

An Introduction  
to the  
Genus *Masdevallia*

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### The Genus *Masdevallia*

*Masdevallia* is one of the most unique and diverse genera in the orchidaceae family, often having striking flower colours in a multitude of shapes and sizes. The genus was named in honour of an 18<sup>th</sup> century Spanish botanist, Dr Don José de Masdevall, with the first recorded species collected in 1779 by botanist Joseph Dombey and two pharmacists, Hipólito Ruiz & Antonico Pavón and two artists sent by Charles III of Spain to the new world forests of Peru and Chile. The genus first appeared in *Flora Peruviana et Chilensis Prodrum* in 1794 in a paper by Ruiz and Pavón with a drawing of *Masdevallia uniflora*.



*Masdevallia uniflora*

Photo source:

<https://orquideasdelmundo.com/tipos-de-orquideas-mas-populares/orquidea-masdevallia/>

*Masdevallia uniflora* Ruiz & Pavon 1798 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Masdevallia* was published in *Systema Vegetabilium Florae Peruvianae et Chilensis* as the type species in 1798. Unfortunately, due to the capture of the ship carrying their early notes, drawings etc. by England in 1779, and the loss at sea of a 1785 ship carrying most of their collection of papers and specimens, much of their work on this genus was lost. A fire at their base camp also destroyed a part of their original collection.

Over the next 70-80 years, only a few more *Masdevallia* species were discovered in Venezuela, Colombia, Brazil, Ecuador and Peru. These included *Masdevallia bonplandii*, *infracta*, *caudata*, *constricta*, *pumila*, *floribunda*, *schlimii*, *buccanator*, *coriacea*, *cucullata*, *laevis*, *meleagris*, *minuta* and *triangularis*. Many of the more showy and spectacular *Masdevallia* species now strongly influencing hybrid breeding are more recent discoveries.

In the late 19<sup>th</sup> century, England and Europe were in the grip of the orchid craze with wealthy collectors prepared to pay very large sums of money for rare orchids. These plants were collected from the wild by paid collectors and shipped back to Europe and England for sale, often at outrageous prices. Many of the plants died after collection before shipping, on the long sea voyages, or following sale to collectors who had little idea about how to grow these exotic orchids. Early habitat records indicate that in some instance, the total known population of a particular *Masdevallia* species was removed to ensure that no other nurseries were able to offer the same species for sale.

This genus is distinguished by large sepals that are fused at their base to form a sepaline tube, that often obscures or hides the diminutive petals and small labellum so that at first glance, this orchid does not follow the standard feature of orchidaceae of a flower composed of three petals and three sepals. The majority of *Masdevallia* species are generally pleasantly fragrant although often light, although those in section *Coriaceae* have a most unpleasant odour reminiscent of rotting meat as they are pollinated by carrion flies. These should be avoided unless you are tolerant of this characteristic.

## Where do these orchids come from?

*Masdevallia* species are found from Southern Mexico through Central America to Southern Brazil and Bolivia. Their habitat is principally cool cloud forests and alpine regions of the Andes and other higher mountains, with some growing on the snowline. Some species occur at lower elevations in warmer lowland habitats.

The geography of Central and South America creates many highly localised microclimatic areas, and particular habitats for epiphytic orchids. As an exotic species grower, having some understanding of these microhabitats can be the difference between success and failure when growing these species. Describing the range of climatic environments is beyond the scope of this article, however it can be said that their diversity is almost beyond comprehension. Therefore, I will focus on the common aspects and those to which we need to pay attention if we want to grow the genus.

## Culture of *Masdevallia* species orchids

The distinct features of *Masdevallia* orchid climate requirements are that none come from Mediterranean climates such as we have in Perth. They are all found in humid moist environments, in some cases mist or cloud forests with minimal diurnal temperature variation. For convenience, Gerritson and Parsons 2005 separate *Masdevallia* species into three groups; cool-cold growing, intermediate and warm growing. They published the following temperature guidelines:

Group	Daytime temperature	Night-time temperature
Cold	10-16°C	4-7°C
Cool	10-17°C	7-12°C
Intermediate	13-20°C	10-13°C
Warm	20-27°C	16-18°C

This table clearly demonstrates the minimal temperature range existing in the natural habitats of the species in this genus, and that as novices living in a hot summer Mediterranean climate, we should start with those coming from lower altitudes identified as warm growing. The coverage of some of the species in this genus will start with those classified as warm growing.

As noted earlier, relatively high year-round humidity and generous air movement is required to successfully grow *Masdevallia* orchids. This can be a significant challenge in Perth, although our orchid friends in Albany benefit from cooler, more humid summers and are able to grow and flower these orchids under shade cloth. In a similar vein, Gerritson and Parsons note that San Francisco provides an excellent climate and *Masdevallia* orchids can be grown and flowered in bush house conditions as the sea fog often present in the morning and afternoon delivers the high humidity required.

Many years ago while in the USA in 1995, we visited the Botanic Gardens in Golden Gate Park, San Francisco specifically to see a collection of *Masdevallia* orchids about which I had read an article. As it turned out, the collection was in fact the private collection of the then Garden Director of the Conservatory, Mr George Marcopoulos and was not on public display. However, the ever resourceful Chris Jones explained to staff that we had come to see orchids mentioned in the article and were disappointed that there were so few in the public display area. We were allowed access to a magnificent private collection of high altitude Andean orchids including *Masdevallia*, *Dracula* and *Pleurothallis*. The fibreglass roofed house in which they were housed was very dark (due to dust on the outside of the roof), and there were many oscillating fans that provided a very high level of air movement, so much in fact that it was impossible to photograph in place the orchids that were in flower. We asked and received permission to temporarily remove the plants from the vertical racks to be able to hold them still enough to take photos.

The majority of *Masdevallia* species grow in shaded habitats with a maximum light intensity of 1,200 foot candles or 12,900 lux for 8 hours a day, about the same as *Phalaenopsis*. While some *Masdevallia* species come from habitats with higher light intensity up to 3,500 foot candles or 37,600 lux, they are in the minority and less common in collections. Media suitable for growing *Masdevallia* orchids in pot culture includes sphagnum moss, fine pinebark, coco-peat, perlite and blends of these materials. If you are able to maintain the high humidity required, tree fern or natural cork slab can be used, although plants grown this way may require much more frequent watering than those in pots.

The majority of *Masdevallia* species grow in mist forest habitats with abundant fresh water. For us as hobbyists, rainwater is essential unless we have access to pure water from reverse osmosis. This genus is particularly susceptible to the dissolved salts content often found in both the Perth local domestic or ground water supply, so if you do not have access to high quality water, growing this genus might not be for you. *Masdevallia* orchids will appreciate application of quarter strength fertiliser once or twice a month when they are in active growth, but care should be taken to water immediately before fertilising and when watering generally to ensure that any residual salts are flushed from the pot.

*Masdevallia* orchids are particularly susceptible to hard and soft scale, mealy bug, mites, aphids, thrips and other sap-sucking insects. As some of these insects are introduced by ants, care should be taken to eliminate any ants that might be seen around your plants. Slugs and snails also enjoy the soft leaves of this genus, and can ruin the flowers that you and your orchid have worked hard to produce.

*Masdevallia* orchids are not immune to fungal, bacterial and viral infection, however well managed culture will minimise this risk. Often, *Masdevallia* orchid leaves will show tiny black spots that at first sight appear to be fungal. However, as Clive Halls (Mr Beenak Orchids) explained when presenting to members at the ISODW in Albany in August 2019, these spots are often the result of environmental stress such as excessive heat or cold, or periods of low humidity. Application of a general purpose fungicide such as Mancozeb Plus, Ridomil Gold, Eco-Fungicide or similar will deal with the majority of common fungal pathogen infections, and therefore new leaves should be free of any spotting. If they are not, further investigation is required.

*Masdevallia* orchids are not large, robust plants like for example *Cymbidium* species, and do not have significant pseudobulbs, therefore a grower needs to pay attention to culture to minimise opportunities for adventitious fungal infection. Fungal infection can be the result of overwatering and wet/soggy media and lack of air movement. Plants weakened by consistently higher or lower than optimal temperature are less resistant to fungal pathogens and more susceptible to infection. Dead leaves should be removed promptly as they too are a source of infection. Cleaning and sterilisation of the growing area and prophylactic application of fungicide at season change can also assist in preventing the establishment of fungal pathogens.

At this point, you might be wondering why bother trying to grow *Masdevallia* orchids in Perth? The answer to this very fair and practical question is that as species orchid growers, we are open to the challenges of expanding our collections and growing orchids that require a bit more effort than those that are simpler to grow and flower. After reading about the challenges faced in growing this particular genus in Perth with our hot, dry summers and cold, wet winters, if you do decide to give it a go, I will try to indicate the species most likely to be successfully cultivated in Perth. It also needs to be said that *Masdevallia* hybrids are more vigorous and tolerant of our Perth climate.

