

# tropicial fuit 

The November Meetings of the Bonita Springs Tropical Fruit Club will be held 2nd \& 4th Saturdays, November 12 and 26, at 4:30 pm at Bonita Springs Fire Control \& Rescue District Station 27701 Bonita Grande Drive, Bonita Springs, FL 34135 Both events will be a 'potluck' events, please bring a dish or dessert.

The Collier Fruit Growers Monthly Meeting will be
Monday, November 21st, starting at 7:00 pm.
The Greater Naples Fire Rescue Station 14575 Collier Boulevard, Naples, Florida 34119 Enter through the east door (Collier Blvd.) side of the Administration Building.


The speaker at the November 21st membership meeting of the Collier Fruit Growers will be Kevin Cruz. He is a small-scale regenerative farmer focused on combining ecological restoration with sustainable food production. Kevin has worked on various organic farms in the US and Guatemala before starting his own farming projects. Using a combination of Permaculture and Agroforestry principles, he is transforming degraded land into abundant and resilient food forest systems in both Florida and Honduras. Kevin will talk about both of his projects in detail and explain the process of restoring degraded land while simultaneously growing an abundance of food, medicine, and resources. Please watch Kevin's video at: https://www.gofundme.com/f/regenerating-degraded-land-in-honduras?utm_campaign=p_cp+sharesheet\&utm_medium=email\&utm_source=customer

NOTE: Due to the reported damage to Fruitscapes nursery, Collier Fruit Growers will have neither their November 2022 nor February 2023 fruit tree sale. Once Pine Island becomes more accessible, Collier Fruit Growers may ask for volunteers to help restore the nursery.

UF|
UF/IFAS Extension Collier County Master Gardener Volunteer

## Naples Yard and Garden Show

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Saturday and Sunday, Nov. 12 \& 13, 2022 | 9AM - 4PM 14700 Immokalee Road, Naples, FL 34120
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Huge Plant Sale

| Orchids | Butterfly |
| :--- | :--- |
| Tropicals | Plants/ |
| Palms | Attractor |
| Fruit | Garden |
| Trees | Art |
| Native | And much |
| plants | more |

## © @mgvcollier

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© Pay in advance:
2022naplesyardandgardenshow.eventbrite.com
© Or pay at the entrance

Volunteers are needed to help attend the booth both days at the Show. Members who are willing to help please call 239-384-9630 to coordinate times.

## AVOCADO PASTA

The easiest, most unbelievably creamy avocado pasta that everyone will love. And it'll be on your dinner table in just 20 min !
All that is needed are a couple of ripe avocados, fresh basil leaves, garlic, lemon juice and olive oil. From there, you can just throw it all into a food processor and give it a whirl! Done and done.
Toss it with your favorite pasta noodles - spaghetti, rotini, macaroni, etc. - along with some fresh veggies. You can really use any veggies you would like. Especially good with sweet corn kernels and crisp cherry tomatoes.

## INGREDIFNTS:

- 12 ounces spaghetti
- 2 ripe avocados, halved, seeded and peeled
- 2 cloves garlic
- 2 tablespoons freshly squeezed lemon juice
- Kosher salt and freshly ground black pepper, to taste
- $1 / 3$ cup olive oil
- 1 cup cherry tomatoes, halved
- 1/2 cup canned corn kernels, drained and rinsed


## DIRECTIONS:

1. In a large pot of boiling salted water, cook pasta according to package instructions; drain well.
2. To make the avocado sauce, combine avocados, basil, garlic and lemon juice in the bowl of a food processor, season with salt and pepper, to taste. With the motor running, add olive oil in a slow stream until emulsified; set aside.
3. In a large bowl, combine pasta, avocado sauce, cherry tomatoes, and corn.
4. Serve immediately.

Recipe source was DamnDelicious.net

Miami/ Dade Fruit and Spice Park
Fall Adventure - Saturday \& Sunday, November 12 \&13, 10am to 5pm Celebrate fall at the Park! During this fun filled weekend there will be fall photo backdrops, scavenger hunts, fruits from this season to see and taste, and tram tours featuring what is in season. Sorry, no pets allowed. Picinic facilities are available. Regular Park admission fees, \$10 per adult, \$3 children (ages 6 to 11), under 6 free.

Southwest Florida Research and Education Center (Immokalee): Open House - Wednesday, November 30, 10:00 am to 2:00 pm Come and enjoy the research presentations, demonstrations, and tours.

