occasionally sighted which do not usually reappear the following season. Has a musky smell which is especially noticeable on warm humid days. A hooded species, and flowers usually white on the inside and reddish on the outside. Labellum with yellow calli and a purple tip. A form in Clydesdale looks a bit different and has purple calli and purple marginal teeth on the labellum. Time of flowering ranges from August in some warm low lands to January in the near alpine areas.

Type-locality: Port Dalrymple, Tasmania.

Note: various forms, may comprise a species-complex.

Yarram



Langwarrin



Omeo

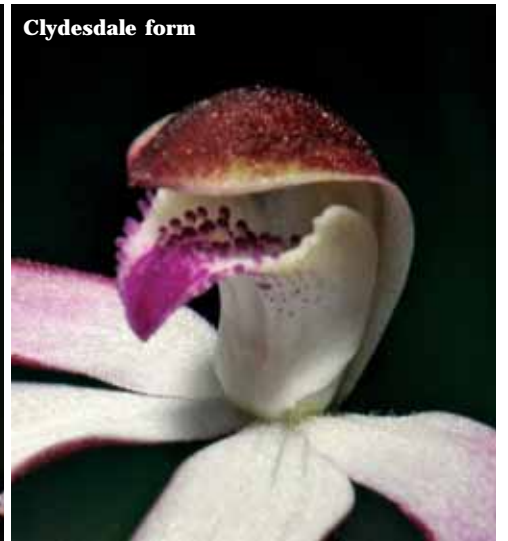


Omeo



Omeo





Mt Hotham



Mountain Caladenia *Caladenia alpina*

An high altitude species, usually occurs just above 1000 m in the eastern highlands and high peaks in other parts of the state such as Mt William, Grampians where photographed at 1040 m.

Flowers appear early November, ranging to January in higher areas. Occurs on grassy slopes with scrubs in Snow Gum habitats in small colonies. Plants up to 30 cm tall in shaded habitats, leave large and broad, and usually with one flower, but can have up to four. Flowers white on inner surface, sometimes pinkish towards tips of tepals. Outside of flower from pale greenish to crimson-white. Labellum and column with red to purple spots and bars, and the many calli yellow to orange

Type-locality: Mt Hotham, Victoria.