There are more than 500 species in the genus, the majority of which are highland rather than lowland. *Masdevallia* species vary in vegetative form from miniature to more robust larger plants. This article will focus on the latter and include a few of the more spectacular, but perhaps more difficult to grow members.

*Masdevallia amabilis* Rchb.f & Warsc. 1854 *SUBGENUS Masdevallia SECTION Masdevallia SUBSECTION Coccineae* Veitch 1889 can be found in northern Peru at 2,000-3,500m as a mini to miniature sized terrestrial or lithophytic, cold to warm growing orchid from cool montane forests and on rocky slopes in intense sunlight. It has a short, inconspicuous ramicaul (a stem bearing a single leaf) encased by 2 to 3 short, tubular membraneous sheaths with erect, coriaceous, oblanceolate, acute, leaves with a deep furrow down the centre. Flowering occurs in summer through winter on apical, erect, reclining or horizontal, slender, terete, to 30cm inflorescences with two distant tubular bracts with crimson-red to purple, white or orange flowers solitary flowers held way above the leaves.

Photo source: <https://www.orchids.org/grexes/masdevallia-amabilis>



In situ photo source: <https://botany.cz/cs/masdevallia-amabilis/>

Flowering can be promoted by increasing the light levels to where the leaves just slightly start to yellow. Its common name is the Lovely Masdevallia, and synonyms include *Masdevallia amabilis* fma. *flammula* (H.Mohr & Braas) O.Gruss & M.Wolff 2007; *Masdevallia amabilis* var. *lineata* Linden & André 1875 *Masdevallia flammula* H.Mohr & Braas 1984

*Masdevallia andreettaeana* Luer 1981 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Oscillantes* Luer 1986 is a mini-miniature sized warm to cool growing epiphytic species is in southern Ecuador and northern Peru in cloud forests at 1,600-2,100m. It has blackish, slender, erect ramicauls enveloped by 2 to 3 loose, tubular sheaths with single, apical, erect, coriaceous, elliptic, obtuse leaves with a blackish petiole (the stem connecting the leaf to stalk). Flowering on erect to ascending, slender 3-3.5 cm single flowered inflorescences from low on the ramicaul in autumn to early winter, the floral bract carries a long-lasting flower at or just below leaf height. This plant can be grown on a mount so as to display the beautiful flowers at their maximum. Its common name is Andreetta's Masdevallia named after the Salesian missionary and Orchid Collector in Ecuador (the founder of Ecuagenera Orchids). This species is often incorrectly spelt as *Masdevallia andreettaana*.



Photo source: <https://www.amazon.com/-/es/Masdevallia-andreettaana-orqu%C3%ADdea-Ind%C3%ADgena-Ecuador/dp/B07GC7FVM8>

*Masdevallia atahualpa* Luer 1982 SUBGENUS *Masdevallia* SECTION *Coriaceae* SUBSECTION *Coriaceae* [Rchb.f.] Veitch 1889 is a small sized, epiphytic, north western Peruvian species with stout, erect to suberect ramicauls enveloped basally by 2-3 loose, tubular sheaths each with a single, apical, erect to suberect, thickly coriaceous, oblong, obtuse leaf. Flowering in spring, a suberect, stout 3 to 4.5cm long, single flowered inflorescence arises from low on the ramicaul with a thin basal bract and a loose tubular floral bract holding a large, fleshy flower at the base of the leaf blade.



Photo source: <http://www.aos.org/sitf-blog/masdevallia-atahualpa.aspx>

In-situ photo source: <https://www.flickr.com/photos/58538170@N03/23284433049>



Its common name is Atahualpa's Masdevallia after the last king of the Incas. The synonym is *Byrsella atahualpa* (Luer) Luer 2006

*Masdevallia ayabacana* Luer. 1978 SUBGENUS *Masdevallia* SECTION *Durae* Luer 2000 can be found in Peruvian, cool montane rain forest at 1,200-1,800m as a caespitose (growing densely in tufts with short, closely packed stems), miniature to small sized, warm to cool growing epiphyte. It has 5-6 cm ramicauls enveloped by inflated, tubular sheaths with oblanceolate, acute, shortly apiculate, variable in size, thickly coriaceous dark green leaves. Flowering in spring through to autumn, flowers are borne on 20-35cm, erect, 2 to 3 successive flowered inflorescences held way above the leaves. The large, intense red-orange flower and the truncate verrucose petals and a labellum distinguish this species from many other members of the genus. Its common name is the Ayabaca Masdevallia after a Peruvian town, and the synonym is *Regalia ayabacana* (Luer) Luer 2006

Photo source: <https://www.orchidsforum.com/threads/masdevallia-ayabacana.1479/>

The comment posted on Orchid Board by Marni Turkel with this photo noted that she had waited too long to repot a large plant of *Masdevallia ayabacana* and as a result its roots had died. It took a long time for some of the divisions to grow new roots, while others did not and died. She reminds growers not to make the same mistake.



*Masdevallia barlaeana* Rchb. f. 1876 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Coccineae* Veitch 1889 is a miniature sized, caespitose, lithophytic cold growing species found on exposed, rocky slopes with grass and small shrubs in Colombia, Ecuador and Peru 2,200-3,100m. The ramicaul is basally enveloped by several, short, tubular sheaths and carries a single, apical, oblanceolate, petiolate, long attenuate leaf. Flowering in summer and autumn takes place on a slender, erect 25 cm inflorescence with lanceolate, acuminate floral bracts half the length of the ovary that hold the single campanulate flower above the leaves. Its common name is Barla's Masdevallia named for an 1800's Brazilian Orchid Enthusiast. This species and *Masdevallia amanda* are closely allied and occur in some of the same habitats where there is a natural hybrid with the two as parents known as *Masdevallia x splendida*.

Photo source:

[https://www.go2peru.com/peru\\_guide/machu\\_picchu/photo\\_orchids\\_in\\_machu\\_picchu\\_2.htm](https://www.go2peru.com/peru_guide/machu_picchu/photo_orchids_in_machu_picchu_2.htm)



*Masdevallia buccinator* Rchb.f. & Warsz. 1854 SUBGENUS *Polyantha* SECTION *Alaticaulis* SUBSECTION *Alaticaulis* {Krzl.} Luer 1986 can be found in Santander state, Colombia as a miniature sized, cold growing epiphyte in oak forests at 2,500- 2,600m. Stout, erect, basally ramicauls enveloped by 2-3 loose, tubular sheaths carry a single, apical, erect, thickly coriaceous, narrowly obovate, subacute to obtuse leaf. Flowering in spring on 23 cm long, triquetrous, successively several flowered, racemose inflorescence that arises from the base of the ramicaul has tubular, imbricating floral bracts that support up to two simultaneously opening flowers. The flowers are unique due to the unusually shaped sepaline tube with lateral sepals inflated above the middle with their anterior margins held closely together forming a deep, obtusely angled mentum. Its common name is the Horn Blower *Masdevallia* referring to the puffed outer lateral sepals, like the cheeks of a bugler. The synonym is *Alaticaulia buccinator* (Rchb.f. & Warsz.) Luer 2006. This species was considered lost for 132 years until rediscovered in a narrow gold mining valley in 1982.



Photo source: <http://www.orchidspecies.com/masbucinator.htm>

*Masdevallia caesia* Roezl 1883 SUBGENUS *Masdevallia* SECTION *Coriaceae* SUBSECTION *Coriaceae* [Rchb.f.] Veitch 1889 is one of the largest flowered members of genus and can be found as a medium to large sized, pendant, cold to cool growing and flowering epiphytic species in southwestern Colombian cloud forests at 1,600-2,200 m. Stout descending ramicauls basally enveloped 2-3 loose, tubular sheaths carry single, apical, erect, coriaceous, suffused with bluish purple, narrowly obovate, obtuse leaves gradually narrowed into the base. Flowering takes place on descending 2.5-5 cm purple dotted single flowered racemes arising from near the base of the ramicaul with a basal bract and a tubular floral bract holding a large, 12-23cm bad-smelling flower amid the leaves.



