

IN THE GARDEN

# Frankincense Fit for a King (One, Anyway)



John Burcham for The New York Times

Jason Eslamieh and his dog, Sacra, in his nursery in Tempe, Ariz., a climate more friendly to the plants than some.

By MICHAEL TORTORELLO

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John Burcham for The New York Times

A close up of young Boswellia sacra (a.k.a. frankincense), whose gum resin is one of the three biblical gifts that the wise men bestowed on the infant Jesus.

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THE holiest plant of the Christmas season may be a raggedy shrub with peeling bark that seems to grow best in a dusty backyard in Tempe, Ariz.

This is Boswellia sacra, better known as the frankincense tree. The shrub's gum resin is one of the three biblical gifts that the wise men bestowed on the infant Jesus.

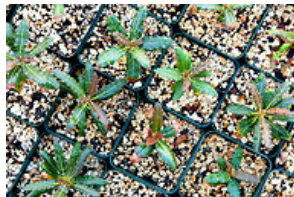
Until recently, Americans who wished to cultivate their own frankincense could only hope for another biblical house call. Marc Hachadourian, who manages the Nolen Greenhouses at the New York Botanical Garden, describes frankincense seed as hard to find and harder still to grow.

"In horticulture, there are a few plants that we joke about that have a miserable life," he said. "Boswellia is only happy in its native environment. And even then, it's not as



John Burcham for The New York Times  
Boswellia seeds.

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John Burcham for The New York Times  
Boswellia seedlings.

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John Burcham for The New York Times  
Mr. Eslamieh in his greenhouse.

happy as it could be.”

Today, a seeker can follow a bright star (O.K., an eBay storefront) to a nursery called the Miniature Garden, in a two-bedroom house near Arizona State University. Here, across the street from a shabby apartment complex advertising move-in specials, lies an oasis for more than 3,000 exotic plants representing 300 species.

One of these is frankincense. Another is a rangy assemblage of vicious thorns, called myrrh, a second gift of the Magi. (*Commiphora myrrha* is “scruffy” and “not very personable,” Mr. Hachadourian said.)

This efflorescence in the Sonoran Desert is the vision of a 61-year-old architect named Jason Eslamieh. Yet for all his labors, the garden seems to exist almost by chance. How did a Bahai student from Iran with the given name Mohammad land in small-town Indiana, marry a Mormon by way of Texas and Mexico, score a bag of seeds from an American consultant in Yemen and become a guardian to the sacred plants of Christendom?

The answer is what could only be an American Christmas story.

A good time to find Mr. Eslamieh working in the garden is anytime at all. He lives with his wife a few miles from the garden, down the street from his dear granddaughters. But for a couple of weeks last month, he was also sleeping on an air mattress at the Miniature office while he tried to turn a snoozy Rottweiler puppy named Sacra into a fearsome guard dog.

“We got broken into twice that we know of,” Mr. Eslamieh said, walking through a French door into the half-acre backyard. “I don’t care about material things. They could come here and steal my computer. I don’t care.”

But it was intolerable to imagine the plants being vandalized. “Twenty years of work into the three genera of the Burseraceae is something I cannot replace.”

It has been no mean feat to assemble all 19 species of the genus *Boswellia*. (Mr. Eslamieh knows of no one else in the world who cultivates the full set.) Five or six of these species are endemic to the island of Socotra, a Unesco World Heritage site, near the mouth of the Gulf of Aden, with a ban on botanical exports. Other *Boswellia* reside in the anarchic hinterlands of Yemen and Somalia.

Having summoned the *Boswellia* to his sanctuary, he now has to keep the plants contented. In his new book, “Cultivation of *Boswellia*: Sacred Trees of Frankincense,” Mr. Eslamieh credits his knack for horticulture to his father, who kept an exquisite garden in Yazd, a provincial capital in central Iran. In the family orchard, he said, “I learned how to graft when I was only 6 or 7 years old.”

Occasionally, father and son would jump into a British-made Hillman and drive south. There, on perhaps an acre of land, his father raised a grove of *Boswellia sacra*. As a holistic doctor and chemist, “he owned a pharmacy,” Mr. Eslamieh said. “Many of his medicines he created from scratch.”

But Mr. Eslamieh’s father also ran a prominent newspaper, where he wrote articles championing liberalism and modernity. Amid Iran’s nationalist ferment of the late ‘60s, what happened next is opaque. An uncle died in an alleged suicide. “Two years later my father was assassinated,” Mr. Eslamieh said, in an incident involving a road accident.

“There was nothing in Iran for me once my dad was gone,” he said. “So I left.”

