

Clivia

## Amaryllidaceae

Clivia (pronounced kly-via) is one of the more primitive genera of the family Amaryllidaceae. Large evergreen perennials with leathery, strap-shaped pointed leaves about 2~2-1/2 ft. (60~85cm) long and 2" (5cm) wide when mature and found in low-lying woodland in South Africa. The plant is named after Lady Florentina Clive, the granddaughter of Baron Robert Clive who founded the British Empire in India. Clivias have neither bulbs nor rhizomes, but possess an abundance of thick rope-like roots. Clivias have predominantly orange, red or salmon coloured flowers. The most well-known species is Clivia miniata. Clivias are fairly easy to grow and when mature will flower. It produces clusters of 10 to 20, orange flowers on a stout stalk just above the tops of the leaves in the spring and summer. One of the rarer flower is the aureum (yellow) variety as shown above. The other rare form is the red variety also shown above.



Chinese Clivia on 3-1/2" pot



typical blooming size Clivia miniata v. aureum on 9" pot

About 50 or more years ago, the Chinese (Northern Part of China) started a breeding program on perfecting the looks and shape of the Clivia miniata and came up with a dwarf plant that do not resemble your typical South African Clivia miniata. The Chinese Clivias are noted for its short bright broad rigid thick rounded tip leaves shaped like a fan. To resolve any inconsistencies in judging a Chinese clivias, the China Association of Clivia in 1999 formulated a standard or guidelines in appraising or judging the quality of a Chinese Clivia. Value Points are awarded on the basis of characteristics of the leaves such as brightness (10 pts), fineness (10 pts), rigidity (10 pts), thickness (10 pts), vein (10 pts), color (10 pts), length and width ratio (10 pts), stalk shape (10 pts), seat shape (10 pts) and Head shape, flower, fruit and others (10pts) for a total score of 100.



Best form Chinese Clivia



Variegated Chinese Clivia Seedlings

A pamphlet on the Standard in Appraising or Judging the Chinese Clivia is available. The pamphlet consists of 64 pages written in Mandarin with English translation and 62 colour photos. By acquiring this pamphlet, you'd be able to determine whether the Clivia you have is a dud or a gem. The pamphlet will only be available free of charge (1 per customer) while quantities last to those who order a minimum of \$100 worth of clivias variegata.

#### **Cultivation:**

Clivias like to be in bright light with early-morning or late afternoon sun but shaded in between. They grow most actively from early spring through fall. During these months a night temperature above 50 degrees F and a daytime temperature of 70 degrees F or warmer

is best. Feed every month and water regularly allowing the potting mix to dry out slightly between deep watering. During late fall (November & December) give them a short rest by withholding fertilizer and watering only enough to keep the leaves from wilting. Try to keep the temperature in the middle forties.

Use a well-drained soil-less mix and put in a pot one size smaller. Clivia likes to be pot bound and do not like to have their roots disturbed. Since clivias are top heavy, use a clay azalea pot.

### Clivia miniata seed sowing instructions:

- 1. Prepare a mix of 50% seedling soil and 50% good rotted garden compost.
- 2. Fill a seed tray half full of the mix and drench with water.
- 3. Place the seeds on top of the mix and firm down with the palm of your hand. Leave the upper surface of the seed showing.
- 4. Place the tray in a warm spot that receives good light but not direct sunlight.
- 5. Water once a week or when the soil mix looks dry with a liquid organic plant food.
- 6. Germination should take between 4~8 weeks with the root tip emerging first. It will find its own way beneath the soil surface. The first leaf follows a few weeks later. It is important not to move the seedling at this stage as the root is very tender and can break at the point where it emerges from the seed.
- 7. Re-pot into a 15-cm pot about 8 months after sowing when the leaves are about 15 cm long. Use the same soil mix as for the seeds. Feed regularly as Clivias are hungry plants. Keep plants away from bright light as they like lots of shade.

#### **Propagation:**

Preferred method of propagation is by division, or offsets in the late spring or early summer, after the plants have flowered. Clivias have thick roots that can become tangled, so when they are removed from the pots, the roots attached to the different offsets must be separated carefully. The seeds take almost a year to ripen, gradually changing from green to dark red or yellow depending on the color of the flower. As soon as they are ripe, they are sown singly, in small pots filled with equal parts fibrous loam and coarse grit, with a little leaf mould added.