Photo source:

[https://www.flickr.com/search/?user\\_id=65086147%40N00&view\\_all=1&text=Masdevallia%20caesia](https://www.flickr.com/search/?user_id=65086147%40N00&view_all=1&text=Masdevallia%20caesia) (John Varigos photo)



In situ photo source:

<https://www.flickr.com/photos/quimbaya/184488582>

Its common name is the Blue-Grey Masdevallia, and synonyms are *Byrsella caesia* (Roezl) Luer 2006; *Masdevallia deorsum* Rolfe 1900; *Masdevallia metallica* F. Lehm. & Kraenzl. 1925

*Masdevallia cardiantha* Königer 1980 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Caudatae* Veitch 1889 comes from north-western Peru where it grows as a miniature sized cold growing epiphyte at 2,100m. Slender, erect ramicauls basally enveloped by 2-3 tubular sheaths carry single, apical, erect, coriaceous, narrowly elliptical, acute, narrowly cuneate leaves. Flowering occurs in spring on a slender, erect, triquetrous, 10-11.5cm simultaneously two-flowered inflorescence arising from low on the ramicaul with a bract at the base and tubular, imbricating floral bracts. Its

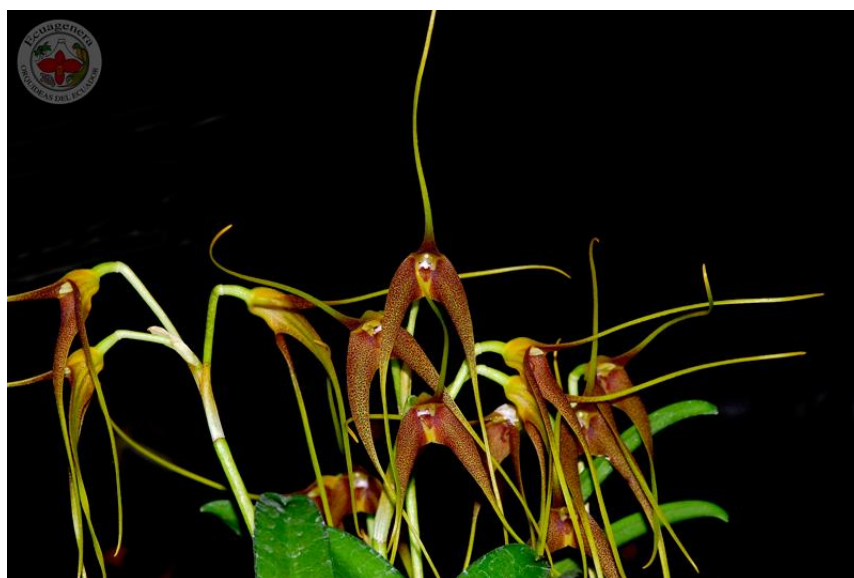
common name is the Heart-Shaped Masdevallia, and the synonym is *Alaticaulia cardiantha* (Königer) Luer 2006

Photo source: [https://www.flickr.com/photos/bilder\\_heinzg/8722939589](https://www.flickr.com/photos/bilder_heinzg/8722939589)



*Masdevallia cinnamomea* Rchb.f. 1855 SUBGENUS *Polyantha* SECTION *Alaticaulis* SUBSECTION *Alaticaulis* [Krzl.] Luer 1986 occurs as small sized, cold growing epiphyte in northern Peru at 2,400-2,500m. The erect, stout, 2.5-5 cm ramicauls basally enveloped by 2-3 close, tubular sheaths carry single, apical, erect, coriaceous, narrowly elliptical, acute, gradually narrowing leaves. Flowering in summer and autumn takes place slender, erect, triquetrous, simultaneously 2-3 flowered, congested, racemose inflorescences arising from low on the ramicaul with a bract at the base and tubular, imbricating floral bracts. Its common name is the Cinnamon-Coloured Masdevallia, and the synonym is *Alaticaulia cinnamomea* (Rchb.f.) Luer 2006

Photo source:  
<https://www.ecuagenera.com/Masdevallia-cinnamomea/en>



*Masdevallia citrinella* Luer & Malo 1981 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Oscillantes* Luer 1986 is a mini-miniature sized, cool to cold growing Ecuadorian and Peruvian epiphytic species that inhabits cloud forests at 1,500-2,400m. It has slender ramicauls basally enveloped by 2-3 thin, white sheaths with a single, apical, erect, coriaceous, elliptical, acute leaf. Flowering occurs on an ascending to horizontal, lax to pendant 3-8cm single flowered inflorescence arising from low on the ramicaul with a thin tubular floral bract carrying a 3cm flower with a tiny oscillating labellum below the leaves. Its common name is the Citrine Coloured Masdevallia



Photo source:

[https://vignette.wikia.nocookie.net/orchids/images/0/06/Masdevallia\\_citrinella.jpg/revision/latest?cb=20080630223844&path-prefix=en](https://vignette.wikia.nocookie.net/orchids/images/0/06/Masdevallia_citrinella.jpg/revision/latest?cb=20080630223844&path-prefix=en)



In situ photo source: <https://travaldo.blogspot.com/2019/04/masdevallia-citrinella-care-and-culture.html>

*Masdevallia coccinea* Linden ex Lindl. 1846 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Coccineae* Veitch 1889 is perhaps the best known member of the genus. It can be found in Colombia and Peru as a small-medium sized, cool-cold growing terrestrial on the sides of rocky cliffs with erect leaves at 2,400-3,000m The short ramicauls are enveloped by close tubular sheaths and carry a single, apical, oblong-lanceolate to spatulate, petiolate, rounded and minutely tridentate apical leaf. Flowering in late spring and early summer occurs on a slender, 30cm, slightly flexuous, single flowered, inflorescence with a spotted bract at each node and waxy, variable sized 3.5-7.5cm flowers held higher than the leaves. Many different colour forms exist of this species including bright red, pink, yellow, orange, and pure white, and as a consequence, it has been widely used in hybridising.

While in the mid-late 1800s, it was heavily over- collected as one of the most prized new world orchids, surprisingly, locally abundant wild populations remain in the Eastern Cordillera of Colombia.

Its common name is the Scarlet Masdevallia, and many synonyms include *Masdevallia coccinea* var. *harryana* (Rchb.f.) A.H.Kent 1889; *Masdevallia denisoniana* T.Moore 1874; *Masdevallia denisonii* Dombrain 1872; *Masdevallia harryana* Rchb. f. 1871; *Masdevallia harryana* var. *atrosanguinea* B.S.Williams & T.Moore 1884; *Masdevallia harryana* var. *decora* B.S.Williams 1889; *Masdevallia harryana* var. *miniata* B.S.Williams & T.Moore 1884; *Masdevallia lindenii* André 1870; *Masdevallia lindenii* var. *grandiflora* L.Linden & Rodigas 1885; *Masdevallia lindenii* var. *harryana* (Rchb.f.) André 1873; *Masdevallia militaris* Rchb.f 1854; *Masdevallia venusta* Schltr. 1921



Photo source:

<https://www.orchidpeople.com/products/masdevallia-dracula/masdevallia-coccinea-leywoods-amaos>

Photo source:

<https://www.orchidweb.com/orchids/pleurothallidinae/species/masdevallia-coccinea-xanthina-crestwood-am-aos>





In situ photo source: <https://www.pinterest.com.au/pin/739294095058636741/>



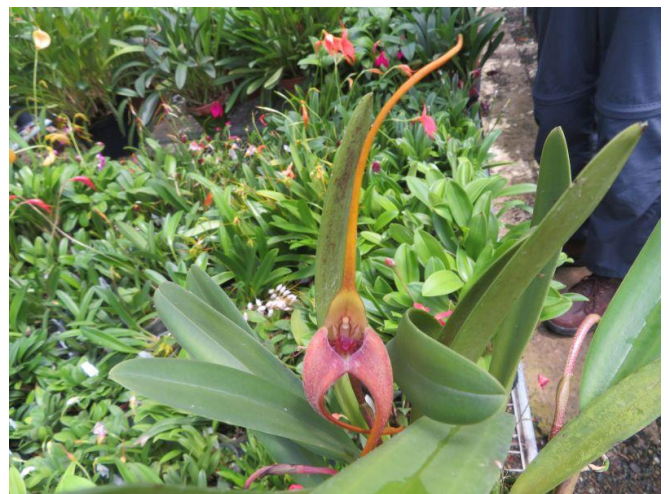
WOC 2017 Photo source: Chris Jones and Tony Watkinson

*Masdevallia colossus* Luer 1978 SUBGENUS *Masdevallia* SECTION *Coriaceae* SUBSECTION *Coriaceae* [Rchb.f] Veitch 1889 can be found in Peru and Ecuador as a vegetatively small sized, cold growing cloud forest epiphyte at 2,000-2,500m. Stout, erect to suberect ramicauls are basally enveloped by 2 to 3 loose, tubular sheaths that carry a single, apical, erect, coriaceous, elliptical, obtuse to rounded leaf. Flowering in autumn and winter occurs on a slender, suberect, 4-11cm single flowered inflorescence arising from low on the ramicaul, with a bract near the base and a tubular floral bract. The fleshy, large 20-24 cm malodorous flower is held at mid-leaf. Its common name is the Gigantic Masdevallia, and the synonym is *Byrsella colossus* (Luer) Luer 2006



Photo source:  
<https://travaldo.blogspot.com/2019/04/masdevallia-colossus-care-and-culture.html>

Photo source: Chris Jones & Tony Watkinson



*Masdevallia constricta* Poepp. & Endl. 1837 **SUBGENUS** *Masdevallia* **SECTION** *Masdevallia* **SUBSECTION** *Saltatrices* [Rchb.f] Luer 1986 is a miniature caespitose epiphytic species from Ecuador and Peru where it can be found in wet montane forests on old trees. This species is one of those more tolerant of warm-cool conditions as it is found at 1,200-1,800m. Short, inconspicuous ramicauls are hidden by basal, tubular, overlapping bracts with a single, apical, erect, coriaceous, oblong-oblancoelate base leaf. Flowering in autumn-winter, the slender, suberect 8cm single flowered inflorescence arises from low on the ramicaul with a bract above the base and a floral bract holding the flower just above the leaves. A major distinguishing feature of this species is the constricted floral tube.



