Garden Chatter, November 2017

Merced Garden Club, Inc.
http://californiagardenclubs.com/mercedgardenclub
facebook page: Merced Garden Club, Inc.

Message from our President:

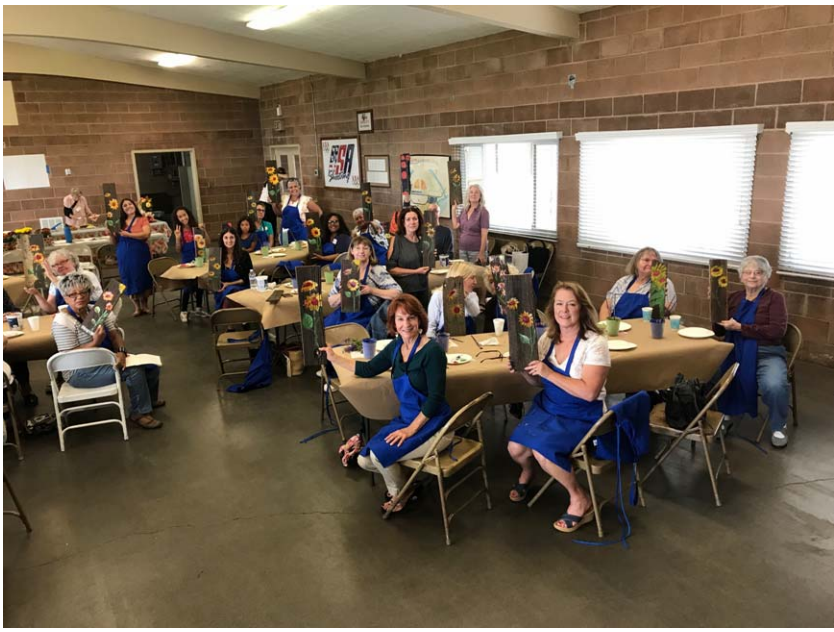
The time is **NOW** to plant spring flowers such as Snapdragons, stock, pansies-violas, calendulas etc. Their roots get a good start and in the spring flowers will explode. It is a good idea to mix in mychorize in planting hole, the product is expensive but it only takes 1/2 teaspoon. Product is available at nurseries but not likely at Lowes or Home Depot.

Make your December lunch reservation Nov.8 =$8 members, $10 guests. A Floral Design program will be presented by our own Joleen Mills and Kathy Moren. After program, for those able to stay there will be supplies for you to make your own design and take home.

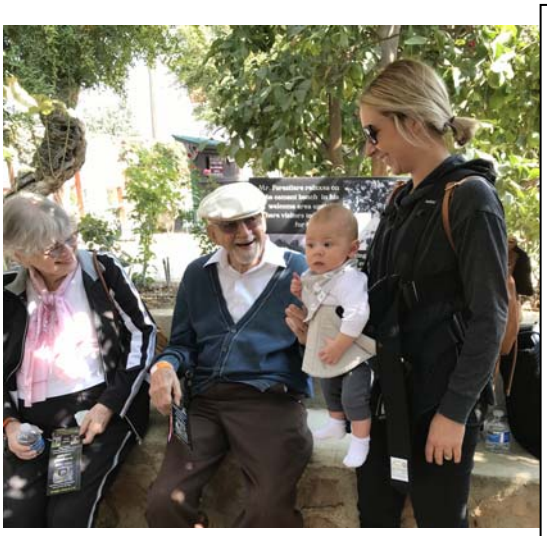
Yearbook additions & corrections:
New members:
Nancy Barner, ladydivanan@att.net
Kaaren Morgner kjmorg@aol.com
Eileen Ingraham eileenitg16@gmail.com

Corrections
Melissa Smith melissaes53@gmail.com
Mary Arellanez mcajhb@gmail.com
Martina Gallardo martiniolive12@gmail.com
Dona Robertson dona@att.net
Sheri Matsumoto sheri.matsumoto@gmail.com

At the Oct. 18, 2017 district meeting, Merced Garden Club was presented by Berni Hendricks, CGCI Awards Chairman: **A Blue Ribbon Certificate of Achievement and a First Award for 2016-2017 yearbook.** Merced Garden Club could use an award chairman to take over our award entries. If you are interested please let Joyce know.

