

Plumeria Plant Biology, Cultivation Technology And Pest Control Measures

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Annotation: Plumeria (lat. Plumeria) is a highly decorative flowering plant belonging to the family Apocynaceae . These tropical trees or shrubs got their name in honor of the famous botanist and explorer from France Charles Plumier. Heat-loving frangipani can be grown at home, the culture is characterized by rapid growth rates (about 40 centimeters per year). For this reason, the plant requires regular pruning, otherwise, in an uncontrolled state, plumeria will grow up to 2 meters in height and even higher.

Key words: Pulimeria, biology, morphology, agrotechnics, reproduction methods, seeds, diseases, countermeasures.

Plumeria (lat. Plumeria) is a highly decorative flowering plant belonging to the family Apocynaceae . These tropical trees or shrubs got their name in honor of the famous botanist and explorer from France Charles Plumier . Heat-loving frangipani can be grown at home, the culture is characterized by rapid growth rates (about 40 centimeters per year). For this reason, the plant requires regular pruning, otherwise, in an uncontrolled state, plumeria will grow up to 2 meters in height and even higher. The leaf blades of the culture are dark, dense, sometimes they can give off a purple, brown or silvery tint. The shape of the leaves is round or elongated, the surface is smooth or wavy. The central vein is clearly visible and divides the leaf into 2 parts with parallel convex "veins". The fleshy leaves and shoots of the bush contain juice, which provokes redness and itching of the skin. That is why it is necessary to trim and replant the plant with protective gloves. Also, do not bring the flower pot into a room where small children play or there are pets. It is worth noting that almost all Kutrovyie are toxic plants. Plumeria buds are large (5-10 centimeters in diameter), growing in dense inflorescences of 17-20 pieces. The smell of flowers resembles gardenia, lemon and oriental spices in one bottle. This extract is in great demand among cosmetologists and perfumers. The aroma becomes especially intense at sunset. This is due to the fact that in the natural habitat, frangipani is pollinated by night moths. Domestic plumerias begin to bloom from the beginning to the second half of July, and fade by the end of October. But in the wild, buds decorate the bush all year round. Frangipani is of North American origin, but most often this spectacular plant is found on the islands of the Caribbean, in Southeast Asia and in India. Plumeria , like all types of clivia, is not only extremely beautiful, it is also beneficial, purifying the air in the house from harmful suspended particles. And the inhabitants of Thailand believe that the bush has magical powers. The peoples of that region often conduct rituals and ceremonies using frangipani . It is generally accepted that the culture can grant eternal life, luck and fortune. Growing frangipani indoors is a very troublesome task. First, we note that it is quite difficult to find seeds or seedlings of plants on the open market. Secondly, large specimens should only be kept in large rooms. However, this is not an obstacle for true fans of home gardening. Returning from foreign trips, tourists take cuttings or pods with plumeria seeds with them. The following types of frangipani are suitable for home cultivation .



plumeria (Plumeria alba). In the wild, it grows on the Lesser Antilles in the Caribbean Sea. These shrubs grow up to 10 meters in height. The leaf blades are large, elongated (up to 30 centimeters in length, up to 7 centimeters in width), their back side is covered with dense white fluff, the edges of the leaf are slightly raised. The buds have an alluring aroma, they are not particularly large in size (up to 2.5 centimeters in diameter), painted white with a yellow center.

Plumeria (Plumeria rubra). Red plumeria grows mainly in Mexico and in the northern part of South America. It can grow up to 5 meters. The leaf blades are oval, 15 centimeters wide and almost 50 centimeters long. The back of the leaves is often covered with fluff, sometimes there are species with sharp ends of the leaves. The buds grow in racemose inflorescences, each 5 centimeters in diameter. The petals are painted in snow-white, soft pink, yellow, red or purple colors.

Plumeria obtuse (Plumeria Obtusa). In the wild, it is a medium-sized evergreen shrub. It reaches 3-5 meters in height. There are also individual varieties that are only 1.5 meters high. In home gardening, plumeria obtusa grows compact, only up to 40 centimeters in height. The leaf blades are dark green, terry . The reverse side is covered with fine fluff of a grayish-swamp shade. The leaves do not exceed 20 centimeters in length. Each bud blooms on a long flower stalk. The edges of the petals are slightly bent, almost half of the petal surface is painted in a rich yellow shade. The aroma of the flowers is somewhat reminiscent of jasmine.

Reproduction of plumeria . At home, frangipani , which was grown from seeds or shoots, can bloom only a couple of times per season, while its relatives in the tropics bloom continuously. Nevertheless, even in this short time, plumeria will have time to please you with its beauty.

Growing from seeds. Growing plumeria from seeds is not an easy task. Everything is complicated by the fact that they may not sprout at all or not inherit the characteristics of the mother bush. The seeds ripen in pods, when this happens, they must be removed and prepared for planting. To begin, take two pieces of fabric, dip them in warm water with the addition of a growth stimulator and place the seed material between them. Next, you will need peat tablets. The seeds are immersed in them so that $\frac{1}{4}$ of them remain on the surface. Then the plantings need to be covered with polyethylene or glass, periodically watered and ventilated. For storage, leave the seedlings in a warm room at a temperature of at least 22-23 degrees. After about one and a half to three weeks, rooting will occur. On the sprouted shoots, you will notice cotyledons. Do not forget to clean off the film from them (the tightness created by it leads to rot). When the sprout gains strength, transplant it into a larger container. Plumeria grown from seeds will bloom only after 2.5 g.

1. Plumeria seeds are a product of the generative method of reproduction that develops after the flowers of the plant, and are collected after they have matured. Before collecting the seeds, the seeds are ripened by thoroughly drying the seed coat.
 2. Seed preparation: to ensure that the seedling grows well, the seeds are treated with water before planting .
 3. Planting seeds: Plant the seeds in a shallow pot with well-drained soil, place them in a shallow hole and cover with soil on top .
 4. Watering and light: Moisten the soil slightly and place the container with seeds in a sunny place. Do not overwater the soil .
- Germination time: Seeds usually germinate in 2-4 weeks. Once the seedlings have formed more than 1 or 2 leaves, they are transplanted individually into separate pots.

Methods of propagation of plumeria by cuttings ;

1. The best time to take plumeria cuttings is spring or early summer .
2. To obtain a cutting, select mechanically undamaged and healthy stems. Cut cuttings 30 cm long.
3. Cuttings are cut with garden shears or a clean knife under the leaf nodes of the branch at an angle of 45⁰ C.
4. The base of the plumeria plant , cut with a feather, is carefully dried for 1-2 weeks in a cool, ventilated place, which prevents the branch from rotting and helps it harden .
5. A part with a diameter of 5-7 cm is pressed into a clean pot with well-drained soil and covered with earth.
6. Before planting, the cuttings are soaked in water, after planting the soil is thoroughly dried, then watered (plumeria cuttings rot from excess water)
7. The pot planted in the pen is placed in a place with good sunlight (at least 6 hours of sunlight per day for good rooting)
8. After 4-6 weeks, the cuttings will begin to develop roots. To check this process, the cuttings are carefully pulled out of the soil and checked .

Agricultural technology :

1. The cuttings take root well and are transplanted to the designated place.
2. Plumeria seedlings bloom after several years, the flowering period lasts for several months .



Rust is another ongoing problem for many plumeria plants . This fungal leaf disease typically accumulates on the undersides of leaves during the growing season. To reduce rust levels in the following growing season, collect fallen leaves and remove them from the area in the fall. Some control can also be achieved with chemical fungicides.

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