# IS PINEAPPLE GOOD FOR YOU - AND THE PLANT <br> By ocean ribbons, published April 20, 2022. Copied From Food Revolution Network 

## SUMIMARY

Pineapples can be a delicious part of a health-promoting diet. They're sweet, flavorful, and versatile, and they contain a powerful enzyme that's attracted the interest of the nutritional sciences. But are there ethical or environmental downsides to the "King of Fruits"? You're an 18th-century British aristocrat. How do you show your fellow nobles just how rich and powerful you are? John Murray, 4th Earl of Dunmore, did it with a pineapple. Europeans had been fascinated by the fruit since Columbus first encountered it in the tropical lands he despoiled for crown and country but couldn't figure out how to grow one until the Dutch invented greenhouses in the 1680s. After that, the ability to produce a pineapple became a clear indication of tremendous wealth. Murray wasn't subtle about it either. His pineapple growing hothouse, built into a garden wall in his ancestral Scottish home, Dunmore Park, was topped with a stone cupola in the likeness of - can you guess? - a giant, 46-foot-high pineapple.

Given the effort and expense required to grow a pineapple in the chilly Caledonian lowlands, it was rare for Murray's family and guests to actually eat one. Instead, they used them as centerpieces at fancy dinner parties, repeatedly, until they began to rot.

While the pineapple is unquestionably an attractive fruit (and often referred to as the "King of Fruits"), these days we're more likely to encounter it in smoothies, fruit salads, and cocktails than in stone follies or rotting table decorations. But the issues of wealth and power that swirled around the earliest colonial exploits still haunt the fruit to this day.

In this article, we'll examine the origin of pineapple, its nutritional profile, assess its benefits and risks, and see if it's possible to consume the fruit in a way that's good for you and the planet. Plus, you'll learn some fun facts about pineapples along the way.

## Facts About Pineapples



Pineapples are a distinctive-looking tropical fruit indigenous to South America. Aside from the meaning of pineapple being linked to hospitality, as well as their association with tropical beach vacations and housing for SpongeBob SquarePants, pineapples have gained favor as a health food, and are particularly celebrated for their antiinflammatory effects.
The pineapple plant, Ananas comosus, is a fairly short shrub, seldom growing as high as five feet. Contrary to popular belief, pineapples don't grow on trees; they are actually part of the bromeliad family.
A perennial in its native lands, the pineapple plant produces clusters of fruit that coalesce into a single pineapple. So, is pineapple a berry? Yes, pineapples are a type of berry fruit called a collective or multiple fruit, which refers to the way the berries fuse together to form the pineapple fruit.
Its wild progenitor originated somewhere around Brazil and Paraguay - the Mayan and Aztecs domesticated and cultivated it starting around 3,000 years ago. By the time Europeans arrived, the pineapple was already a staple crop in many indigenous diets.

These days, the biggest pineapple-producing regions include South and Central America, Southeast Asia, and India.

Types of Pineapples


Pineapples come in four main classes, or cultivars. The Smooth Cayenne is the most widely cultivated variety, making up about $70 \%$ of all harvested pineapple, and roughly $90 \%$ of the processed pineapple in the world. If you buy canned pineapple, it's almost certainly from the Smooth Cayenne.

Red Spanish pineapples are rounder, more aromatic, and tastier than Smooth Cayenne. They do not can well and are best when fresh.
Queen pineapples are eaten fresh only, and are the most commonly grown cultivar in Malaysia, Australia, and South Africa.

According to many aficionados, Abacaxi pineapples are one of the most delicious varieties but are hard to grow at scale. So if you get a chance to taste a locally grown abacaxi pineapple in Florida, the Bahamas, or Brazil, savor the opportunity.

There's also a bioengineered pineapple called Rosé or Pink Glow, named for its pink flesh. Growers in Costa Rica produce it and ship it to the US (minus Hawaii) and Canada. In addition to being served fresh, this pineapple can also end up in cans of fruit and juice. The patent mentions carotenoid synthesis in relation to creating a new and different-looking variety, presumably to aid marketing. Aside from that, the Pink Glow doesn't appear to have any other redeeming traits. It can't hold a tune, for example, or calculate tips, or even remind you to floss. But it does cost about five times as much as other pineapples.