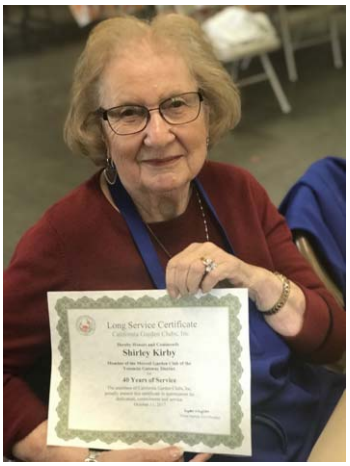


Pictures Sunflower painting class



Joyce

Oct. 12, 2017 field trip to Chaffee Fresno Zoo and Forestiere Underground Gardens was enjoyed by many members. Pick up your local free Merced County Times to read all about it.
times. 95 year young Ottto Reagan and 5 month old Abram Alkema joined Merced Garden Club on our field trip to Underground gardens.



Shirley Kirby received 40 year service award. Shirley has been president of Merced Garden Club three times.

Interested in doing a gardening blog? Ceres Garden Club adds a blog to their website. Check it out at https://ceresgardenclub.org/blog/. They have a lot of useful information in their newsletters. Let me (Helga) know if you want to use your creativity and knowledge of plants and gardening. We can add you to our website.

What to Plant in November

https://www.ufseeds.com/learning/what-to-plant-in-november/
Don't be sad, you can still grow a lot of different plants inside. This is a great time of the year to clone some of your outside plants or grow them from seed indoors. Grow herbs on the windowsill!

Herbs
Herbs are defiantly the most popular indoor plant to grow throughout the winter months. Try your hand at these 5 most popular herbs. Also check out the Urban Farmer Herb Kit
Suggested variety: Basil, Chives, Oregano, Parsley, Thyme

Indoor Plants
Growing flowers indoors can be a good way to pass the winter months. Try growing an indoor Amaryllis flower kit. These beautiful flowers will brighten up your house and give off a nice aroma.
Suggested variety: Seasonal Decorations

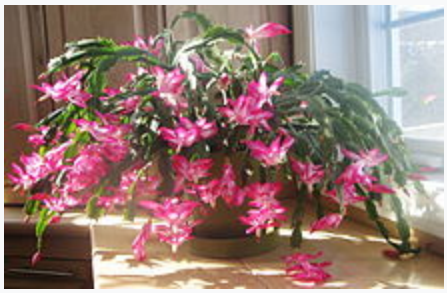
Sprouts
Growing sprouts indoors is fun, quick and a great way to spruce up salads and sandwiches. It doesn't take much effort but you still get the reward of growing your own food.
Suggested variety: Sprouts

Vegetables
If you live in some warmer climates it is a perfect time to plant vegetables. Try some of the cool weather vegetables that can survive now that the summer heat is over.
Suggested variety: Lettuce, Radish, Spinach, Broccoli, Carrots

Is there a Thanksgiving Plant?
Yes it is the Schlumbergera

https://en.wikipedia.org/wiki/Schlumbergera

Schlumbergera



Cultivar belonging to the *Schlumbergera* Truncata Group

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Core eudicots
Order:	Caryophyllales
Family:	Cactaceae
Subfamily:	Cactoideae
Tribe:	Rhipsalideae
Genus:	***Schlumbergera*** Lem.