Its common name is the Constricted Masdevallia referring to the elongate compressed sepaline tube. The synonym is *Masdevallia urosalpinx* Luer 1979

Photo source:

<http://marniturkel.com/mostlyspecies/f.m.constricta.3282.html>



Photo source: <http://orchidkarma.com/masdevallia-constricta/>

*Masdevallia davisii* Rchb. f. 1874 **SUBGENUS** *Masdevallia* **SECTION** *Masdevallia* **SUBSECTION** *Coccineae* Veitch 1889 is a miniature to small sized, cold growing terrestrial or lithophytic species from Peru at 2,600- 4,000m on rocky outcroppings in pockets of soil or on bare rock at the tree line in wet cloud forests. Very short ramicauls are enveloped by several, scarious, basal sheaths and carry single, apical, oblanceolate coriaceous leaves. Inflorescences are slightly tridenticulate at the apex and carry fragrant, singular flowers on an erect, slender 25 cm, successively flowering raceme in the late spring and summer with distant, scarious, thin, tubular bracts that hold very showy flowers above the leaves. Its common name is Davis' Masdevallia named for a late 1800's –early 1900's English orchid collector.



Photo source:

[https://commons.wikimedia.org/wiki/File:Masdevallia\\_davisii\\_\(33631626546\).jpg](https://commons.wikimedia.org/wiki/File:Masdevallia_davisii_(33631626546).jpg)



In situ photo source: <https://travaldo.blogspot.com/2019/04/masdevallia-davisii-care-and-culture.html>

*Masdevallia decumana* Koniger 1982 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Caudatae* Veitch 1889 is another mini-miniature sized, warm to cold growing cloud forest epiphytic species from Peru and Ecuador found at 1,000-2,500m. Its blackish, slender, erect ramicauls are enveloped basally by 2 to 3 tubular sheaths carrying a single, apical, erect, coriaceous, elliptical, obtuse to rounded leaf. Flowering occurs in winter on a slender, suberect, 5-6cm erect inflorescence arising from low on the ramicaul with a bract near the base, and a floral bract with a solitary flower held below or just at leaf height. Its common name is the Large Flowered Masdevallia



Photo source:

<http://marniturkel.com/mostlyspecies/f.m.decum.606.html>

*Masdevallia erinacea* Rchb.f 1877 SUBGENUS *Pygmaeia* SECTION *Pygmaeae* Luer 1986 is a miniature species from Costa Rica, Panama, Colombia and Ecuador where it can be found in premontane rain forests as a warm to cool growing epiphyte at 700-1,400m. The erect stems are covered with tubular bracts and carry a single, apical sub coriaceous, linear-lanceolate leaf. The single, small summer flowers are borne on a 4-7cm inflorescence with the unusual flowers held just above the leaves. Its common name is the Hedgehog Masdevallia, and synonyms are *Diodonopsis erinacea* (Rchb. f.) Pridgeon & M.W. Chase 2001; *Masdevallia echinocarpa* Schltr. 1920; *Masdevallia horrida* Teusch. & Garay 1960; and *Scaphosepalum erinaceum* (Rchb. f.) Schltr. 1920



Photo source: <https://www.pinterest.se/pin/24769866676944190/>

In situ photo source:

[https://www.flickrriver.com/photos/artour\\_a/370376672/](https://www.flickrriver.com/photos/artour_a/370376672/)



*Masdevallia exquisita* Luer & Hirtz 1993 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Masdevallia* is a cool growing, mini-miniature sized species from the wet montane forests in northern Bolivia and Peru at 1,800-2,000m. Slender, erect, blackish ramicauls enveloped by 2-3 loose, tubular sheaths carry a single, apical, erect, coriaceous, elliptical, subacute leaf. Flowering in summer occurs on slender, erect 6 cm inflorescences that arise from low on the ramicaul with a thin bract near the base and a tubular floral bract that holds the solitary flower at or just below leaf height. This species is quite distinct with snow white sepals and bright crimson suffusion in the middle third to half of the flower. Its common name is the Choice *Masdevallia*.



Photo source:

<http://www.orchidspecies.com/masexquisita.htm>

*Masdevallia floribunda* Lindl. 1843 SUBGENUS *Masdevallia* SECTION *Minutae* Rchb.f Ex Woolw. 1896 is another mini miniature to small sized, cool to hot growing, tufted, epiphyte from Belize, Mexico to Costa Rica and the Caribbean found at 400-1,500m in damp forests. Erect, slender ramicauls basally enveloped by 2-3 close, thin tubular sheaths carry a single, apical, oblong-lanceolate, petiolate leaf. Flowering in summer through and autumn on a 7.5-13 cm long, slender, decumbent to erect inflorescence arising from low on the ramicaul carries a single flower that can often be followed by a second flower just above leaf height. Several colour variations exist which were in the past identified as separate species (including *Masdevallia tuerckheimii* that has been recognised as a valid species by Kew), however they have since been reduced to synonymy. Its common name is the Easy-Blooming *Masdevallia*

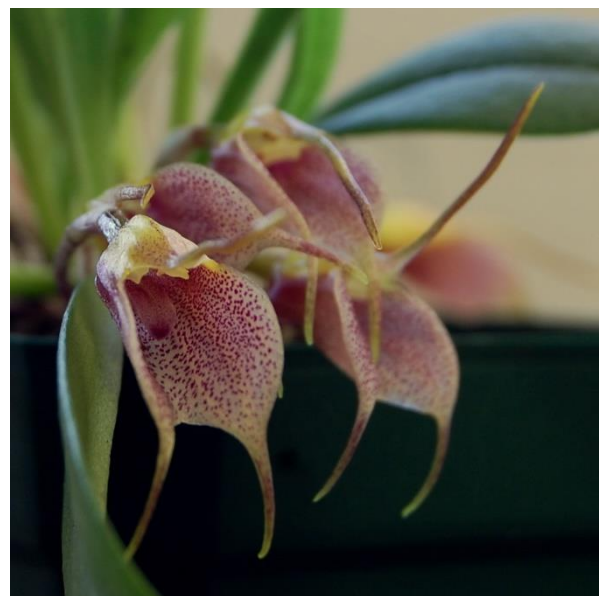


Photo source:

<https://www.cpkforum.com/forum/index.php?/topic/54451-masdevallia-floribunda/>

Photo source:

<https://www.flickr.com/photos/14667149@N00/5190008468>





In situ photo source: <https://www.inaturalist.org/taxa/273834-Masdevallia-floribunda>

*Masdevallia gilbertoi* Luer & R. Escobar 1978 *SUBGENUS Masdevallia SECTION Masdevallia SUBSECTION Masdevallia* can be found in the department of Risaralda in Colombia on the western cordillera in cloud forests at 1,400-2,000m as a miniature sized, cool growing epiphyte on mossy trees. Sender, erect, blackish ramicauls are basally enveloped by 2-3 loose, tubular sheaths and carry a single, apical, erect, coriaceous, long-petiolate, elliptical, subacute to obtuse leaf. Flowering in summer through autumn occurs on a suberect, 11cm, slender, single flowered inflorescence arising from low on the ramicaul with a bract near the base and a thin, tubular floral bract holding the flowers above the leaves. This species can easily be distinguished from others by the long, forward pointing tail of the dorsal sepal and the long, crossed, reflexed tails of the lateral sepals. Its common name is Gilberto's Masdevallia named after Sr Gilberto Escobar, a Colombian orchid enthusiast of the late 1900's



Photo source: <https://www.pinterest.com.au/pin/392235448768355486/>

*Masdevallia guttulata* Rchb. f. 1877 SUBGENUS *Polyantha* SECTION *Alaticaulis* SUBSECTION *Alaticaulis* [Krzl.] Luer 1986 is another mini-miniature sized, caespitose, hot to warm growing epiphytic species found along watercourses in Venezuela, Colombia and Ecuador at 400-1,100m. Slender, erect ramicauls enveloped by 2- 3 tubular sheaths carry a single, apical, erect, coriaceous, narrowly elliptical, subacute leaf. Flowering in winter occurs on stout, suberect, triquetrous, congested, successively single flowered inflorescences arising from low on the ramicaul with a basal bract and a thin, imbricating floral bract that holds the single flower at or well above leaf height. This species can be distinguished from others in the section by the whitish sepals with minute tufts of red hairs within as well as the apices of the lateral sepals are usually triangular and tail less but occasionally some narrowing is present that creates a short, broad apical tail. Its common name is the Small-Spotted Masdevallia, and synonyms are *Alaticaulia guttulata* (Rchb.f.) Luer 2006; *Masdevallia guttulata* Rolfe 1890; *Masdevallia lawrencei* Kraenzl. 1895