Pineapple Nutrition Like most fruits, pineapple is rich in vitamins, fiber, minerals, and phytonutrients -
 specifically vitamins C and A (the latter as carotene), folate, potassium, and manganese. It's also a source of simple and complex carbohydrates, in the form of natural sugars and fiber, respectively. While pineapple is fairly high in sugar, it's also $86 \%$ water and low on the glycemic index. Because it's high in fiber, pineapple is considered a good fruit to eat, even for people with diabetes.

You can see how one cup of pineapple's nutrition measures up below (Source: USDA):

- $\quad 82.5 \mathrm{kcal}$ calories
- 21.6 g carbohydrates
- $\quad 16.3$ g sugars
- $\quad 2.31 \mathrm{~g}$ fiber
- 180 mg potassium
- $\quad 78.9 \mathrm{mg}$ vitamin C

Perhaps most notably, raw pineapple contains a digestive enzyme called bromelain, which breaks down proteins in the body. (Don't worry! I'm talking about the ones you aren't using at the moment; bromelain will not dissolve you from the inside out.)

Pineapple juice has a similar nutritional profile, but with lower concentrations of nutrients due to processing - and unless it's raw, it won't have any bromelain. And since juice generally lacks fiber, it has a faster and greater impact on blood sugar than the whole fruit. Canned pineapple also lacks any bromelain, and often includes added sugar in the form of syrup, for preservation purposes.

For these reasons, you'll get the most nutritional benefit from eating fresh or frozen pineapple as opposed to juiced or canned.


Most research into the health benefits of the fruit focuses mainly on that special enzyme, bromelain.
Anti-inflammatory
A fairly technical review article from 2016 noted bromelain's "anti-inflammatory, antithrombotic and fibrinolytic affects [sic], anticancer activity and
immunomodulatory effects, in addition to being a wound healing and circulatory improvement agent."

I had to look up a couple of those terms "Antithrombotic" means it suppresses the formation of blood clots. Fibrinolytic compounds can break up clots once they've already formed. And immunomodulatory substances change the function of the immune system, either ramping it up to fight infection or calming it down to prevent an overreaction.

A study from 2021 found that bromelain extracts caused changes in certain biochemical pathways associated with the chronic inflammation of both rheumatoid and osteoarthritis.

## Gut Health Benefits

Bromelain is also a nutrient of interest when it comes to gut health. Eating pineapple in moderation has been shown to benefit digestion. It kills some problematic gut bacteria that can cause diarrhea and also displays antifungal properties. Taken orally, bromelain reduces the severity of gastric ulcers and is considered a high-potential treatment for inflammatory bowel disease and colitis.

## Anticancer

Bromelain appears to slow the spread of colorectal cancer, at least in mice and zebrafish. A 2014 study that looked at human cancer cells in vitro and mice with colorectal cancer suggested that bromelain nudges cancerous cells to kill themselves off (a process known as apoptosis). It also shows potential against certain types of oral cancer.

## Antimicrobial

Bromelain also shows strong antimicrobial properties. It attacks the bacteria that can cause gum disease, as well as pathogens found on the skin that can cause acne. And in early 2021, an international team discovered that bromelain might inhibit COVID-19 transmission by targeting the spike proteins in the SARS-CoV-2 virus.

## Metabolic Benefits

Bromelain exhibits positive metabolic effects, as well - at least in rodents. To tease out the mechanisms, researchers in 2018 fed pineapple juice to obese rats (who had been rendered obese through a high-fat diet). They observed that the juice decreased the production of insulin, which shuttles sugar into cells, and leptin, the "hunger" hormone. It also changed some liver functions related to the creation and storage of fat, suggesting that pineapple consumption could possibly help humans preferentially burn fat and reverse obesity.

A 2020 study found that bromelain extract protected mice from fatty liver disease. And in late 2021, scientists published evidence that bromelain could help in treating type 1 diabetes. Rats who received bromelain experienced lower blood glucose, lower cholesterol and triglycerides, and faster wound healing than controls.

## Risks or Side Effects of Pineapple



That's an impressive list of potential benefits from eating pineapple. Before you go all Earl of Dunmore and turn your house into a giant greenhouse (or just start buying fresh or frozen pineapple by the cubic yard), you should be aware of some potential risks and side effects that, while rare, are still worth a mention.