Species

- *Schlumbergera kautskyi* (Horobin & McMillan) N.P.Taylor
- *Schlumbergera microsphaerica* (K.Schum.) Hoevel
- *Schlumbergera opuntioides* (Loefgr. & Dusén) D.R.Hunt
- *Schlumbergera orssichiana* Barthlott & McMillan
- *Schlumbergera russelliana* (Hook.) Britton & Rose
- *Schlumbergera truncata* (Haw.) Moran

Etymology

Botanist Charles Lemaire (1801-1871) gave the name *Schlumbergera* to this genus in 1858, honouring Frédéric Schlumberger (1823-1893), a French collector of cacti and other succulent plants.[1]

Description

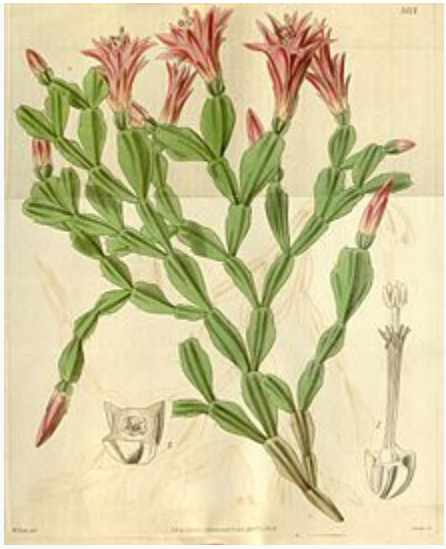
In the wild, the species of *Schlumbergera* grow either on trees (epiphytic) or on rocks (epilithic) and can form sizeable shrubs with woody bases; a height of up to 1.2 m (4 ft) has been reported for one species (*S. opuntioides*).[2] They are leafless, the green stems acting as photosynthetic organs. The stems are composed of segments, which take one of two forms. In most species the segments are strongly flattened (cladodes), being made up of a central core with two (or more rarely three) "wings". Special structures characteristic of cacti, called "areoles", then occur at the ends of the segments of the stem. In two species the stems are less flattened, more cylinder-shaped, and the areoles are arranged in a more or less spiral pattern all over the segments. In both cases, the areoles, which may have wool and bristles, are where the flower buds appear.[3]

Zygomorphic flower, probably of a cultivar in the *S.* Truncata Group, cut in half to show its internal structure

The flowers either hang downwards and are almost regular (radially symmetrical or actinomorphic) or, as in most species, are held more or less horizontally with the higher side of the flower different from the lower side (radially asymmetrical or zygomorphic). In those species whose flowers are held up, their angle with the horizontal is relatively constant and is characteristic of the species. Each flower has 20–30 tepals. The outer tepals – those closer to the base of the flower – are short and unconnected, and spread out or curve backwards. The inner tepals – those towards the tip of the flower – are longer and become progressively more fused together at the base to form a floral tube. In some species the difference between the outer and inner tepals creates the appearance of a "flower within a flower". The flowers produce nectar in a chamber at the base of the floral tube.[3]

The many stamens are arranged in two series, which is a distinctive characteristic of the genus. The inner stamens are fused at the base to form a short tubular structure. The outer stamens arise from along the floral tube. The style is usually dark red and has a stigma with 6–8 lobes; the style plus stigma is roughly the same length as the stamens. If the flower is fertilized, a fleshy fruit forms, either smooth or with ribs. The brown or black seeds are about 1 mm in diameter.[3]

Taxonomy[



Drawing of *S. russelliana*, the type species, from the Botanical Magazine, 1839

The genus is one of a small number belonging to a group of cacti classified as the tribe Rhipsalideae. Species of cacti belonging to this group are quite distinct in appearance and habit from most other cacti since they grow on trees or rocks as epiphytes or lithophytes. Although the species are easy to identify as members of the Rhipsalideae, for many years there was confusion as to how they should be divided into genera.[4] This confusion extended to *Schlumbergera*, whose complicated taxonomic history has been detailed by McMillan and Horobin.[1] The modern genus *Schlumbergera* was created by Charles Lemaire in 1858. The name commemorates Frédéric Schlumberger, who had a collection of cacti at his chateau near Rouen. Lemaire placed only one species in his new genus – a plant discovered in Brazil in 1837 which had been named *Epiphyllum russellianum* by William J. Hooker. Lemaire renamed it *Schlumbergera epiphylloides* (under the current rules of botanical nomenclature it should have been called *Schlumbergera russelliana*, which is its current name).[1]