#### Pests & Diseases:

Mealy bugs and scale insects may be problems.

Clivias especially the yellow ones tend to be expensive. At one time they were selling for \$1600. A mail order magazine recently was selling it for \$995 blooming size plants. By the same token, Chinese clivias especially the best ones tend to be expensive. About \$25,000 to \$100,000

### Frequently Asked Questions (FAQ)

Q. A good friend of mine gave me a blooming size or mature Clivia miniata and I have not had luck in flowering it. The plant is extremely healthy, and I keep it in my living room thru-out the year with an average temperature of 60 in winter and 80 in summer. What can I do initiate the plant to flower?

A. Clivias in its natural setting are exposed to temperature ranging from almost freezing to 90 degrees and therefore in the low temperature they have to undergo dormancy and 'wake up' when the temperature is conducive to growing like in the spring and summer. Since your plant is exposed to temperature conducive for growing, it never undergoes the dormancy requirement. As the saying goes, a happy plant is a contented plant and therefore has no incentive to further propagate its genepool. Propagation is affected by producing the flower then through pollination produce the seeds and distribution to repeat the growing cycle. In the fall, expose your plant to low temperature in the 35 to 40 deg F such as storing it in an unheated garage and withhold watering for about a month and a half to two months to induce the plant to go into dormancy. After dormancy you can put the plant back where it should be and resume your normal watering regimen. That effort should reward you with flowers.

Q. Books, literature, etc states that clivias have fan shape leaves. Why is it that my Clivia leaves grows in all different directions and does not have that fan shape look?

A. Whenever plants are exposed to sun in like in the morning or in the afternoon, the leaves, stems, flowers etc also tries to follow the direction of the sun. Since the plant is stationary, anything in front gets lighter while the back end may not receive any light. The effect on the plant is growth of the leaves may favour in one direction thus losing its shape. This usually happens to window growers or plants grown on window sills. To counteract this effect, rotate the plant 180 degrees every 3-5 days. The intent is to have the plant a uniform exposure to the sun in all direction. Plants grown in a greenhouse or sunroom usually don't have this problem.

Q. How often should I water my Clivia? I keep on losing them due to root rot.

A. Water your plant heavily then let it dry out. Clivias roots are not designed to be immersed in wet soil for a long time. When the plant is already saturated and cannot absorb any additional water, the fleshly roots already laden w/ water burst and starts to rot. Another problem is fungus gnats. In its larval stage, the larva tends to gnaw on the roots and when the root becomes infected it rots.

Q. How do I resuscitate my Clivia that lost its roots?

A. Remove any rotted root until you see healthy tissue, apply fungicide to the affected area, let it dry out, then apply rooting solution or powder where the roots are supposed to come out. Wet a handful of sphagnum moss, then squeeze it hard until it no more water comes out then wrap sphagnum moss at the base (where roots are supposed to come out). Put the plant in a super high humidity environment like a zip lock bag, plastic bag or terrarium. Check periodically for sign of rooting. Once the plant is starting to root, repot the plant making sure that the small roots are not broken in the process of transplanting.

Q. How do I know if the seed pod in my Clivia is ripe for picking?

A. All Clivia miniata bear green fruit or seed pod. After about a year, these green seed pods will turn into red for Clivia miniata and yellow for Clivia miniata v. aureum (yellow). That's the time to harvest them. Depending on the size of the seed pod, it may contain 1 to 8 seeds.

# Q. Why are the flower stalk short on my mature Clivia?

A. Mature plants should be exposed to a dormancy period (cool temperature-34 to 50 degrees F night and day and withholding water) for 4 weeks or if the day temperature warms up to 6 to 8 weeks. Shorter than that or no dormancy exposure at all and you run the risk of having a short stalk or no flower respectively. If your Clivia has undergone the required dormancy requirement, perhaps you may have insufficient potassium in the fertilizer regimen. Just to be on the safe side, use a balanced fertilizer.

### References:

- Margaret Hagen, Extension Educator, Agricultural Resources, UNH Cooperative Extension.
- International Bulb Society (IBS)
- Standard of the Appreciation and Appraisal of Chinas Kafir Lily, Authored by Chai
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