<https://www.ecuagenera.com/Masdevallia-guttulata/en>

In situ photo source:

<https://www.flickr.com/photos/andreaskay/22991915491>



*Masdevallia hirtzii* Luer & Andreetta 1989 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Saltatrices* [Rchb.f] Luer 1986 can be found as a mini-miniature sized, cool to warm growing epiphyte in Ecuador and Peru in cloud forests at 1,200-1,550m. Blackish, erect, slender ramicauls basally enveloped by 2 to 3 loose tubular sheaths carry single, apical, erect, coriaceous, elliptical, satiny green above and silvery green below, subacute leaves. Flowering in late winter and spring occurs on basal, slender, erect, 4-6cm inflorescences arising from low on the ramicaul with a bract near the base and a tubular floral bract with a solitary flower held just above leaf height. This floriferous species can have several inflorescences from the base of each leaf, and is known to flower year round in the right conditions. Its common name is Hirtz's Masdevallia after a German orchid collector in Ecuador in the late 1900's



Photo source:

<https://www.ecuagenera.com/Masdevallia-hirtzii/en>  
*Masdevallia hirtzii*

*Masdevallia ignea* Rchb. f. 1871 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Coccineae* Veitch 1889 is a small sized, cold growing terrestrial species in the tall forest rich humus in the Eastern Cordillera of Colombia at 2,600- 3,800m. Stout, erect, ramicauls basally enveloped by 2-3 loose, tubular sheaths carry sub erect, elliptic-lanceolate to oblong-lanceolate, coriaceous, dark green leaves. Flowering on slender, terete, 30-37.5cm inflorescences in late spring and summer, the single flowers are held well above the leaves. Many colour variations exist including the striking red orange for which the species is known as well as yellow-red, orange, red and pink/purple suffusion.

Photos source:

<https://www.orchidweb.com/orchids/pleurothallidinae/species/masdevallia-ignea>



Photo source:

<https://www.pinterest.com.au/pin/757167756075640406/>



Its common name is the Fire-Red Masdevallia, and the myriad of synonyms include *Masdevallia boddaertii* Linden ex André 1879; *Masdevallia ignea* fma. *citrina* (Stein) O.Gruss & M.Wolff 2007; *Masdevallia ignea* var. *armeniaca* B.S.Williams 1894; *Masdevallia ignea* var. *aurantiaca* B.S.Williams 1894; *Masdevallia ignea* var. *boddaertii* Linden ex André 1879; *Masdevallia ignea* var. *citrina* Stein 1892; *Masdevallia ignea* var. *coccinea* Stein 1892; *Masdevallia ignea* var. *goorii* Sander 1901; *Masdevallia ignea* var. *grandiflora* B.S.Williams 1894; *Masdevallia ignea* var. *hobartii* Stein 1892; *Masdevallia ignea* var. *marshalliana* Rchb.f. 1872; *Masdevallia ignea* var. *massangeana* B.S.Williams 1887; *Masdevallia ignea* var. *pulchra* Vuylsteke ex Cogn. 1897; *Masdevallia ignea* var. *rubescens* Linden ex Kraenzl. 1925; *Masdevallia ignea* var. *splendens* Stein 1892; *Masdevallia ignea* var. *stobartiana* Rchb.f. 1881; *Masdevallia ignea* var. *superba* Linden ex Kraenzl. 1925; *Masdevallia ignea* var. *tomasonii* Gentil 1907 and *Masdevallia ignea* var. *vuylstekeana* Cogn. 1897. First collected in 1879, the collector's identity and actual locality are unknown, however further population of this important

species widely used in hybridising were found as collectors were sent to find the colour variations. As one of the earlier discovered species, many different names were and continue to be proposed.

In situ photo source:

<http://www.orchidspecies.com/colombia06.htm>



*Masdevallia instar* Luer & Andreetta 1978 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Caudatae* Veitch 1889 is a miniature to small sized, caespitose, cloud forest, cool to cold growing epiphytic species from Ecuador and Peru where it can be found on tree trunks and low branches in cold, scrub cloud forest at 1,500-3,150m. Short, inconspicuous ramicauls concealed by several tubular sheaths carry single, narrowly lanceolate to oblanceolate, attenuate leaves. Flowering in summer and autumn takes place on erect to suberect, slender 10cm marginally than the leaf inflorescence arising from low on the ramicaul with a bract near the base, a close, tubular bract that carries the single flower held above the leaves. The species is like *Masdevallia triangularis* but can be differentiated by the ovate labellum lamina with the apical lobule having an entire margin. Its common name is the Equally Large Petal *Masdevallia*

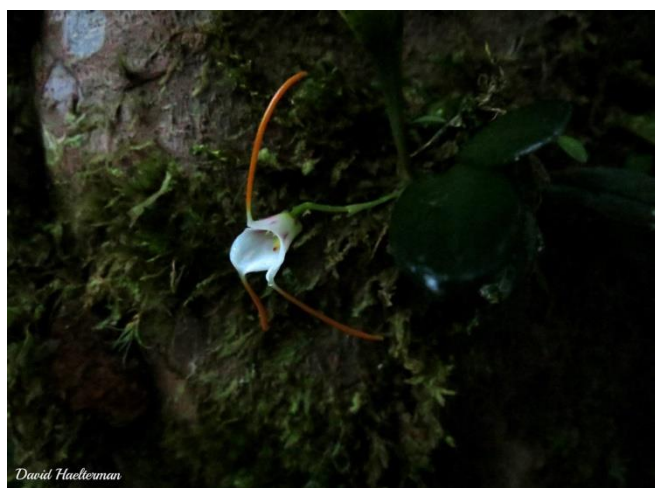


Photo source: <https://www.yonggee.name/Genera/Masdevallia.html>

*Masdevallia lauchiana* John Fraser 1894 SUBGENUS *Masdevallia* SECTION *Minutae* Rchb.f Ex Woolw. 1896 is a species from Costa Rica where it can be found in primary forests as a mini-miniature sized, warm to cool growing epiphyte at 950-1,500m. Erect, slender ramicauls basally enveloped by 2-3 imbricate, tubular sheaths carry single, apical, erect, coriaceous, narrowly elliptical-obovate, subacute to obtuse leaves. Flowering in autumn on slender, suberect, 4-6cm, single flowered inflorescences arising from low on the ramicaul and with a bract near the base and tubular floral bracts, the flowers often smell of Vanilla. Its common name is Lauche's *Masdevallia* named for the Director of the Vienna Botanical Garden in the 1800's. The synonym is *Acinopetala lauchiana* (John Fraser) Luer 2006



Photo source: <http://orchidkarma.com/masdevallia-lauchiana/>



In situ photo source: <https://www.flickr.com/photos/58798926@N07/8232940913>

*Masdevallia laevis* Lindl. 1845 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Masdevallia* comes from Venezuela, Colombia and Ecuador where it can be found as a small sized, variable, cold growing epiphyte on scrub trees in high cloud forests at 2,900-3,900m. Erect, slender, often blackish ramicauls are enveloped by 2-3 loose tubular sheaths and vary a single, apical, erect, coriaceous, elliptical, obtuse to subacute leaf. Flowering in late spring through summer and into autumn, slender, erect, 2-13 cm single flowered inflorescences arising from below the middle of the ramicaul with a bract above the base and a tubular floral bract holding the showy flower at mid leaf. Its common name is the Smooth Lipped *Masdevallia*.



In situ photo source: <https://orchid.unibas.ch/index.php/en/database-search/advanced-search?SearchResultID=308605>

Photo source: <https://www.ecuagenera.com/Masdevallia-laevis/en>



*Masdevallia laevis* Lindl., Province of Imbabura, Ecuador, Mariano Acosta, altitude 3200 meters above sea level, January 1979, photo by Carlyle A. Luer.

Some differences of opinion exist about this species, and the flower shape and colour appears to be quite variable. *Masdevallia affinis* is now considered to be a synonym of this species. Other synonyms include *Masdevallia chlorotica* Kraenzl 1925; *Masdevallia chrysoneura* F. Lehm. & Kraenzl. 1899; *Masdevallia confusa* Kraenzl. 1925; *Masdevallia gomeziana* Lehm & Kraenzl. 1921; *Masdevallia lepida* Rchb. f. 1855; *Masdevallia musculigera* Schlechter 1924; *Masdevallia pantherina* Lehm. & Kraenzl. 1894; *Masdevallia petiolaris* Schlechter 1899.