First, the bromelain in pineapples can increase the absorption of medications: antibiotics, chemotherapy drugs, and blood pressure medication, specifically ACE inhibitors. So be sure to check with your healthcare provider if you're taking any of these meds.

Second, pineapples are associated with certain allergic reactions. An epidemiologic study of oral allergy syndrome in Japan found that the combination of airborne pollen and eating certain fruits triggered symptoms. After melons, pineapples were the most common triggers.

Constant exposure to pineapples can also lead to allergic reactions over time. A case-study from 1979 featured a pharmaceutical technician who developed asthma and rhinitis after handling bromelain for years.
If someone already has an allergy to latex, pineapple exposure can cause a cross-reaction. And, there is also a true pineapple allergy that typically starts with a tingling mouth and tongue, and can also include more serious symptoms like gastrointestinal discomfort or difficulty breathing.

Raw pineapple can also irritate the mucous membranes of the mouth, causing sores, itching, and irritation. That is the bromelain, breaking down proteins in your mouth. (I know I said it won't turn you into goo, but that's kind of what it's doing to the soft tissues of your mouth before it gets to your stomach, which can digest it like a champ.) If this sensation makes eating pineapple unpleasant for you, you can sprinkle it with salt or soak it in brine water for a minute - or you can cook it, which breaks down the bromelain. Just keep in mind that you'll lose some of the fruit's health benefits if you cook it.

## Are Pineapples Fthical or Sustainable?

Although pineapples often symbolize tropical hospitality, the history of pineapples can also represent a legacy of colonialism and slavery. The kitchen gardens of early Caribbean plantations grew pineapples to supply white households, presaging the fruit's displacement of indigenous staples and subsistence crops to feed the colonizers' hunger for "dessert foods."

And pineapple soon became a global commodity. George Washington, who first encountered the pineapple in the plantations of Barbados, had them imported from the West Indies, a port in the triangular trade of enslaved Africans.

The first commercial crop enterprise was established in Hawaii in 1886. And as the industry grew and made fortunes for the planters and distributors, other growers followed, often settling on land stolen from the Hawaiian people. Since the fields needed workers, a plantation system was developed. Now that indigenous people couldn't grow food on their own land, they had little choice but to accept work on the plantations at terms set by their colonial overlords. As demand grew, fruit company owners brought in laborers who they exploited practically without limit.

## Pineapple Issues Today

The exploitation of people and land isn't just a relic of the pineapple's colonial past. Modern pineapple production is not without its own issues, too. Costa Rica dominates the global pineapple export industry, with two out of every three exported pineapples coming from its producers. Sadly, the industry has not been a friend to the health of its workers or the sustainability of the land upon which it grows its cash crop.

## Pineapple Pesticides

It's easy to miss the significance of the pesticide issue, as the Environmental Working Group (EWG) includes pineapples in its Clean 15(2) list, largely due to the fruit's thick and inedible skin. But the EWG rating doesn't reflect the harms that pesticides can cause to farmworkers and their environment.

Pesticides and agrochemicals used in growing pineapples on Costa Rican plantations have devastated local communities. A weedkiller called bromelian (which has been banned in the EU) was in use until 2017, and it still pollutes ground and surface water to the point where people are afraid to drink the water. It also harms the livestock on neighboring farms.

## Monocultures

Costa Rican pineapples are grown as intensive monocultures, which causes its own problems. The expansion and intensification of pineapple plantations have led to surface and groundwater contamination, soil erosion, and the buildup of sediment in rivers.

An organization called MOCUPP is tracking land use by the pineapple industry in Costa Rica. They've found that despite a ban on logging old-growth forests, the profit motive has led pineapple producers to contribute to deforestation in the country. Intensive pineapple farming has colonized important unprotected forests, including wetlands and secondary forests.

This in turn causes displacement of peasant families in Costa Rica and threatens their food sovereignty. And while giving people money instead of making it possible for them to grow their own food may feel like a fair trade (after all, it's what most people in the industrialized world, indeed the entire world, think of as normal), the poverty wages mean that the workers who are responsible for our tropical smoothies and piña coladas can hardly afford the cheapest, least healthy processed food for themselves and their families. And the working conditions in these plantations, many of which are owned and run by the Dole corporation, may constitute health and human rights abuses in their own right.