Mr. Eslamieh arrived in rural Indiana on a student visa in 1972 and enrolled in a college language program. "I could not make a sentence," he said. "I didn't know a soul here."

After stops in French Lick, Ind.; Pikeville, Ky.; and Annandale, Va., he came to Arizona State University to study architecture, and never left. In the dorm, he adopted the name Jason, from Jason and the Argonauts, but said, "I should have stayed with my heritage and gone with Darius or Sassan."

The Mormon rancher's daughter who would become his wife was almost Sun Devil royalty: in the late 1940s, her father was the Arizona State starting quarterback. Over a 26-year career at the university, Mr. Eslamieh worked up to the post of campus architect.

He may have found success, but then, there was no contingency plan.

"To tell you how arrogant I was," he said, "when I finished my English school, which took me three months, I wrote a letter to my mom. And I said how I found my country. There was no way I would ever come back."

*BOSWELLIA sacra* is not much of a looker. While *Sacra* the dog napped on the patio, Mr. Eslamieh inspected a head-high shrub, started from seeds field-collected in Yemen. The paired leaves appeared small and crinkled. But the exfoliating bark was something else again: ocher and papery, like a sheet of baking parchment scorched in the oven.

Mr. Eslamieh appreciates the plant less for its pulchritude than its deeper botanical riddles. He can predict rain from the swelling of the nodes along the branches. When the barometric pressure drops, he said, the *Boswellia* "take every opportunity to grow, to flower, to set seeds."

The lobed seeds on Mr. Eslamieh's plant are notable for refusing to perform their one and only job: germination. "You could put 100 seeds in a pot and you are lucky to get eight" seedlings, he said. "Most people get one, two, three."

*Boswellia sacra* must be a plant with a death wish. Mr. Eslamieh hypothesizes that the tree may have been overharvested for its valuable fragrant resin. Harvesters slash the trunk with a hatchet and collect the dried beads of sap. Researchers in Eritrea, writing in the *Journal of Applied Ecology*, observed that frequent resin-tapping in another *Boswellia* species (*B. papyrifera*) lowered the number of seeds and lessened their viability.

In their native range, mature *Boswellia* turn into firewood. The seedlings become fodder for marauding goats. Mr. Eslamieh has concluded that one way to rescue *Boswellia sacra* from obsolescence is to boost its vigor and commercial output.

He pointed to a short, dark-leafed shrub a few feet down the planting area he calls *Boswellia Alley*. "This is *Boswellia* 'Tierney,'" he said, a first-generation cross between *Boswellia nana* and *Boswellia sacra*. The goal is to breed a kind of "super *sacra*." This would be a hardier plant with healthier seeds and a stronger concentration of *Boswellic* acid: the soup of volatile compounds that gives the resin its prized fragrance and medicinal properties.

Many of these chemical chains are terpenoids, which are common in the wider *Burseraceae* family, said Douglas Daly, the curator of Amazonian botany at the New York Botanical Garden. The length and complexity of the chain determine whether the volatile compound is an essential oil, a hormone or a near-rubber.

"The coolest thing about this group of plants is anywhere you go, you find them being used for almost the same group of purposes," Dr. Daly said. "You always find it being used as a fumigant or for pulmonary disorders. You always find it being used for illumination, to make torches or lamps. You also find it used as a sealant, to caulk canoes and repair ceramics."

Accounts from the ancient world make frankincense sound like a cross between aspirin, penicillin, Xanax and [Viagra](#), with a touch of duct tape and magic. Dr. Daly finds special

wonderment in “The Plants of Dhofar,” a 1988 ethnobotanical guide published by the Sultanate of Oman. One day, frankincense might be used to enrage a war elephant. The next, it could soothe the terror of a prisoner on the way to execution.

Mr. Eslamieh would love to see his “super sacra” tree become a commercial staple in Somalia, India and Yemen. But he doesn’t intend to patent the plants. Though the garden sells more than 100,000 seeds a year (and they are not cheap, at \$25 for 100), neither Mr. Eslamieh nor his two business partners draw any salary. The revenue goes toward drip lines, water bills and a new 36-foot-long greenhouse that cost \$22,000.

In other words, the plants are not making money for Mr. Eslamieh; he is making money for them.

IN the history of baffling Christmas presents, none may be stranger than the three gifts of the Magi: gold, frankincense and myrrh. The gold, in traditional interpretations, represented God’s splendor and power, said the Rev. Serene Jones, president of Union Theological Seminary in the City of New York. The frankincense, burned for purification, suggested divinity. Myrrh, a funereal spice, prefigured the crucifixion and the anointing of the dead.

“An odd thing to bring baby,” Dr. Jones said.

