Student Homework: What Happened to Maxillaria *tenuifolia*?

Maxillaria *tenuifolia* Lindl. 1837

Maxillaria *tenuifolia*, the delicate-leafed Maxillaria or coconut pie orchid, is a species of [orchid](https://en.wikipedia.org/wiki/Orchid) ranging from [Mexico](https://en.wikipedia.org/wiki/Mexico) to [Nicaragua](https://en.wikipedia.org/wiki/Nicaragua) and possibly [Costa Rica](https://en.wikipedia.org/wiki/Costa_Rica). These plants are easy to grow if kept moist and given good air movement in a high-light windowsill of any orientation but North.[[2]](https://en.wikipedia.org/wiki/Maxillaria_tenuifolia#cite_note-2)

Of all the members of the genus Maxillaria are not as sought after in cultivation, *Maxillaria tenuifolia* is the most popular. It has rather small flowers, typically no more than one and a half inches, and they come only one to a spike. Its popularity is due to the flower's scent, which is just like that of coconuts. The flowers are colored in red with yellow or brown speckles. This plant is easy to grow and flower but does like a little cooler night temperature in winter.

**Light:**

Medium light as for between [*Cattleya*](https://en.wikipedia.org/wiki/Cattleya) and [*Phalaenopsis*](https://en.wikipedia.org/wiki/Phalaenopsis). From 1500 to 3500-foot candles are ideal. This plant will also grow well under fluorescent and high-pressure sodium fixtures.

**Temperature:**

Maxillaria *tenuifolia* grows well in intermediate temperatures, with winter nights from 55 to 62 degrees Fahrenheit and days of 58 to 75 degrees Fahrenheit. Summer temperatures can be several degrees warmer.

**Humidity:**

Maxillaria *tenuifolia* likes a relative humidity of 50 percent or higher. The use of humidity trays or room humidifiers to provide additional humidity in dry conditions is beneficial to these plants.

**Water:**

In its natural habitat, Maxillaria *tenuifolia* gets a lot of water during the rainy season, but starting in December there is a drier season that can last until May. For cultivation indoors, this means that the potting medium should be allowed to dry out between waterings from Late November until the end of March. Being careful not to allow the pseudobulbs to become too wrinkled is essential, the plant should not be kept *too* dry. the plants may only have to be watered every 2–3 weeks during the dry period. About mid-March one can begin watering normally allowing the potting medium to become somewhat dry between watering, but not as dry as in the winter months. It is best to use rain, distilled or reverse osmosis water for these plants.



Maxillaria tenuifolia h.f. aurea ‘Yamada’ AM/AOS, 83 points, 2017

Photography by G. Barfield



Maxillaria tenuifolia ‘Popper’ CCM/AOS, 83 points, 2015

Photography by Kuligowski

Maxillaria, abbreviated as Max in the [horticultural](https://en.wikipedia.org/wiki/Horticulture) trade, is a large [genus](https://en.wikipedia.org/wiki/Genus) of [orchids](https://en.wikipedia.org/wiki/Orchid) (family [Orchidaceae](https://en.wikipedia.org/wiki/Orchidaceae)). This is a diverse genus, with very different [morphological](https://en.wikipedia.org/wiki/Morphology_(biology)) forms. Their characteristics can vary widely. They are commonly called [spider orchids](https://en.wikipedia.org/wiki/Spider_orchid), flame orchids or [tiger orchids](https://en.wikipedia.org/wiki/Tiger_orchid). Their scientific name is derived from the [Latin](https://en.wikipedia.org/wiki/Latin_language) word *maxilla*, meaning [jawbone](https://en.wikipedia.org/wiki/Maxilla), reflecting on the [column](https://en.wikipedia.org/wiki/Column_(botany)) and the base of the [lip](https://en.wikipedia.org/wiki/Lip) of some species, that may evoke a protruding jaw.