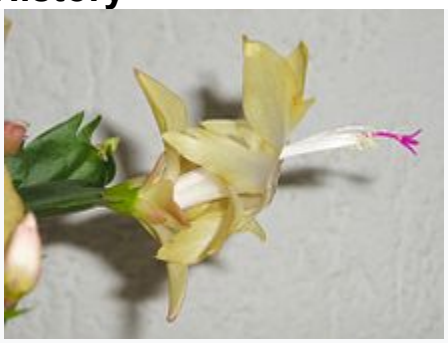
Lemaire noted the similarity of his *Schlumbergera epiphylloides* to a species first described as *Epiphyllum truncatum* by Adrian Hardy Haworth in 1819, but did not accept that the two species should be included in the same genus. In 1890, Karl Moritz Schumann created the new genus *Zygocactus*,[5] transferring *Epiphyllum truncatum* to *Zygocactus truncatus*. Although he later placed it back in *Epiphyllum*, abandoning *Zygocactus*, the generic name *Zygocactus* continued to be widely used.[1]

In 1913, Nathaniel Britton and Joseph Rose followed Lemaire in keeping *Schlumbergera russelliana* and *Zygocactus truncatus* in separate genera. (They also transferred the Easter cactus – now *Hatiora gaertneri* – to *Schlumbergera* as *S. gaertneri*, initiating a lasting confusion between these two genera.)[1]

In 1953, Reid Venable Moran placed both *Schlumbergera russelliana* and *Zygocactus truncatus* in the genus *Schlumbergera*. Other species were added later by David Hunt, including those formerly placed in *Epiphyllanthus*, to form the modern total of six full species and a number of hybrids.[1]

Cultivation

History



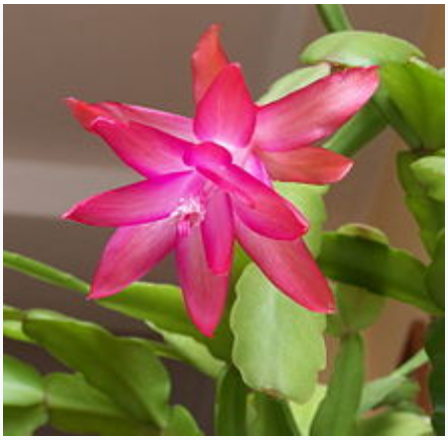
S. Truncata Group 'Gold Charm'; note the very pointed teeth at the end of the segments, zygomorphic flowers held above the horizontal, and yellow pollen.

Schlumbergera truncata was in cultivation in Europe by 1818, and *S. russelliana* was introduced in 1839. The two species were deliberately crossed in England by W. Buckley resulting in the hybrid now called *S.* × *buckleyi*, first recorded in 1852. By the 1860s, a substantial number of cultivars (cultivated varieties) were available in a range of colours and habits, and were used as ornamental plants in "stoves" (heated greenhouses) and in houses, where they were popular for their autumn and winter flowering. Many cultivars were selected seedlings of *S. truncata*, but at least three *S.* × *buckleyi* hybrids were available, of which one, now called *S.* 'Buckleyi', is thought to be the original Christmas cactus. By the early part of the 20th century, the genus had become less popular, and many of the early cultivars were lost.[20]

From around the 1950s onwards, breeding resumed in Europe, North America, Australia and New Zealand. New plants were produced by crossing among the species and existing cultivars of *S. truncata*, *S. russelliana* and the hybrid *S.* × *buckleyi*. Treatments which induced mutations were also used. The result was a wide range of flower colours which had not been available before, including the first true yellow to be sold commercially, *S.* 'Gold Charm' (which was a sterile triploid). Breeders aimed for plants which grew strongly, were upright at the point of sale rather than pendulous, had many flowers or buds, and were adapted to living as house plants.[20]