The Magi, walk-on actors in the Gospel of Matthew, speak a few lines and then exit stage right. (Contrary to Christmas lore, it is not even clear there were three of them.) Faced with this enigma, Dr. Jones latches onto the verse that reads, “there came wise men from the east to Jerusalem.” This could have been Persia — modern-day Iran. The Magi followed a star.

“It’s safe to say that they came from outside of the Roman-Jewish world into which Jesus was born,” Dr. Jones said.

In this understanding, she said, “Jesus is not here just for Jews and Christians, but Jesus is here for the whole world. Not that the whole world should convert, but that the love of Jesus is extended to everywhere.”

In the run-up to Christmas, Mr. Eslamieh will ship *Boswellia* seedlings to gardeners around the globe. Born Muslim, he practiced the Bahai faith for years. But these days, Mr. Eslamieh said, “I am better off to be a free thinker.”

Still, “If you asked me which one has brought me the most satisfaction,” he said of his plants, “it has to be sacra, because of the connection it brings me with other people.”

A haboob was blowing in from the south, darkening the sky with an Old Testament wrath. (Sacra the trusty guard dog slept right through it.) But before retreating into the house, Mr. Eslamieh took out a pair of shears and cut the tip from a branch of *Boswellia* sacra.

A white bead of sap formed at the wound. Egyptians, according to “Plants of Dhofar,” believed this to be “the sweat of the gods, fallen to earth.” The aroma drifted across the yard. It hinted at cypress and citrus and maybe witch hazel. But at the same time, it seemed like nothing else in the American garden or forest.

In ancient Jewish ritual, Dr. Jones said, “it was believed the closest one could get to the divine would be to smell the divine. It was like a direct apprehension of divinity.”

If God has a smell, it must be frankincense.

### **Manna From Above? No, Tips for Growers**

If you want to grow *Boswellia* sacra, or frankincense, at home it helps to have a desert in the backyard. Failing that, the best place to start might be Jason Eslamieh’s book,

“Cultivation of *Boswellia*: Sacred Trees of Frankincense” (A Book’s Mind; \$33).

Gardeners across the tank-top meridian — in Miami, Houston, Phoenix, Los Angeles — may be able to keep the *Boswellia* outdoors year round. When the temperature falls below 40 for a day or two, *Boswellia* drops its leaves. In real parka weather, the plant goes icicle down to the roots.

At the [Miniature Garden](#), in Tempe, Ariz., Mr. Eslamieh shrouds his shrubs in Christmas lights, the ornamental equivalent of an electric blanket, and shelters them under plastic tepees during cold stretches.

Above all, he hews to his father’s three principles of gardening: “soil, soil and soil.” When Mr. Eslamieh started the nursery in 2007, with partners Patte Lanus and Michael Finley, he replaced the top 18 inches of dirt with a fast-draining mixture of one-third mulch and two-thirds decomposed granite. A frankincense tree does not want to wallow in the shady damp with ostrich ferns and English ivy.

Yet now and then *Boswellia sacra* savors a good stiff drink. Mr. Eslamieh’s advice: put the pot in the sink, turn on the faucet, walk away.

Given a choice, *Boswellia* doesn’t care to be confined to a pot. If gardeners would ground it in the yard during the summer, then transfer the seedlings to indoor pots for the winter, “the things they could do with their plants!” Mr. Eslamieh said.

Bob Jones, 65, a retired banker in Pittsburgh, keeps five different *Boswellia* thriving in pots on the flat roof outside his one-bedroom apartment, along with nearly 700 other plants. Mixed with standard potting soil, “pumice is the preferred medium, if you can find it,” Mr. Jones said. But he has had fine luck substituting Turface MVP (a baseball diamond supplement) and Oil-Dri absorbent (a garage cleaner). Mr. Jones does make sure to change the soil every year or two, lest a buildup of salts and minerals starts to poison the pot.

It’s possible to grow the *Boswellia* under lights. But it’s easier, Mr. Jones said, to shut the plants down for the winter on a shelf in the bedroom. “I don’t give them a drop of water from November until March,” he said.

He bought his *Boswellia* from the Miniature Garden. Mr. Eslamieh’s eBay store sells *Boswellia sacra* seeds (\$25 for 100) and seedlings in 4-inch pots, grown from seed (\$55 each; expedited shipping, with heat packs, is \$7.50). Mr. Jones also stocks up on desert plants from [Arid Lands Greenhouses](#), a Tucson nursery that currently lists *Boswellia sacra*, grown from cuttings, in a one-gallon pot for \$40.

When you find yourself trawling the nursery list at the [Cactus Mall](#), you know you’re lost in the desert for good.