Recent molecular studies have found *Maxillaria* as it has long been viewed to be an unnatural hodgepodge composed of groups not closely related to each other. Hence it has been proposed that the genus should be split into several genera, proposals that have been gaining acceptance, Kew World Checklist of Selected Plant Families. **Some of the species long considered members of Maxillaria have been moved to other genera:**[**Camaridium**](https://en.wikipedia.org/wiki/Camaridium)**,**[**Heterotaxis**](https://en.wikipedia.org/wiki/Heterotaxis)**,**[**Ornithidium**](https://en.wikipedia.org/wiki/Ornithidium)**,**[**Brasiliorchis**](https://en.wikipedia.org/wiki/Brasiliorchis)**,**[**Christensonella**](https://en.wikipedia.org/wiki/Christensonella)**,**[**Nitidibulbon**](https://en.wikipedia.org/w/index.php?title=Nitidibulbon&action=edit&redlink=1)**,**[**Sauvetrea**](https://en.wikipedia.org/wiki/Sauvetrea)**,**[**Inti**](https://en.wikipedia.org/wiki/Inti_(plant))**,**[**Mapinguari**](https://en.wikipedia.org/wiki/Mapinguari_(plant))**,**[**Maxillariella**](https://en.wikipedia.org/wiki/Maxillariella)**,**[**Rhetinantha**](https://en.wikipedia.org/wiki/Rhetinantha)**,**[**Mormolyca**](https://en.wikipedia.org/wiki/Mormolyca) **as noted in Generic realignments in Maxillarinae.**

Maxillaria species still included in the smaller version of the genus are distributed in the [rainforest](https://en.wikipedia.org/wiki/Rainforest) at sea level to elevations of 3,500 m, in [Latin America](https://en.wikipedia.org/wiki/Latin_America) from central [Mexico](https://en.wikipedia.org/wiki/Mexico) to [Bolivia](https://en.wikipedia.org/wiki/Bolivia), as well as in the [West Indies](https://en.wikipedia.org/wiki/West_Indies). This is an indication for the different temperature requirements, from warm growing to cold growing, within the genus.

They are mostly [epiphytes](https://en.wikipedia.org/wiki/Epiphyte), rather large in size, but some are [terrestrials](https://en.wikipedia.org/wiki/Terrestrial_plant) or even [lithophytes](https://en.wikipedia.org/wiki/Lithophyte), such as Maxillaria *rupestris*.

Many species are rather large with rampant growth.

**Characteristics**

Their [pseudobulbs](https://en.wikipedia.org/wiki/Pseudobulb) are round or oblong and each carry one or two [lanceolate](https://en.wikipedia.org/wiki/Glossary_of_leaf_morphology) [leaves](https://en.wikipedia.org/wiki/Leaf). Some grow close together in a clustered manner on a short [rhizome](https://en.wikipedia.org/wiki/Rhizome), while in other species the pseudobulbs keep some distance on an elongate rhizome. This rhizome is clothed in a somewhat transparent, silvery-gray [velamen](https://en.wikipedia.org/wiki/Velamen).

The [flowers](https://en.wikipedia.org/wiki/Flower) grow solitary on short stalks, called [scapes](https://en.wikipedia.org/wiki/Scape_(botany)), from the base of the pseudobulb. Most are small to very small, but some [species](https://en.wikipedia.org/wiki/Species) carry large, showy flowers. The flowers are never longer than the leaves. Their free [petals](https://en.wikipedia.org/wiki/Petal) and [sepals](https://en.wikipedia.org/wiki/Sepal) have a typically curved and adnate [labellum](https://en.wikipedia.org/wiki/Labellum_(botany)) with three inconspicuous lobes. Or the lip may have a distinct [callus](https://en.wikipedia.org/wiki/Callus) on the disc ( = central part of the lip from which the lobes radiate). The papillae (= small warts like glands) and the [trichomes](https://en.wikipedia.org/wiki/Trichome) of the lip show great diversity. The most common form for the papillae is the conical form with rounded or pointed tips.