Mt Hotham



Cobungra



Kiandra



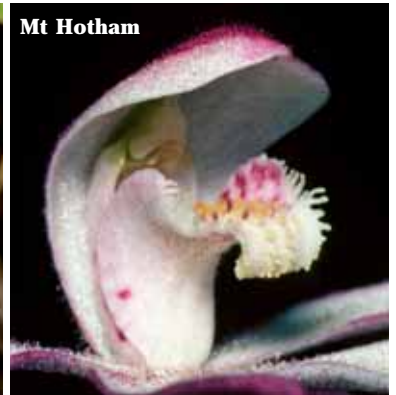
Mt Kosciuszko



Mt Hotham



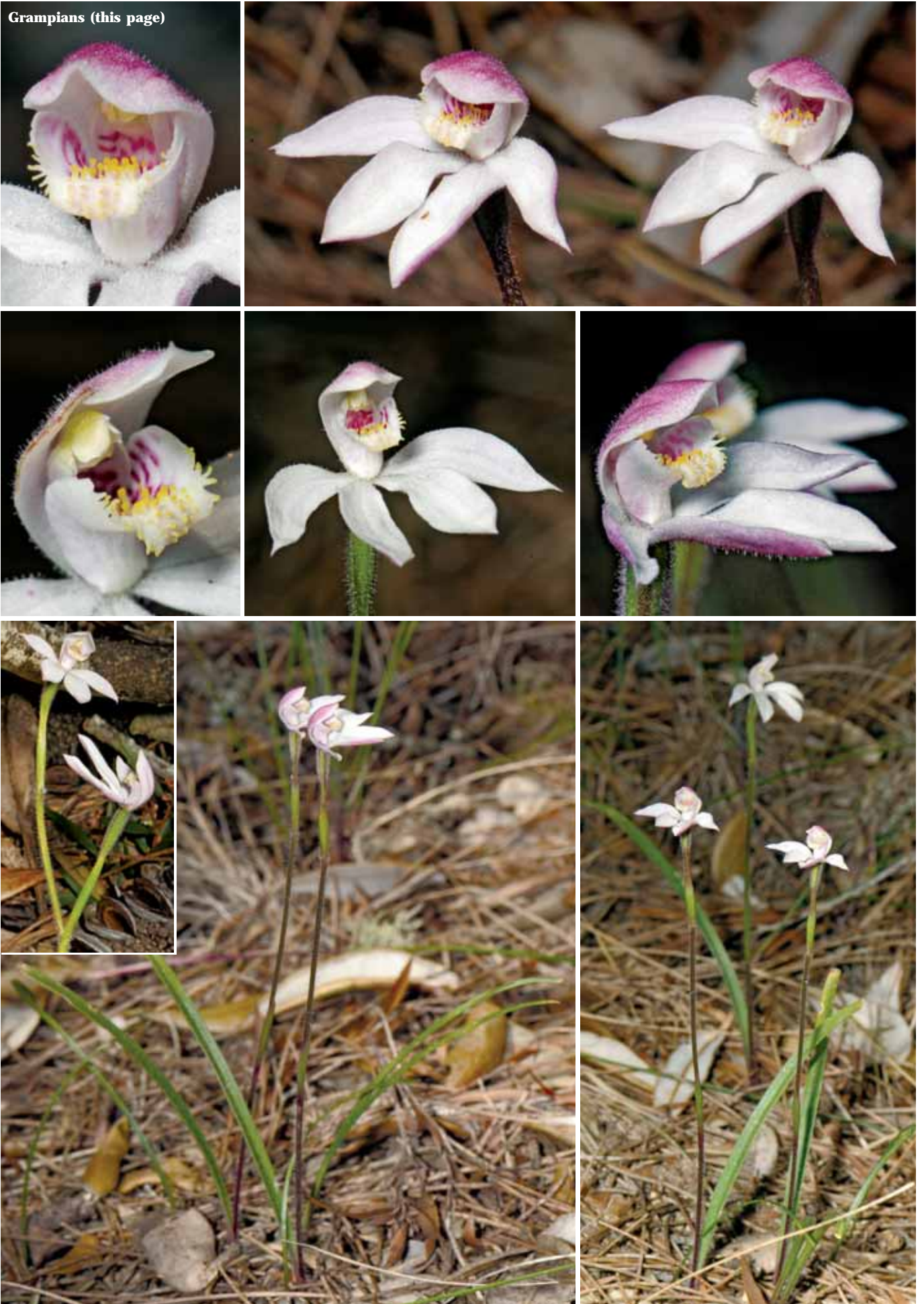
Mt Hotham



Mt Hotham



Grampians (this page)



Victoria's Small Caladenias – Kuiters

Belgrave South



Black-tongue Caladenia *Caladenia congesta*
 Widespread in Victoria, but sporadic occurrence and locally common in very few places. Usually found in dry heathlands from near coastal to near alpine. May flower prolific after fires. Plants can grow rather tall in comparison to flower size and typical as shown on opposite page, reaching some 50 cm in height. Flowers can be found from about October and may last until January, but unpollinated flowers have been reported to last some 10 weeks. Flowers nearly always very pink, sometimes pale with spots, and rarely white. Labellum very distinctively tri-lobed with central part covered by densely packed blackish calli running all the way on the tip. Pollinated by native bees, which are tricked to visit the flower by the tongue-like labellum looking like the anther of a native lily flower.

Type-locality: Devonport, Tasmania.

Omeo



Belgrave South



Belgrave South



this page: Belgrave South



Victoria's Small Caladenias – Kuitert

Small-caladenia hybrids

Crossings occasionally occur when sympatric sibling species flower in large numbers at about the same time. A hybrid flower may not look obvious, but there is a good chance of finding one when searching for them. Hybrid flowers may be difficult to identify when parent species are not present as they usually share characters from them.

Looking for hybrid flowers can bring some extra rewards. Aberrations or pelorics may also be present amongst small caladenias. The peloric form usually has an additional central anterior sepal, instead of a labellum. A peloric is a throwback, a previous genetical make-up, from a point of time of a different past era, which usually present itself in some way in the flower. It may effect colour, which is less obvious, or morphology to some degree of simplification, ranging from minor to major, including the size of the plant or flower. See page 21.

Some of the rare hybrid forms are presented here and some of the more crosses ones are included with the species treatments.

Caladenia gracilis X *hildae*

A one-only double-flowering individual was photographed near Omeo. The parent species *Caladenia gracilis* was common in the immediate area, but *C. hildae* occurred adjacent to it with just a few individual plants. It has the colour and shape of *C. hildae*, but detail of the labellum is much like that of *C. gracilis*.



Caladenia carnea X *cucullata*

One double-flowering individual was photographed near Stawell. This is a rarely seen hybrid, and one between a hooded and a non-hooded form of *Caladenia*. At distance it looked much like *C. carnea*, but close examination revealed the more typical labellum of *C. cucullata*. The two species are abundant in the area, however, their flowering times barely overlaps.



Caladenia alata X fuscata

One plant found in Yarram with a few of each parent species present. The season before both parent species were numerous following fire. The following season (2nd after fire) some *C. fuscata* were present, but no *Caladenia alata* were found.



Caladenia alata X gracilis

One plant found in Yarram in the same place as the previous hybrid, but *Caladenia gracilis* is in low numbers there and normally flowers some weeks later than *C. alata*.
Photos: Len Carrigan.



Caladenia iridescens X mentiens

One hybrid plant found in Langwarrin where both parent species occurred in good numbers in the immediate area. The plant leaf and height was like a *Caladenia iridescens* and the flower petals formed was similar to this parent species as well, but colour and its labellum was very much like *C. mentiens*.



Caladenia carnea X fuscata

Photographed in the Brisbane ranges and Yarram, where *Caladenia fuscata* were very numerous and *C. carnea* few. The plants appeared to be *C. fuscata*, but this rarely has double flowers. Close examination revealed the characters of *C. carnea* on the labellum. Also size was small for typical *C. carnea* and large for *C. fuscata*.



*Aquatic
Photographics*

