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# Propagation of Ligthops: The Flabbergast of Creation

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#### An Exordium:

Our earth is an exemplary asylum of many peculiar living creatures. Hitherto, it has been the abode of astonishing flora and fauna. In the present era, people like to nurture many distinctive, attractive and extraordinary plants to develop aesthetic and ornamental value, it may be out of their curiosity, but it's a healthy news for our nature. In this context, a mention worthy plant is "Lithop" popularly known as "Living Stone". Many a people encounter about these little wonders. They are also known as "Pebble Plants" sometimes.



# An Apologia Behind It's Codification:

These plants grow up on stony rocky grounds and look like a heteroclitically shaped pebble *et*. *quoque* they are also proved to be plants, hence known as stone plants/ pebble plants. They seem capable of fooling man and animals. Sometimes



they are also mentioned as "Finger Magnets" as children have an enthusiastic urge to touch them. Their leaves are truncated as pebbles like structure, hence called pebble plants.

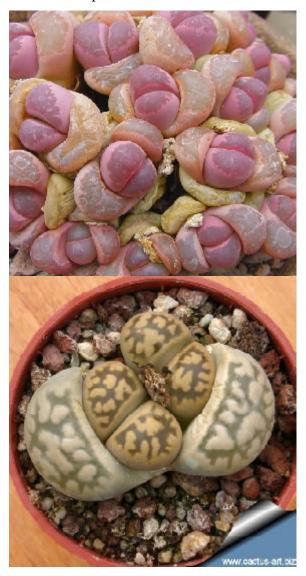
#### **Systematics:**

Kingdom-Plantae Phylum-Angiosperms Order-Carryophyllales Odisha Review———November - 2012

Family-Aizoaceae Genus-Lithop

# **Adaptation Of These Little Wonders:**

Lithops, it's very name indicates that it must be eligible to grow on rocks and stony surface. Lithop word is derived from two Greek



words (Lithops-Stone and Ops-face). Body of Lithops have a pair of leaves capable of storing every bit of moisture available to plant. They generally grow in moisture stress condition. In order to reduce evaporation loss and conserve moisture for metabolic activities, it's leaves are abbreviated just like pebbles. They are master of mimicry, which are seen like stones, hence easily escape from grazing animals also. Their colour and shape give them fabulous chance to survive.

#### **Distribution Round The Globe:**

Primarily they are natives of Southern African region. They are commonly seen in South Africa, Namibia, Botswana and Angola. Now due to commercialization, they are grown round the globe. They are also seen in dry grasslands-Veld. Living stones are capable of growing in area of annual rainfall of 700 mm to Zero.

## **Descriptions of Lithops:**

Lithops are a type of succulent plants. They contain one or more pair of fused leaves opposite to each other. Generally they lack stem.



FLOWERING IN A LITHOP PLANT

Many of them produce flowers during Autumn and early Winter. Colour of flower is yellow/white in appearance. Flowers open in afternoons of sunny days. After flowering in the fall and

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extending through winter, new bodies come out within former ones. Old leaves become flaccid and shrivelled. Gradually old leaves dry up and new ones come up. Meristem between leaves produce flowers and new leaves. Leaves have a partial or complete translucent top surface for allowing light to enter into interior of leaves for photosynthesis. The underlying storage tissue is transparent to allow light to penetrate into inner chlorenchyma. Tops of leaves have light coloured speckles. These cold sensitive plants grow best in a cactus growing medium that has been mixed with organic matter.

# **Cultivation/Propagation Practices:**

These Xerophytes are relatively easier to grow, but somewhat fastidious with soil, temperature, time and quantity of watering. They grow well in shallow containers in a controlled environment. Special care is to be taken to allow them to adjust themselves to changing light levels. Stone gravels of 1-4 mm size and of p<sup>H</sup> less than

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7 are best suitable for it. Pet/pot ground is avoided as they harbour insect pest etc.

All very fine particles are avoided to make sure that seeding roots can grow into soil directly



instead of creeping over soil. They prefer a soil mixture of Sandy Gravel (2 part sand, 1 part clay loam and 1 part gravel). Bone meal and Dolomite lime can be applied. They need very little feeding i.e. liquid fertilizer (Wuxal Super, N:P:K in 8:8:8 proportion) two to three times a year during growth. They should be watered at proper time. No chemicals are required.



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# **Planting Materials:**

Lithops can be grown by seeds/cuttings. Seed is more popular. Each plant is self fertile, so pollen from two or more plants used to produce seed. Germination of stone plant seed is easy. Seeds are sown in warmer summer when it will germinate quickly. Seeds are tiny for a long time, so it's better if they grow rapidly. They generally prefer warm days and very cool nights.

#### **Pest Control:**

They are generally not attacked by pests. but if so happens Imidachlorpid one treatment per year is enough for controlling it. No other chemicals are used.

# **Repotting:**

In every two years or, so Lithops need to be repotted. It is good to this, so that soil can be renewed. Best time to do it is just after repotting, they should be given protection from sun for two weeks. They will be able to absorb water quickly and establish themselves.

# **Improved Cultivars:**

There are hundreds of cultivars available for growing . Some emerging and popular ones are as follows:

- L. aucampinae
- L. bromfieldii
- L. dinteri
- L. fulviceps
- L. gesinae
- L. geyeri
- L. helmutii

#### L. lesliei

#### L. pseudutroncatella



(SOME GOOD CULTIVARS)

# **Importance Of Lithops In The Present Day Context:**

Human has been always a lover of scenic beauty. Nature loving human needs a blend of present scientific items along with panoramic touch of creation. Nature's beauty is the best healing matter. Now ornamental plants have gained a good taste of people everywhere. They are tiny, less space consuming, need negligible special care. Hence, they are easy to propagate and manage homes and offices. They also multiply aesthetic value of our surroundings.

Lithops are small and charming creatures. They need less water and soil. They grow on stones and can be kept in pots/vessels. These are kept near window side, terraces or in hanging baskets. They need no more fertilizer or insecticides. They are viable for long time and sustain water stress conditions. In market they also fetch good price. So a grower or a nursery man can grow them for commercial purpose.

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# **Summary:**

The short stature, succulent plants known as stone plants are plants growing on rocky surfaces and have a pebble like appearance. Their leaves are converted to pebble - like to reduce transpiration. They can be grown from cuttings/ seeds. They require hot days and very cool nights. They need no special shape and colour to give them a chance to survive from claws of predators. Water need is less. For commercial purpose they can also be grown, so though propagation of Lithops is a new concept for growers and plant lovers, but it is gaining importance day by day.

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