In the 1980s the species *S. orssichiana* was also used in crosses. The hybrid of *S. truncata* and *S. orssichiana* has been named *S.* × *reginae* or *S.*Reginae Group; one of the first cultivars was *S.* 'Bristol Queen'. *S. opuntioides* crosses have also been made, but have not resulted in commercially available cultivars.[20]

Modern cultivars



Member of the *S.* Buckleyi Group, viewed from below; rounded rather than pointed edges of the segments, pendant more or less regular flowers and pink pollen.

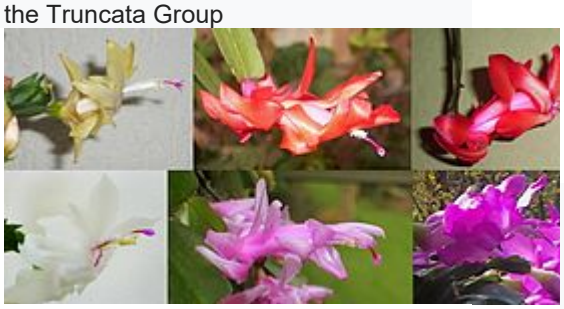
McMillan and Horobin have listed hundreds of modern European, North American and Australian cultivars, which they put into a number of cultivar groups:[21]

- The **Truncata Group** contains all cultivars with mainly *S. truncata* characteristics: stem segments with pointed teeth (dentate); zygomorphic flowers held more or less horizontally, usually above the horizontal; and pollen which is yellow.
- The **Buckleyi Group** contains all cultivars with at least some features clearly showing inheritance from *S. russelliana*: stem segments with rounded, more symmetrical teeth (crenate); more regular flowers which hang down, below the horizontal; and pollen which is pink. There is considerable variation within this Group; McMillan and Horobin introduced subcategories: "TB" for those more like *S. truncata* and "BT" for those more like the classic *S.* × *buckleyi*, with "B" reserved for the first generation (F1) *S.* × *buckleyi* hybrids.
- The **Reginae Group** contains cultivars known to be derived from hybrids with *S. orssichiana*.
- The **Exotica Group** is used for the small number of hybrids involving *S. opuntioides*.

Attempts have also been made to classify cultivars by colour. A difficulty is that the flowers of many cultivars exhibit different colours depending on the temperature during bud formation and growth. In particular, temperatures below 14 °C (57 °F) produce pink tones in otherwise white and yellow cultivars, and deepen the colour in pink and red cultivars. The availability of iron to the plant has also been suggested to affect flower colour.[21]

In the United States, cultivars are propagated in large numbers for sale before Thanksgiving Day (the fourth Thursday in November). In Europe, plants are mainly sold later in the year, in the period before Christmas. A single Dutch grower (de Vries of Aalsmeer, the Netherlands) was reported in 1989 as producing 2,000,000 plants per year.[21]

Variation in stem shapes in *Schlumbergera* cultivars: top – typical of the Buckleyi Group; bottom – typical of the Truncata Group



Variation in flower colour in modern Truncata Group cultivars; there are also bi-coloured flowers

S. Reginae Group 'Bristol Queen'

Common names

Plants are offered for sale under a variety of common names. The earliest English common name was "Christmas cactus". In Europe, where plants are largely produced for sale in the period before Christmas, this remains the most widely used common name in many languages for cultivars of all groups (e.g. *Weihnachtskaktus* in German,[22] *cactus de Noël* in French,[23] and *cacto de Navidad* in Spanish[24]). This is also the name used in Canada.[25] In the United States, where plants are produced for the Thanksgiving holiday in November, the name "Thanksgiving cactus" is used; "Christmas cactus" may then be restricted to cultivars of the Buckleyi Group,[26] particularly the very old cultivars such as 'Buckleyi'.[25] The name "crab cactus" (referring to the clawed ends of the stems) is also used for the Truncata Group.[27] "link cactus" is another common name, describing the way that the stems of the genus as a whole are made up of linked segments.[25] The name "chain cactus" is common in New Zealand, and may also refer to *Hatiora* species.[28]