*Masdevallia lehmannii* Rchb. f. 1877 SUBGENUS *Amanda* SECTION *Amandae* Rchb.f 1874 can be found in Ecuador and Colombia as a small sized, cold growing epiphyte in humid valleys of the semi-arid southwest at 2,000-2,400m. Erect, stout ramicauls basally enveloped by 2-3 loose, tubular sheaths carry single, apical, erect, coriaceous, petiolate, elliptical, obtuse leaves. Flowering occurs in summer on suberect to arcuate, slender, racemose 10 cm, densely and simultaneously many flowered inflorescence arising from low on the ramicaul with 2 distant bracts and inflated floral bracts

This species is a variation of *Masdevallia polysticha* and differs by having a longer and more congested inflorescence that have flowers that are light yellow to yellow orange. The sepals are shortly and densely pubescent towards the edges and less so inward as well as their being spotted with red or red-brown. Its common name is Lehmann's *Masdevallia* =named



for a German orchid collector in South America in the late 1800's. Synonyms are *Masdevallia densiflora* Schltr. 1920; *Spilotantha densiflora* (Schltr.) Luer 2006; *Spilotantha lehmannii* (Rchb.f.) Luer 2006

Photos source (this and next page): <http://www.yonggee.name/Genera/Specklinia%20to%20Stanhopea.html>



*Masdevallia limax* Luer 1978 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Saltatrices* [Rchb.f.] Luer 1986 can be found as a mini-miniature sized, cool to cold growing epiphyte in southwestern Ecuador at 1,400-2,400m. Blackish, erect, slender ramicauls are enveloped by 2-3 loose, tubular sheaths and carry a single, apical, elliptical, acute leaf. Flowering in summer and autumn occurs on an erect to horizontal, slender 13cm long, solitary flowered inflorescence arising from low on the ramicaul with a bract near the base and a tubular floral bract carrying a long-lasting, waxy flower at or just amid the leaves. The flower is bright orange, tubular and inflated below a constriction between the middle and distal quarter of the tube. Its common name is the Slug-Like Masdevallia



Photo source: <https://www.pbase.com/znarfi39/image/152773557>

*Masdevallia macrura* Rchb.f. 1874 SUBGENUS *Cucullatia* Luer 2002 is a medium-large sized, cold growing lithophyte on mossy, plant covered rocks in cloud forests in Colombia and Ecuador at 2,000-2,600m. 15cm long, stout stems basally enveloped by 2-3 loose, inflated tubular sheaths carry single, apical, erect, coriaceous, elliptical, obtuse leaves. Flowering in winter through to early spring, single large showy, rigidly fleshy flower are carried on an erect, stout 30cm inflorescence arising from the middle of the ramicaul with a keeled, white, membranous bract below the middle and a floral bract holding the large flower (up to 25cm) well above the leaves. . This both vegetatively and florally the largest Masdevallia species, and its common name the Long Tail Masdevallia recognises this characteristic.

Photo source: <https://www.flickr.com/photos/95227122@N08/24797245535>

The synonym is *Megema macrura* (Rchb.f.) Luer 2006.



*Masdevallia manchinazae* Luer & Andreetta 1988-9 SUBGENUS *Pygmaeia* SECTION *Amaluzae* Luer 1986 can be found in Ecuador and Peru as an epiphyte in cool, moist intermontane valleys in the lower reaches of the dry sierra at 1,750-1,900m. It is a mini-miniature sized, caespitose epiphyte with 2-3cm blackish, erect, basally slender ramicauls enveloped by 2-3 tubular, sheaths carrying a single, apical, erect, coriaceous, elliptical, acute leaf. Flowering occurs on a slender, terete 3-7.5 cm inflorescence arising from low on the ramicaul with a bract near the base and a tubular floral bract. The single flowers are held at leaf height during spring. This species is separated from others by the "V"-shaped median furrow of the labellum which also has the lateral margins slightly revolute, the prominent purple veins on the sepals and the long caudae. Its common name is the Manchinaza Masdevallia named for a region in Ecuador, and the synonym is *Luzama manchinazae* (Luer & Andreetta) Luer 2006 .



Photo source:

<https://www.flickr.com/photos/ericinsf/480956049>

*Masdevallia minuta* Lindley 1843 SUBGENUS *Masdevallia* SECTION *Minutae* Rchb.f Ex Woolw. 1896 is another mini-miniature, hot to cool growing forest and foothill terrestrial or epiphytic species from Venezuela, Surinam, Guyana, French Guiana, Colombia, Ecuador, Peru at 220-1,500m . Slender, erect, basally enveloped ramicauls with 2-3 tubular sheaths carry single, apical, erect, coriaceous, narrowly obovate, subacute leaves. Flowering in spring, summer and autumn, single flowers are borne on slender, erect, filiform, 15- 60cm inflorescences arising from low on the ramicaul with a bract below the middle, and a floral bract carrying the single flower held way above the leaves. Its common name is the Tiny Masdevallia, and the synonyms are *Acinopetala minuta* (Lindl.) Luer 2006; *Masdevallia surinamensis* Focke 1851



Photo source:

<https://www.flickr.com/photos/wsbeorchids/5291049387>

*Masdevallia niesseniae* Luer 1998 **SUBGENUS** *Masdevallia* **SECTION** *Masdevallia* **SUBSECTION** *Coccineae* Veitch 1889 comes from southern Colombia as a miniature sized, cool growing orchid in cloud forests at 1,500-1,600m. Erect, channelled ramicauls basally enveloped by 2-3, white, loose, tubular sheaths carry single, apical, erect, coriaceous, elliptical, subacute, gradually narrowing leaves. Flowering in spring, the slender, erect 23cm single flowered inflorescence arises from above the base of the ramicaul with a bract below the middle. The flower is surrounded by a thin, tubular floral bract. Its common name is Niessen's Masevallia named for Andrea Niessen, a Colombian Orchid nursery proprietor.



Photo source: <http://www.orchidspecies.com/masniesseniae.htm>

*Masdevallia norops* Luer & Andreetta 1978 **SUBGENUS** *Masdevallia* **SECTION** *Masdevallia* **SUBSECTION** *Masdevallia* can be found in Ecuador and Peru as a cool to cold, miniature epiphyte in cloud forests at 1,500-2,800m. Slender, erect, blackish ramicauls basally enveloped by 2-3 tubular sheaths carry single apical, erect, coriaceous, petiolate, elliptical, subacute leaves. Flowering in spring on erect, slender 6-10cm solitary flowered inflorescences arise from low on the ramicaul with a bract below the middle and a floral bract holding the single flower at or below leaf height. It can be distinguished by having an elliptical, long petiolate leaf and a unique bright orange flower held above the middle and below the leaf. It has sepals that are fairly fleshy and rigid as well as the blade of the dorsal is convex and somewhat horizontal holding the acute apex reflecting the long tail upward and the lateral sepals are rigid and concave as well as narrow and falcate and more or less cross. The petals are callous above the lower margin with a blunt, basal tooth and the lip is oblong, acute and arcuate. Its common name is the Shining Masdevallia



Photo source: <https://www.orchidsforum.com/threads/masdevallia-norops.7544/>

*Masdevallia peristeria* Rchb.f. 1874 **SUBGENUS** *Masdevallia* **SECTION** *Coriaceae* **SUBSECTION** *Coriaceae* [Rchb.f.] Veitch 1889 is a small sized, cool to cold growing an epiphytic or terrestrial species found in open woodland and along waterways in Colombia and Ecuador at 1,500-2,500m. Stout, erect ramicauls basally enveloped by 2-3 loose, tubular sheaths carry single, apical, linear-lanceolate, suberect, thick, fleshy leaves. Flowering in spring and summer, the short 9cm terete inflorescence arising from low on the ramicaul carries a pale green spotted with crimson malodorous flower. The common name is the Dove-Like Masdevallia, and synonyms are *Byrsella peristeria* (Rchb.f.) Luer 2006; *Masdevallia ellipes* Rchb.f 1877; *Masdevallia haematisticta* chb. f 1866; *Masdevallia peristeria* subsp. *haematosticta* (Rchb. f.) Luer 1988





Photos source:

<https://travaldo.blogspot.com/2019/05/masdevallia-peristeria-care-and-culture.html>

*Masdevallia picturata* Rchb.f 1878 SUBGENUS *Fissae* Luer 2002 comes from Found in Costa Rica, Panama, Colombia, Ecuador, Guyana, Peru, Bolivia and Venezuela where it can be found as a mini-miniature sized, cool to cold growing epiphyte on tree trunks along riverbanks in wet cloud forests at 1,500-2,750m. Short stems basally enveloped by tubular sheaths carry a single linear to obovate leaf. Flowering in autumn, winter and early spring occurs on erect 4 cm single flowered inflorescences that hold the flowers above the leaves. The flowers of this species can vary greatly in colour and patterning. Its common name is the Striking Masdevallia, and synonyms include *Fissia picturata* (Rchb.f.) Luer 2006 ; *Masdevallia cryptocopis* Rchb.f. ex Kraenzl. 1925; *Masdevallia meleagris* Rchb. f. 1858; *Masdevallia ocanensis* Kraenzl. 1921; *Masdevallia picturata* var. *minor* Cogn. 1896; *Masdevallia picturata* subsp. *minor* (Cogn.) Luer 1986; *Rodrigoa cryptocopis* (Rchb.f. ex Kraenzl.) Braas 1979.

