

Cobb County Extension Service Horticulture

Luffa Sponge Gourd

Background:

Luffa (*Luffa aegyptica* Mill syn. *L. cylindrica*), or Loofah or vegetable sponge, is a member of the Cucurbitaceae family. Luffa is closely related to and has similar cultural requirements as the cucumber. It is an annual climbing vine, which produces a fruit containing a fibrous vascular system. When separated from the skin, flesh and seeds, the fiber network can be used as a bathroom sponge. Luffa can also be used as packing material, for making crafts, and as filters. Used as a bath sponge it produces a mild glow on the skin. The blood circulation the sponge induces on the skin has been credited as a relief for rheumatic and arthritic sufferers. The versatility of the luffa goes beyond producing sponges. The young fruit, when small, (around 6 inches) are delicious used in soup or stew. They can also be cooked like summer squash. Older fruit have been reported to develop purgative chemicals. Because luffa has a compact network of close fibers, its resiliency makes it useful for many products like filters, slipper soles, baskets. Small pieces of luffa sponge are good for scraping vegetables like carrots without having to remove the valuable nutrients by peeling them. You can also wash dishes, scrub your tub, etc. with luffa. When they become soiled throw them in the washer! Luffa is environmentally safe, biodegradable and a renewable resource.

Growing:

Luffa requires a very long growing season in order to mature into dried sponges. Luffa is cold sensitive. The seed should be sown outside after the ground is thoroughly warm in the spring and all danger of frost is past. For faster germination, scrape the seed coat with a nail file before soaking overnight or soak for 24 hours. Seeds may be started in peat pots about three weeks prior to moving them outside. Be patient if seeds are slow to sprout - that is the characteristic of luffa. Luffa's grow best in full sun in a well prepared bed. Plant seeds 8-12" apart along a fence, or in hills of 3 or 4 seeds 1/2" deep with hills 4 to 6 feet apart. Luffa needs plenty of moisture while growing. It prefers a pH of around 6.0 to 6.8. Water deeply and cover the bed with mulch, keep the mulch away from the stem. Excessive water can result in poor growth and root disease. Damping off can be a problem with young seedlings if growing in cool wet conditions, and fruit rots may cause losses if the fruit are allowed to grow on the ground. Gourds are heavy feeders and require fertile soil. Nutrients and water may be reduced in late summer to slow growth rate and encourage fruits to harden off.

Although Luffa can be left to grow along the ground, best yields and fruit quality are obtained by using a support structure or trellis so the fruit rests on the ground as little as possible. The vines can reach up to ten or twelve feet. The fruit will be preceded by lovely yellow flowers. The fruits are green, smooth and look like cucumbers, reaching 12 to 18 inches in length. Fruits may weigh up to 3 lbs., the stake or trellis must be strong enough to allow the fruit to hang free. Any constriction will result in deformed fruit. Removing all the first flowers, male flowers, and the first four lateral branches helps produce better fruits later. Generally speaking, cultivation is similar to growing cucumbers and melons.

If any fruit develops rotten spots or holes, remove it from the vine. It cannot be saved.

Harvest:

It is from the luffa gourds that the organic sponges are produced. Towards the end of the summer (or into fall) the luffa will begin to lose weight. This is a sign that it is beginning to mature on the vine. When harvesting the luffa, in order to get high-quality vegetable sponges, allow to ripen on the vine and harvest when the skin has turned yellow or brown. Leave on the vine for as long as possible. After the first frost you must remove them from the vine immediately to keep from rotting. You will not be able to salvage every luffa that is on your vine. Only fruit that appear on the vine early in summer will have the length of time required to mature.

Cleaning & Preparation:

If you don't have time to clean the dried gourds right away, they can be stored in a dry location.

Gourds left to dry on the vine are ready when the shell is brown and hard and you hear dry seed inside when shaken. Break off the bud end and shake all the seeds out (save - see seeds, below). Submerge in water a couple minutes until softened. The water needs to be changed frequently to avoid staining the fibers. The skin and pulp should remove easily. Soak the sponges in another bucket of a bleach and water mixture (about 30:70) to whiten the fibers further if necessary. The fibers may also be bleached with hydrogen peroxide. Leave the sponges in the bleach and water mixture around fifteen minutes or until you reach the desired color. Rinse in clean water to remove bleach. When the water remains clean, the sponges can be removed, trimmed, and dried. Hydrogen peroxide is sometimes used as a bleach to attain the lightest color. For best results air dry the sponges. Lay them out on a sunny day for sun bleaching and drying. Once cleaned and dried you can store the sponges in a dry location until you are ready to use them.

Fiber density, texture, and appearance are the main quality parameters. A dense, fine- to medium-textured fiber is preferred. The price paid for each sponge usually depends on quality and sponge length. This sponge is machine washable.

Seeds:

Start with fresh seed from a quality seed producer, especially if you plan to sell your sponges. Seeds saved from prior harvests may be used if you are sure that they were only pollinated from other luffa gourds. The Cucurbitaceae may cross pollinate and the seed when

saved and planted may not give rise to what you expected. If there are no other gourds or squash growing nearby you may be able to save your seed for the next crop.

Coloring Luffas:

To color or dye sponges, use only clean and bleached sponges. Cut the sponges to desired lengths. Buy Rit Dye® in colors that you like. Follow the directions on the box, when thoroughly mixed, place the sponges into the dye. Stir gently or if in a washer, mix on the gentle cycle, for about a minute. Then, let the sponges soak for several minutes until color desired is achieved. Drain the colored water, then rinse with clean water or on the gentle cycle in the washer. Shake lightly to dry or spin dry for only a minute on the gentle cycle to remove excess water. Place sponges in a warm dry place or put them outside in a sunny location to air dry.

Other Uses:

Attach yarn through one end of the sponges to hang in the shower.

Place a cleaned natural or colored sponge in a clear freezer bag and tie off with a ribbon for gift giving. Include a tag, or a note inside the bag, that tells that the sponge was homegrown by you.

Use sponges in baskets along with soaps for gift giving.

You can cut thin slices off the sponges to create discs that look like snowflakes to use for crafts. Glue small dried berries and pinecones to the center of the disc with a hot glue gun. Then glue a small bow, made of ribbon, and use the same style of ribbon to make a hanger for Christmas tree ornaments. Snowflake discs can also be used as a decorative refrigerator magnet. Just glue the magnet to the back of the disc, and stick them on your refrigerator.

Another idea is to save some dried, unshelled sponges to use on wreaths or in flower arrangements. It's also fun to save a few dried, unshelled, uncleaned sponges to impress your friends with your garden skills and handy work!

By Jack Arnott
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