

going Care

Inspecting your luffa plants for signs of insect invaders such as aphids, cucumber beetles and squash bugs is as important as regular watering, especially as younger plants are becoming established. That means examining the undersides of leaves for bad actors and their eggs and removing them before their populations can grow.

Also watch for evidence of squash vine borers, which drill small holes into stems, leaving little piles of shavings behind. They dine on the insides of vines, killing entire sections of the plant as they go. See some telltale signs? Take a clean razor blade, make a slit along the vine and remove the intruder.

Because insect pollinators are critical for the success of your crop, it's better to rely on organic and integrated pest management methods instead of pesticides. Aside from helping safeguard plants from direct insect damage, your vigilance should also afford some protection against the indirect damage from associated viral and bacterial diseases. If you do notice sections of mildewed, wilted or discolored leaves, your plant might be diseased. Cut away affected portions of the plant, remove from the garden and discard. (Disinfect any garden tools that came into contact with the diseased sections, too.)

Selling the seeds for 5 cents per packet, the purveyors gushed: "When ripe, the skin easily peels off, revealing the inside, a beautiful network of interwoven fibers, a veritable vegetable sponge, and for scouring purposes rivaling the famous 'iron dish-cloths.' Large quantities of them are imported from the tropics and offered for sale in the drug stores, under the name of Loofah, being considered an indispensable adjunct to every well-regulated bathroom."

Besides their utility in the bathroom and kitchen, loofah sponges — particularly those from the über-fibrous Luffa aegyptiaca species — were once heavily used in manufacturing. According to Charles B. Heiser, author of The Gourd Book, "Flattened by being pressed through steam rollers, it has been used to make soundproof wall boarding. It has good insulation properties and has been used to make sun helmets and as a lining for steel army helmets." Loofahs were also used as packing material, stuffing for mattresses and even as engine filters.

As for Luffa acutangula, because it's comparatively softer inside than Luffa aegyptiaca, it has long been popular as an edible gourd in India, China and beyond. Chinese immigrants frequently grew Luffa acutangula, harvesting the gourds when they were 4 or 5 inches long. Describing Luffa acutangula in his 1832 work, Flora Indica, or, Descriptions of Indian Plants, author William Roxburgh noted that the half-grown fruit was one of the best native vegetables in India. "The natives use it much in their curries," he wrote. "When peeled, for the skin is hard, boiled and dressed with butter, pepper and salt. They are little inferior to green peas."

## WHAT'S IN A NAME?

Whatever variety you choose to grow, when searching for luffa seeds, you'll probably encounter a few different spellings, including "loofah," "loofa" and "luffa." While "loofah" is often used to describe the finished sponge, "luffa" is commonly applied to the plant itself. Still, there is no hard-and-fast rule. To be sure you know exactly what you'll end up with, look for open-pollinated varieties, which explicitly state the botanical species name.

Producing strong, scratchy sponges that are at least 1 to 2 feet long, Luffa aegyptiaca is the species most commonly available. (You might also find it called Luffa cylindrica or "long luffa.") Seeds for Luffa acutangula — featuring narrower, slightly shorter fruits — can be somewhat more difficult to find but are sometimes sold as "angled luffa" or "Chinese okra." A less common luffa plant, known as Luffa sepium, Luffa operculata or "ball luffa," is also available in the U.S. Luffa operculata produces spiny, rounded fruits that, when dried and skinned, reveal miniature, spherical sponges. The Indiana Gourd Society (www. indianagourdsociety.org) sells seeds for a "Ball Luffa Cucurbita" ornamental that's said to result in sponges that are about 2 inches in diameter.



## **GROWING YOUR OWN**

With their sprawling vines, large leaves and grabby tendrils, luffa plants need full sun and lots of room. As a result, you'll want to plant them at their own end of your garden or around its perimeter, so they don't interfere with other crops you wish to grow. They also can require a growing season of as long as four full months, so, depending on your climate, you might need to start your seeds inside, transplanting them once soil temperatures are consistently warm. Toward the season's end, you might also have to harvest your gourds before they've had a chance to fully dry on the vine, but even under these circumstances, you should be able to come away with a robust loofah harvest.

Luffa gourds grow best in fertile, well-draining and slightly acidic soil. To get a jump on the growing season, you can remove any weeds, amend your soil with compost or worm castings and then cover the area with lightweight, water-permeable landscape fabric. This helps keep the weeds down and your soil temperatures up by planting time.