Photo source: <https://www.pinterest.at/pin/24769866685514631/>



In situ photo

source:<https://www.orchidsforum.com/threads/fissia-picturata-syn-masdevallia-picturata.21159/>



*Masdevallia pulcherrima* Luer & Andreetta 1980 SUBGENUS *Amanda* SECTION *Amandae* Rchb.f 1874 can be found as a miniature sized, cold growing epiphyte in cloud forests in Ecuador at 2,000m. Slender ramicauls basally enveloped by 2-3 imbricating sheaths carry a single, apical, erect, coriaceous, petiolate, elliptical, subacute leaf. Flowering in summer on an erect then arching, simultaneously multi flowered 12-1 cm slender inflorescence arising from low on the ramicaul with bracts below the middle and at the base and a thin, oblique floral bract, this species common name is the Beautiful Masdevallia. The synonym is *Spilotantha pulcherrima* (Luer & Andreetta) Luer 2006



Photo source: <https://www.flickr.com/photos/jvinoz/6834549273/>  
(John Varigos photo)

*Masdevallia regina* Luer 1998 SUBGENUS *Masdevallia* SECTION *Duræ* Luer 2000 occurs in Peru as a miniature to small sized, warm to cool growing epiphyte at 1,000-1,500m. Stout, erect ramicauls enveloped by 2-3 tubular sheaths carry single, apical, erect, thickly coriaceous, narrowly obovate, obtuse leaves. Flowering in the winter occurs on congested, successively few flowered, racemose, terete, 30cm inflorescences arising from low on the ramicaul with 3 to 4 close bracts below the middle, and thin, tubular floral bracts that hold the flower well above the leaves. This species is very similar to *Masdevallia princeps* but differs by its acute apices of the lateral sepals, long approximate tails that are not reflexed, a round convexity in the centre of the synsepal and a narrower lip with an obtuse apex without a deflexed callus. Its common name is the Queen Masdevallia, and the synonym is *Regalia regina* (Luer) Luer 2006



Photo source: <https://www.flickr.com/photos/orquideologia/34672581410>



In situ photo source:  
<https://www.flickrriver.com/photos/43086338@N08/49069925196/>

*Masdevallia rolfeana* Kraenzl. 1891 SUBGENUS *Masdevallia* SECTION *Reichenbachianae* Woolw. 1896 is a mini-miniature sized, cool to cold growing epiphyte on tree trunks in windy Costa Rican cloud forests 1,400-2,200m. Erect stems basally enveloped by 2-3 tubular sheaths carry a single, apical, patulate, slightly rough adaxially, petiolate leaf. Flowering in autumn through spring, the 12-18cm inflorescence is shorter than the leaves and has 1-3 successive flowers. Its common name is Rolfe's Masdevallia after the well-known 1800's Kew taxonomist. The synonym is *Reichantha rolfeana* (Kraenzl.) Luer 2006



Photo source: <https://wsbeorchids.org/2018/365-days-of-orchids-day-534-masdevallia-rolfeana/masdevallia-rolfeana-c/>



In situ photo source: <https://wsbeorchids.org/2017/365-days-of-orchids-day-169-masdevallia-rolfeana/rolfeana-wild-2/>

*Masdevallia sanctae-inesae* Luer & Malo 1978 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Caudatae* Veitch 1889 is a mini-miniature sized, cool to cold growing epiphyte found on mossy trees in southern Ecuador's cloud forests at 1,900-2,500m. Blackish, slender ramicauls basally enveloped by 2-3 tubular sheaths carry a single, apical, erect, coriaceous, elliptical, subacute to obtuse leaf. Flowering occurs throughout the year on lateral, slender 2.5-3 cm inflorescences arising from low on the ramicaul with a bract near the base and a tubular floral bract that carries a single flower held below the leaves. Each ramicaul can produce several successive inflorescences. Its common name is the Saint Inez' Masdevallia named for the nursery where it first was cultivated.



Photo source: <https://www.flickr.com/photos/84159422@N02/40178063214>

*Masdevallia scabrilinguis* Luer 1979 SUBGENUS *Masdevallia* SECTION *Minutae* Rchb.f Ex Woolw. Is another mini-miniature sized, warm to cool growing species reported from Panama and western Costa Rica at 1,200-1,300m. Slender, erect ramicauls basally enveloped by 2-3 thin, close, tubular sheaths carry single, apical, erect, coriaceous, narrowly obovate, subacute to obtuse leaves. Flowering takes place in spring on slender, erect to suberect, successively solitary flowered 4-8cm inflorescence arising from low on the ramicaul with a bract below the middle and a tubular floral bract holding the flower amid the leaves.

This species now said to be a synonym of *Masdevallia attenuate*, but can be distinguished by a single, small, white, tubular flower without stripes, and yellowish sepaline tails about as long as the blades. The petals are acute to subacute at the apex and more or less unguiculate (claw like) at the base. The marginal callus does not have an acute tooth. The apex of the oblong lip is obtuse and verrucose. There is a pair of verrucose calli that are obtusely angled near the middle.

Its common name is the Rough-Lipped Masdevallia, and the synonym is *Acinopetala scabrilinguis* (Luer) Luer 2006

Photo source:  
<https://travaldo.blogspot.com/2019/05/masdevallia-scabrilinguis-care-and-culture.html>



*Masdevallia sprucei* Rchb. f. 1878 SUBGENUS *Polyantha* SECTION *Alaticaula* SUBSECTION *Alaticaula* [Krzl.] Luer grows as a mini-miniature sized, hot to warm growing epiphyte in lowland tropical and wet montane forests in Venezuela, Colombia, Ecuador and Peru at 100-900m. Erect, slender ramicauls enveloped by 2-3 tubular sheaths carry single, apical, erect, coriaceous, elliptical, obtuse leaves. Flowering in late autumn and early summer, slender 7cm inflorescences carry successive (3-4) single flowers on a triquetrous inflorescence arising from low on the ramicaul with a bract near the base and thin, tubular floral bracts holding the flowers just at leaf height. Its common name is Spruce's Masdevallia named for an 1800's English orchid collector. The synonym is *Alaticaula sprucei* (Rchb.f.) Luer, 2006

Photo source:  
<https://www.orchidsforum.com/threads/masdevallia-sprucei.14032/>



*Masdevallia strobilii* H.R. Sweet & Garay 1966 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Saltatrices* [Rchb.f.] Luer 1986 is a mini-miniature sized, warm to cool growing epiphyte from Ecuador and Peru where it can be found on the lower branches of trees and fence posts along or near riverbanks at 1,400-1,700m. Slender, erect, ramicauls basally enveloped by 2-3 loose tubular sheaths carry single, apical, erect, coriaceous, elliptical, acute leaves. Flowering in early winter, slender, suberect to horizontal 3-4.5cm single flowered inflorescences arising from low on the ramicaul with a bract above the base and a floral bract holding the showy, fragrant flower at mid leaf. Its common name is Strobil's Masdevallia named for a German orchid collector living in Ecuador in the 900's.



Photo source:

<https://www.flickr.com/photos/ericinsf/2684705491>

*Masdevallia superbiens* Luer & Hirtz 2005 SUBGENUS *Amanda* SECTION *Amandae* Rchb.f 1874 occurs as a miniature sized cold growing epiphyte in Bolivar Ecuador at 2,800m. Stout ramicauls enveloped by 2-3 loose, tubular sheaths carry single, apical, erect, coriaceous, elliptical, subacute to obtuse, cuneate below into the petiolate base leaves. Flowering takes place in spring and summer on a stout, erect 15-18cm loose, simultaneously opening, several flowered inflorescences arising from low on the ramicaul with a bract on the lower third and an inflated floral bract. Its common

name is the Very Fine Masdevallia, and the synonym is *Spilotantha superbiens* (Luer & Hirtz) Luer 2006

Photo source: <https://wsbeorchids.org/2018/365-days-of-orchids-day-732-masdevallia-superbiens/>



*Masdevallia titan* Luer 1996 SUBGENUS *Masdevallia* SECTION *Durae* Luer 2000 comes from Peruvian cloud forests at 1,000-1,400m where it can be found as a small sized, warm to cool growing epiphyte. Stout, erect ramicauls basally enveloped by 2-3 tubular sheaths carry a single, apical, erect, thickly coriaceous, narrowly obovate, obtuse, gradually narrowing leaf. Flowering in late spring and early summer, terete, purplish, horizontal to ascending 30-40 cm successively few flowered inflorescences arise from low on the ramicaul, with 2 to 3 bracts below the middle and a tubular floral bract.

