



# 10 things you never thought of growing in your greenhouse

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**S**o, you are a seasoned greenhouse gardener and you think you have grown it all – from tomatoes and begonias to bromeliads and jasmine. Not quite! Your greenhouse is your personal laboratory; your site for experimentation that has the potential to reward you with a joyous sense of achievement when you try something new and come up aces. Much like every home has its own character that reflects the tastes and styles of its inhabitants, a greenhouse too has a personality that mirrors your attitudes and preferences.

It is established beyond doubt that the greenhouse is a space that offers plenty of opportunity to grow a huge variety of plants even when the external environment turns hostile. It is up to you to discover how far and how much you can stretch the boundaries in growing plants you thought could not be grown in a greenhouse.

Here are ten unusual things you never thought of growing in your greenhouse!

1. **Alpine plants** found at the region where the upper limit of tree growth begins to merge into the permanent snowline are unusual candidates for the greenhouse. When all the focus is on creating warmth for plant growth, alpines need plenty of sunlight with cool temperatures. Their natural habitat sees them covered over by snow for long durations which actually helps preserve them till temperatures are more conducive for growth. The snow keeps the plants from getting wet and protects them from the chilly winds. They need well-drained low nutrient soils to thrive. Mimicking these conditions is possible in an unheated greenhouse during winters which opens up the possibility of starting them in your greenhouse for later planting to the outside. And you thought an unheated greenhouse would not offer scope for experimentation...!
2. Wondering what to do with all those tender **water plants** you put in the garden pond as winter approaches? You can bring them inside your greenhouse to tide over the winter or set up a small water trough to simulate a pond right inside the greenhouse to keep them growing. These plants do well with cool to moderate temperatures with bright sunlight. Lift the containers as winter sets in and replace these in a water trough or a shallow tub for the winter. Bringing the water lilies and other plants from your water garden would not only open up the possibility of expanding the range of plants, but also lengthen the growing season. If temperatures can be made to hover around the 27 degree Celsius mark, your choice of plants can be quite wide and varied. The water body increases the humidity inside the greenhouse which benefits other plants such as the bromeliads and the insectivorous plants like the pitcher plant. Even low light and moderate temperature can keep the most tender of lilies alive over the winter. Clear a sunny spot on a bench for your tropical aquatic plants and look for tiny baby plants to lift and propagate in early spring.

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- An interesting and different plant category to check out is the **carnivores**. These carnivorous plants thrive in wet, humid conditions and are generally found in nutrient deficient soils. As a result, they have adapted themselves by supplementing their nutritional requirements by consuming other animals, usually insects. Most of these plants come from open bogs and do well when placed on sunny benches inside the greenhouse. Carnivorous plants get damaged with excess calcium salts in water. The water they are irrigated with needs to be slightly acidic. Most growers who work with carnivorous plants distil water for the plants and acidify it with Aluminium sulphate. An annual repotting in fresh soil also helps keep the plants healthy. Bring these plants into your greenhouse during winter, but keep them under low humidity to prevent fungal infections. Some plants may become dormant in winter and you have to reduce temperature and light to allow them to complete their natural dormancy. You can use your greenhouse to over-winter your insectivorous plants and prepare them for replanting outside when weather conditions become suitable.
  - You might have learnt about mimicry in animals as a protective adaptation in school science classes! Few of us would be able to quote examples of *plant* mimicry in the living world. There is a class of plant native to the desert areas of South Africa; a plant that mimics its environment so well that animals looking for food cannot distinguish them from the surrounding rocks. If you set out to identify them, you too would be deceived unless it was in flowering phase when you would be delighted to see daisy-like white or yellow flowers with a spicy scent. Intriguing, isn't it? The type of plants described above are called **Lithops** or 'flowering stones' or 'living stones'. Lithops usually exhibit only two succulent leaves that directly join a taproot. The leaves are designed to store sufficient water to survive for months. Lithops make ideal greenhouse plants because they need low humidity, infrequent watering and care. You just have to be careful that they receive enough direct sunlight and follow their requirement for water with due diligence. They do best when subjected to intense sunlight for 4 to 5 hours early in the day and then are shaded partially in the afternoon to avoid sunburn if the light continues to be intense. Lithops respond to light deficiency by showing thinning, elongation and listing of the plant to one side. Soon, the plant begins to lose coloration and sides turn greenish. If you still do not heed the distress call, your plant is likely to die. Lithops exhibit distinctly different watering requirements during different parts of the year. You would have to read up on the water requirements and follow a strict watering schedule.
  - Here is one vegetable you wouldn't have thought of: **sweet potato**! Sweet potatoes are starchy tubers that are high on fiber, vitamins A and C. Roast them on coal for novelty, squeeze a twist of lemon, add salt and take a bite! Kids love the satisfying starchy flavor. Alternately, you could cut the tuber into wedges, toss in salt and chilli powder, coat with olive oil and roast till done. Sweet potato pie is served as accompaniment to the traditional Thanksgiving dinner in some places. You are probably mentally savouring the taste and the aroma by now! Well, you have to grow the tubers before you cook them – and here are tips on how you can.