**Cultivation**

*Maxillaria* is not one of the popular genera among growers. Only a few species grow big, showy flowers. But some species are nevertheless sought by collectors, mostly for the [fragrance](https://en.wikipedia.org/wiki/Fragrance) of their blossoms, such as [Maxillaria *tenuifolia*](https://en.wikipedia.org/wiki/Maxillaria_tenuifolia).

Native to:

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico Central, Mexico Gulf, Mexico Southeast, Mexico Southwest, Nicaragua



Distribution of Maxillaria *tenuifolia* by Kew

Two Synonyms

Homotypic Synonyms

[*Maxillariella tenuifolia* (Lindl.) M.A.Blanco & Carnevali](https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:60448259-2) in Lankesteriana 7: 530 (2007)

Heterotypic Synonyms

[*Maxillaria gracilifolia* Kraenzl.](https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:155064-2) in Mitt. Inst. Allg. Bot. Hamburg 6: 420 (1927)



Typical color form of Maxillaria *tenuifolia*

Photography by unknown

Flowers of Maxillaria tenuifolia are produced from the base of the pseudobulbs in the spring.

Like Brassavola nodosa, Maxillaria *tenuifolia* is one of those orchids that belongs in every collection. While small plants remain compact, they may also be grown into a specimen in a rather short period of time. The grass-like foliage makes an attractive houseplant even when not in flower. Being a widely distributed species, it is adaptable to a broad range of growing conditions. Also known as the "coconut orchid," this Maxillaria will perfume the home or greenhouse with its coconut-scented flowers and delight family and visitors.

The genus as we have accepted it in the past has undergone considerable transformation. A new classification system proposed by Mark Whitten PhD and Mario Blanco in the February 2011 issue of ORCHIDS should lend clarity to what was once a large and diverse genus. While the names change, the orchids stay the same for us to enjoy in our collections. If you are one who likes to be on the cutting edge of orchid taxonomy, you may change your nametags for this species to **Maxillariella tenuifolia** which is fortunately, not a major name change to remember. It is a pity that this group of orchids is not better known outside a dozen or so popular members. There are many fine species, both large and small, well worth growing and suited to all types of culture from cool to warm, shady to bright.



Maxillariella *tenuifolia* in situ

Photography by unknown

This species was discovered near Veracruz, Mexico by Karl Theodore Hartweg and described by Lindley in 1837 in the Botanical Register. It is primarily a low elevation species found from Mexico to Costa Rica at elevations up to 1500m (4921ft). The best temperature range for cultivation is warm to intermediate, providing temperatures no lower than 50 º F (10º C) day or night. The long rhizome makes for a somewhat straggly plant that wants to "climb" out of a pot, but a good-sized plant can be easily kept in a six-inch pot. It will eventually start to droop over the edge as it grows up but by that time, you should plan to repot it anyway as it will take a couple of years to reach that stage by which time the media will need replacing. Basket culture is an optimal solution to accommodate this growth habit and a slab of tree fern will work equally well, although not offer as tidy a presentation. Most elements of Max. *tenuifolia* culture are quite forgiving with the main consideration being the avoidance of stale or soggy media. We have grown it in all sorts of media including osmunda, fir bark, coconut husk fiber or chunks and of course, fir bark mixes. The paramount quality of the media is that it does not stay consistently wet so sphagnum may be the least suitable choice. Plants should not be watered again until dry, or just approaching dry. Fertilize along with your other orchids every week or two using a half strength solution of balanced fertilizer. Light tolerance is broad for this species and it can be grown in a bright greenhouse, or with "Phals" on a windowsill. Lower light will produce long whip-like foliage and a stragglier plant as it reaches for the light. Should your plant not flower, you will need to give it more light. Flowering season is March-April and flowers last for a week to ten days or longer if kept cool. Flower color is typically oxblood red with a spotted lip, but yellow color forms are known to exist. Plants propagate easily and are always readily available in the trade so there is no excuse to not have one in your collection.

**Bottom Line**

**Maxillaria *tenuifolia* has been transferred to the genus Maxillariella *tenuifolia.***

**References**

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