Its common name is the Titan Masdevallia referring to the large flower, and the synonym is *Regalia titan* (Luer) Luer 2006

Photo source: <http://www.orchidspecies.com/mastitan.htm>



*Masdevallia towarensis* Rchb.f 1849 SUBGENUS *Polyantha* SECTION *Alaticaula* SUBSECTION *Alaticaula* [Krzl.] Luer 1986 is a cool to cold growing miniature sized epiphytic species endemic to Venezuela at 1,600-2,400m. Stout, erect ramicauls enveloped by 2-3 loose, tubular sheaths carry single, apical, erect, thickly coriaceous, glossy green, elliptical, subacute to obtuse leaves. Flowering in autumn and early winter, 2-4 flowers open simultaneously on each, stout, erect, congested 8-18 cm racemose inflorescence that arises from low on the ramicaul with a basal bract and white, tubular, imbricating floral bracts holding waxy, long-lived flowers well above the leaves. The inflorescences should be left on the plant after flowering as they may re-flower later in the year or the next year.



Photo source: <https://www.pinterest.com.au/pin/501025527267562287/>

The common name is the Tovar Masdevallia, named after a Venezuelan town. Synonyms are *Alaticaulia towarensis* (Rchb.f.) Luer 2006; *Masdevallia candida* Klotsch & Karst. 1854. This species is largely extinct in any locations close to Caracas as a result of the indiscriminate over-collection of flowering plants for sale in local markets.

*Masdevallia tuerckheimii* Ames 1908 can be found in Chiapas Mexico and Guatemala in damp forests as a mini-miniature to small sized, cool to hot growing, tufted, epiphyte at 400-1,500m. Erect, slender ramicauls basally enveloped by 2-3 close, thin tubular sheaths carry a single, apical, oblong-lanceolate, petiolate leaf. Flowering in summer through and autumn on a 7.5-13 cm long, slender, decumbent to erect inflorescence arising from low on the ramicaul carries a single flower that can often be followed by a second flower just above leaf height. This species was formerly cited as a synonym of *Masdevallia floribunda* but has now been separated and is recognised as a species according by Kew. Its common name is Tuerckheim's Masdevallia named for a German collector in the 1,800's. Synonyms are *Masdevallia floribunda* subsp. *tuerckheimii* (Ames) Luer 1988; *Masdevallia floribunda* var. *tuerckheimii* (Ames) O.Gruss & M.Wolff 2007



Photo source: <https://www.pinterest.com.au/pin/291397038370660123/>

*Masdevallia uniflora* Ruiz & Pavon 1798 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Masdevallia* is the type species for the genus and comes from central Peru and Ecuador as a small to medium sized, caespitose, cold growing terrestrial among rocks or epiphyte on scrub trees in cloud forests at 2,500-3,000m. Short, slender, erect ramicauls enveloped by 2-3, loose, tubular bracts carry single, apical, erect, coriaceous, elliptic, long petiolate, acute leaves. Flowering in winter, erect, 22cm wiry, single flowered inflorescences arise from low on the ramicaul with a bract below the middle and an acute, tubular floral bract with the campanulate (bell-shaped) flower held well above the leaves. The distinguishing characteristics of this species are the fuchsia-coloured flowers, the relatively short sepal tails, the prominent basal petal lobes and the elongate column foot. Its common name is the Single Flowered Masdevallia.



Photo source:

<https://www.ecuagenera.com/Masdevallia-uniflora/en>

*Masdevallia veitchiana* Rchb.f 1868 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Coccineae* Veitch 1889 is one of the most strikingly coloured members of the genus. It can be found as a small sized, cold growing terrestrial, sometimes lithophytic or rarely epiphytic species on steep rocky slopes covered with grasses and shrubs in full sun (but with the leaves protected by the grass) in the vicinity of Macchu Picchu, Peru at 2,000- 4,000m. Short ramicauls enveloped by of tubular bracts carry erect, linear-oblongate, tapered to the channelled petiolate base, acute, thick leaves. Flowering in spring and early summer, the erect 39-44cm single flowered inflorescence carries two distant, tubular bracts and a single inflated tubular, ovate floral bract. The long-lasting flowers are held well above the leaves.

Dale Borders notes: the unequal colour distribution apparent in *Masdevallia veitchiana* is due to the presence of minute purple hairs on the sepals which lend a prismatic visual aspect to the flower. Viewed head-on with the light behind you, the colour is symmetrical. Its common name is Veitch's Masdevallia named for the well-known 1800's English



nurseryman. In Peru, it is also known as Gallo-Gallo [means rooster and refers to the rooster-like red comb, crest and wattles of the flower] - The Incas call it Wajanki.

In situ photos source:

<https://www.inaturalist.org/taxa/429506-Masdevallia-veitchiana> and <https://www.inaturalist.org/observations/120665133>



*Masdevallia venus* Luer & Hirtz 2000 SUBGENUS Polyantha SECTION Alaticaules SUBSECTION Alaticaules [Krzl.] Luer is found in south-eastern Ecuador at 600m as a mini-miniature sized, hot growing epiphyte growing in deep shade with stout, erect ramicauls enveloped a loose basal tubular sheaths that have single, apical, erect, coriaceous, narrowly elliptic, subacute indistinct, petiolate base leaves. Flowering occurs in spring on a stout, erect 26 cm congested, racemose, successively single flowered inflorescence arising from the base of the ramicaul with basal tubular bracts and thin, imbricating floral bracts. The synonym is *Alaticaulia venus* (Luer & Hirtz) Luer 2006, and its common name is the Venus Masdevallia, named for the Goddess of Love and Beauty.



Photo source: <https://www.ecuagenera.com/Masdevallia-venus-dark/en>

*Masdevallia wagneriana* Linden ex Lindl. 1852-3 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Oscillantes* Luer 1986 is the type species for the Subsection and is a miniature sized, tufted, cool to warm growing epiphytic species endemic to Venezuela where it grows in coastal mountains at 1,100 – 1,800m. Slender erect ramicauls basally enveloped by tubular sheaths carry single, apical, elliptic, petiolate, suberect, coriaceous, glossy dark green leaves. Flowering in spring, summer and autumn occurs on suberect to spreading, slender 5 cm single flowered inflorescences arising from low on the ramicaul with a bract near the base and a tubular floral bract held amid the leaves. This was the first described *Masdevallia* species with a complicated but delicately balanced oscillating lip. Its common name is Wagner's *Masdevallia* named for a German plant collector in Venezuela in the mid-1800's.



Photo source: <http://www.orchidspecies.com/maswagneriana.htm>

*Masdevallia xanthina* Rchb.f 1880 SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Caudatae* Veitch 1889 is a mini-miniature sized, cool to cold growing epiphytic species that grows in damp woodland montane cloud forests in Antioquia and Caldas districts of Colombia, Ecuador and Peru on both sides of the Andes at 1,500 – 2,500m. Blackish, erect, slender ramicauls basally enveloped 2-3 loose tubular sheaths carry single, apical, oblong-ovate, suberect, shortly petiolate, tri-denticulate leaves cuneate below into the slender petiole. Flowering in winter occurs on an erect, slender, terete 8cm single flowered inflorescence arising from low on the ramicaul with a bract below the middle and a tubular floral bract that holds the flower above the leaves. Its common name is the Yellow *Masdevallia*, but it is a highly variable species as the photos demonstrate. Synonyms include *Masdevallia estradae* var. *xanthina* (Rchb.f.) A.H.Kent 1889; *Masdevallia pallida* (Woolward) Luer 1978; *Masdevallia xanthina* var. *pallida* Woolward 1896; *Masdevallia xanthina* subsp. *pallida* (Woolward) Luer 1988



Photo source:  
<https://www.flickr.com/photos/quimbaya/558494252>

Photo source: <http://www.orchidspecies.com/masapparito.htm>



In situ photo source:  
<https://www.orchidroots.com/detail/information/?pid=121978&role=>



Photo source:  
<https://www.orchidroots.com/detail/information/?pid=121978&role=>



*Masdevallia yungasensis* T.Hashim SUBGENUS *Masdevallia* SECTION *Masdevallia* SUBSECTION *Masdevallia* is a mini-miniature to miniature sized, Bolivian, cold growing epiphyte or terrestrial in cloud forests or wet montane forests at 2,150 – 3,000m. Erect, slender ramicauls basally enveloped by 2-3 loose, tubular sheaths carry single, apical, erect, coriaceous, long-petiolate, elliptical, subacute to obtuse leaves cuneate below into the petiole. Flowering takes place in winter on an erect, slender 4 - 6.5cm inflorescence arising from low on the ramicaul with a bract above the base and a tubular floral bract with the single, showy flower held at or just below the leaves. Its common name is the Yungas Masdevallia named after the Bolivian mountain range in which it was discovered. Synonyms are *Masdevallia calocodon* Luer & R. Escobar 1981; *Masdevallia yungasensis* subsp. *calocodon* (Luer & R.Vásquez) Luer 1988



Photos source:  
<https://orchidroots.org/detail/information/?pid=121992&role=>