Sweet potatoes are good candidates for the greenhouse as they are not frost tolerant. They do great when you start the cuttings or 'slips' in pots in your greenhouse. Cover each pot with a plastic cloche to help the cuttings to take root. Sweet potatoes need plenty of water for the formation of their starchy roots. They do well at temperatures around 21 to 26 degrees Celsius. The tubers are ready in about four to five months after rooting of cutting is done.

6. A number of *Stevia rebaudiana* plants in garden add sweetness to your diet – literally! Stevia is a perennial herb native to Paraguay and Brazil. It loves acidic, moist sandy soils near marshes or streams. In cold areas Stevia is planted out after the last frost and is treated as an annual. You can obtain young plants from various herb growers or nurseries. Propagation from seeds is difficult and they may not be easily available. Root cuttings of Stevia in the spring under fluorescent light or grow lights turned on for 14 to 16 hours a day. Each cutting should be two to four centimeters long with several nodes. Clear the leaves from the node that goes into the rooting medium which can be coarse sand or horticulture vermiculite. Leave the axillary leaves to grow above the mix. Maintain a temperature of 60 to 70 degrees F and mist several times a day in the greenhouse till roots are well-formed. You can tell if the rooting was a success by the visible growth in plants within a week. Transfer the growing plants to larger pots containing regular potting soil within a month. You can transplant these into your outdoor garden in another fortnight or so, or keep them outside in containers. Place the plants in full sun when it is cool, but provide shade when it gets hot. Also ensure that roots do not dry out. Bring plants back in before the first frost if you plan to grow it as a perennial. Stevia contains Stevioside which is the ingredient that is a sweetener used as a sugar substitute. Stevioside content is highest just before flowering. You can dry the leaves and use them as such or powder them in a kitchen grinder for use in various recipes.
7. The next plant that you can think of growing in your greenhouse is a grapevine! *Vitis vinifera*, the species of vine that produces nearly 99 per cent of the world's wines, is a plant that is susceptible to cold, especially if temperatures drop several degrees below zero degrees Celsius. Vines are usually directly grown in the ground rather than pots, though some growers successfully use pots to be able to move the vines outdoors when possible. In spring, the dormant vines are forced out of dormancy without the risk of cold damage by heating up the greenhouse. Heating can be tapered off as the weather gets warmer and natural heat from the sun ripens the fruit. Growing grapes in your greenhouse ensures that they are protected from rain and soggy weather which is notorious for inducing botrytis and downy mildew in the plants. With grapes, you have to be extra careful with temperature, humidity and ventilation requirements. As grapes are wind pollinated, have an insect or pest control plan in place as these can swamp your vines if infection occurs when you leave the greenhouse open for pollination after the danger of cold damage is past. Enjoy your own grapes fresh off the vine!
8. An interesting plant to start in your greenhouse is **safron**, *Crocus sativus*, the world's most expensive spice! It is a condiment or spice obtained from the stigma of the flowers and is used



in traditional Asian and Mediterranean dishes for colour and flavor. It also has proven medicinal properties that add to its appeal. Saffron is a very slow grower if you propagate it from seeds and requires several years of patient care before you can really obtain a harvest. However, you can propagate it from rhizomes for a quicker yield of the delicate stigmas which are dried and used as condiment.

*Crocus sativus* is frost hardy plant that flowers only after hot, dry summers and prefers sandy loams free of clay as well as hot sheltered areas.

It is usually not started from seeds, but if you are able to obtain these, be very patient with them. Start them in the spring in a cold frame greenhouse and allow them to grow for about three years before you think of planting them out permanently in late summer when they are dormant. If you have bulbs, you can plant them out directly without needing to start them in a greenhouse.

9. Here is one that you are going to enjoy and one which truly requires the patience of the saints! **Coffee** plants can be grown in your greenhouse to give you your own beans to roast and grind. It takes a few years though. Coffee plants are shrubs from tropical Africa. They thrive in warm, humid climate with a lot of diffused light. You can bring in seeds to start new plants or buy plantlets. Plant in fast draining moist potting soil with a neutral pH at around 75 degrees F. Maintain temperature at all times. If you are faced with very cold winters and your greenhouse is not sufficiently heated, bring the plants into your house. The seeds have to be soaked before planting and take 6 to 8 weeks to germinate. You have to wait between two and four years to see the lovely white blossoms. At age five, the berries can be harvested.
  
10. Finally, you could try grafted, high yielding fruit trees such as tropical **mango, litchi or avocado** trees.

There is a lot of uncharted territory yet as far as potential of the greenhouse is concerned. You have all the opportunity in the world to try growing whatever catches your fancy provided you do a little research and study to come up with a viable plan and project. Use your greenhouse to its maximum potential and try out something new every season...the possibilities are unending!