The Easter cactus or Whitsun cactus is now placed in the genus *Hatiora*, but was at one time included in *Schlumbergera* (or one of its synonyms). The name "holiday cactus" has been used to include both *Schlumbergera* and *Hatiora* culti vars.[25]

Care of cultivars

Young plant of a member of the *S.*Truncata Group; still upright and therefore more convenient for selling

When grown as house plants, *Schlumbergera* cultivars are said to be relatively easy to care for. McMillan and Horobin describe in detail their cultivation in both commercial and domestic conditions. Their specific recommendations include:[29]

- *Growing medium* - Free-draining, humus-rich, somewhat acid growing media are used for commercial production, such as a mixture of peat or leafmould and an inert material such as grit, sharp sand or polystyrene beads. It is recommended that plants should be grown in relatively small pots; half-height pots are suitable.
- *Watering* - They are more tolerant of drought than many house plants, but can be damaged by both under- and over-watering. Keeping the growing medium just moist throughout the year avoids either extreme.
- *Light* - They can be damaged by exposure to more than small amounts of sunlight. Members of the Buckleyi Group, such as the old-fashioned Christmas cactus with pendant flowers, are more tolerant of high light levels than members of the Truncata Group, such as most of the modern cultivars. Too much light causes stems to take on a reddish colouration; however, very low light levels will prevent flowering. Day length is important in controlling flowering; continuous darkness for at least 12 hours is necessary to induce bud formation. A period of about 8 days with 16 hours of darkness at 16 °C (61 °F) has been shown to cause flower buds to form. Lower temperatures slow this process. The advice sometimes given to withhold water to produce flower buds has been shown to be incorrect.
- *Propagation* - Both commercially and in the home, propagation can be achieved by using short pieces of stem, one to three segments long, twisted off rather than cut. Cuttings are allowed to dry for 1–7 days, forming a callus at the broken end, and then rooted in an open growing medium. Temperatures above 21 °C (70 °F) and up to 27 °C (81 °F) in long day/short night conditions speed rooting.

Schlumbergera new growth. The upper view shows bright red new cladodes forming, the centre shows maturing growth, the lower view shows two aerial roots extending down

Pests and diseases

In cultivation, these plants have been described as "remarkably free from pests and diseases". Two significant insect pests are aphids on young shoots, buds and flowers, and root mealybugs which attack below soil level. Stems and roots can be rotted by diseases caused by fungi and similar organisms; these include infections by species of *Fusarium* (a fungus), and *Phytophthora* and *Pythium* (both water moulds). Approved chemical treatments can be used in the case of insect attack or these diseases.[30]

Aphids, mealybugs and other invertebrate pests can spread viruses. Symptoms vary with the species, but a loss of vigour is usual. Cactus virus X has been isolated from *S. truncata*. There is no treatment for virus diseases; it is recommended that infected plants be destroyed.[30]

Garden Quotes:

With rake and seeds and sower,
And hoe and line and reel,
When the meadows shrill with "peeping"
And the old world wakes from sleeping,
Who wouldn't be a grower
That has any heart to feel?
~Frederick Frye Rockwell, "Invitation," *Around the Year in the Garden*, 1913

We think that diamonds are very important, gold is very important, all these minerals are very important. We call them precious minerals, but they are all forms of the soil. But that part of this mineral that is on top, like it is the skin of the earth, that is the most precious of the commons. ~Wangari Maathai (1940–2011), *Dirt! The Movie*, 2009

In the garden I tend to drop my thoughts here and there. To the flowers I whisper the secrets I keep and the hopes I breathe. I know they are there to eavesdrop for the angels.
~Dodinsky, www.dodinsky.com

If you have a garden and a library, you have everything you need. ~Cicero