As you wait for the danger of frost to pass, you can also further your head-start by germinating luffa

seedlings indoors. For best results, presoak your luffa seeds in water for as long as 24 hours before planting them in a sterile growing medium. This helps break down their tough outer seed coats and spewed germination. A seedling heat mat can also hasten sprouting.

Provided your plants have at least their first set of true leaves, and conditions outside are sunny and warm, you can very gently transplant your seedlings. Luffas can be planted in rows with individual plants positioned at least 4 feet apart from one another, or they can be placed 2 to 3 plants per soil mound, with mounds positioned 6 to 8 feet apart.

If you used landscape fabric, just cut a small "X" and plant the seedling through this opening in the fabric. Repeat this process until each luffa seedling is in place. Next, water them in, taking care to direct moisture to plant roots while keeping the plants' foliage dry. This practice can help prevent the spread of certain fungal diseases.

Finally, if the weather is still a little cool — and you'd like to protect your tender seedlings from birds, rodents and other hungry critters — you can make cloches from clear, plastic soda bottles. Wash the

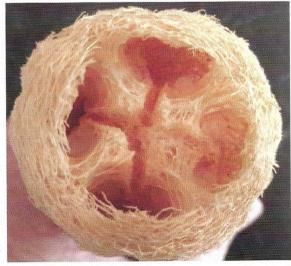
Depending on the size and number of luffa gourds that appear, you might need to shore up certain types of trellises. This netted fencing required additional support stakes as the season progressed.



bottles with warm, soapy water, remove their lids and trim off their bottoms. When positioned over luffa seedlings, they can create a cozy microclimate. Just make sure your plants don't dry out or get overheated on very sunny days, and remove the cloches once warm weather returns.

## **TRELLISING & TRIMMING**

Your luffa plants need regular watering to really get going, and as fruits develop, they also need physical support. Mostly made up of water, luffa gourds become surprisingly heavy. You don't have to trellis your plants, but doing so can maximize garden space and contribute to a crop that's more uniform in size and shape something that might be important if you plan to sell finished loofah sponges at a farmers market. (Allowed to hang freely from the trellis, gourds are less likely to become misshapen from contact with the ground.)



This is an end view of a dried loofah sponge after the outer skin has been removed and seeds inside have been dislodged.





Finishing Janches

To harvest sponges, let luffa vines and gourds dry completely. Ideally, this can take place outdoors before fall's frost, but, if freezing temperatures are forecast, you should harvest your gourds and let them dry in a protected garage or outbuilding. (Frost can damage gourds' spongy interiors.)

Dried gourds are dark brown and lightweight. (Shake them, and you'll hear some dried seeds rattling inside as well.) Gently squeezing along the length of a dried luffa will cause its skin to loosen and crack, revealing the fibrous treasure inside. Vigorously shaking the sponge or whacking it against your open palm helps dislodge the luffa seeds.

After removing all traces of their outer shells, you might notice some loofas aren't uniformly cream colored. You can set them out in direct sunlight to naturally bleach them. Or you can soak them in a mild bleach solution, rinse and then let them dry completely before storing.

Whether you slice loofas extra thin and pour in colorful glycerin soaps or sell natural sponges whole, loofas have wide commercial appeal with beauty buffs, the green-living set and plenty of other folks. (Packets of luffa gourd seeds are another unusual commodity you can offer.) When unused loofas are kept in a clean, dry spot, they enjoy a much longer shelf life compared with other produce.

Provided they are sturdy and deeply set, luffa plant supports can be as simple as a few wooden garden stakes strategically spaced near groups of luffas. Lengths of leftover fencing erected alongside each row are another easy option. As your plants grow, they grab onto the supports you provide and climb their way up. If your trellising is inadequate, however, they pull it all down in a hurry, potentially damaging vines and fruits in the process.

If you'd rather not trellis and if you have enough space to let your vines wander — and you don't mind any resulting variability in fruit size and shape — this method can work. In this case, though, plan to slip a heavy sheet of cardboard, scrap wood or paving stone underneath individual luffa gourds to help prevent damage from soil-borne diseases and insect pests.

Once your luffa plants' primary vines begin to take off, lightly snip their ends at about the 10-foot mark. This encourages branching and the development of female flowers. When fertilized by insect pollinators, these female flowers set the tiny fruits, which eventually become luffa gourds. In other words: The more female flowers you have, the bigger your potential gourd crop will be. If

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Complete with five stamens and pollencovered anthers (above left), the flower on the left is male. Featuring three longer, slightly curled stigma, the flower on the right is female.

Allowing luffa vines and gourds to dry completely (above) makes harvesting the sponges inside very easy, but if the weather turns frosty, you might need to pick gourds before they've finished drying.