## The Rise of Fair-Trade Pineapple

In response to investigations and activist complaints, Dole and Whole Foods Market have partnered with Fair Trade USA to sell fair trade pineapples that directly benefit pineapple farmworkers in Costa Rica. You can help farmworkers and local economies by buying fair trade and also organic pineapples, when possible, thus enabling the workers who are producing your food to avoid most pesticides. And when you're getting organic produce, you benefit personally, as well.

If you live in another tropical or subtropical country in South America or Africa, or in a subtropical zone in Florida, parts of California, Hawaii, or Puerto Rico, you can get locally grown pineapples from small farms (which may also be grown organically).

## How to Gut a Pineapple \& Know When It's Ripe



If you've ever seen a pineapple display at a supermarket or produce stand, you may have wondered which fruit was ripe, which needed a few days, and which was already past its prime. The key indicators include the fruit's color, firmness, and smell.
The pineapple should have some golden color to the skin, and not present as all green. When you press the skin, the interior flesh should have a little give to it, and not be hard and resistant or soft and mushy. If you can stick your finger all the way through, you're either dealing with an overripe pineapple or you should audition for the next Kill Bill movie.

To serve the fruit, cut off the top and bottom and all the skin. What you do next depends on how you want to use the pineapple - whether you want to serve it in strips, cubes, or rings (or just chuck the chunks into a blender.)

## Pineapples Uses

Once you have got your chunks, rings, or strips, what can you do with the pineapple to add color, flavor, and 'bromelain' to your life? (Remember that it's fine to use frozen pineapple, but probably best to avoid canned chunks or pineapple juice with added syrup and sugar.)

## The World's Rarest Avocados



And the men and women who are trying to collect all of thembefore it's too late. By Alastair Bland, December 4, 2012

Avocado expert and global fruit hunter Richard Campbell poses in a large wild avocado tree whose fruits have long been favorites of locals in the nearby village of Progresso, Belize. The tree has been cloned via grafting and two copies of the original now grow in the Fairchild Tropical Botanic Garden.

Each tree that Richard Campbell walks past in the Florida orchard where he works reminds him of a person, a place, and a story. One of Campbell's favorite botanical biographies here is that of the Blas avocado, a large, green-skinned fruit with flesh as runny as warm butter. He first found the tree about a decade ago in a village called San Mateo in the coastal lowlands of Costa Rica. According to local lore, the tree-a gnarly old giant with smooth skin and olivegreen, half-moon leaves-had grown from an avocado pit discarded more than a century before. The tree's fruit had garnered such regional fame that some people would travel nearly 100 miles during harvest time to collect piles of it in oxcarts.
Campbell located the owner of the tree and got his permission to remove several branch tips for grafting. Today, two clones of the original grow in the Fairchild Tropical Botanic Garden in Coral Gables, Fla., where Campbell and several other fruit collectors have established a vast collection of tropical tree fruits, including mangos, jackfruits, mamey sapotes, and durians. There are some 200 varieties of avocados alone, most of them collected by Campbell and his frequent collection partner, Noris Ledesma, between 2002 and 2008 on a series of expeditions to Central America and the Caribbean. This region, bounded by Hispaniola, Panama, and southern Mexico, is the place of wild origin of the West Indian avocado. This subspecies of Persea americana, or the common avocado, is distinguished by its fruit's smooth green skin, low oil content, sweet and juicy flesh, and large size-usually more than a pound in weight. For many people in Latin America, this fruit is a dietary staple, often used in smoothies, ice cream, avocado mousse, and even juice. (By contrast, the popular Hass avocado-a hybrid of the Mexican and Guatemalan subspecies-has thick, oily meat, well suited for guacamole.) Florida farmers have grown West Indian avocados for years, though only a few varieties. Campbell and Ledesma believe that thousands more exist in the coastal areas south of the Bahamas. Here grow native avocado varieties that occur nowhere else in the world, making them especially valuable to geneticists seeking to preserve and study rare plants. Campbell and Ledesma's goal is to collect as many of these undiscovered avocado types as possible and preserve them in the Fairchild collection. This ambition is not merely the product of aesthetic appreciation of the fruit. In truth, thanks to development, deforestation, and climate change, avocado breeds are disappearing more quickly than Campbell and Ledesma can collect them, and many types could disappear before they are even discovered.
Fruit collectors have been embarking on exotic tree-hunting safaris for centuries. The first leg of the famously doomed 1787 voyage of Lt. William Bligh on the soon-to-be-mutinied HMS Bounty was, in fact, a mission to collect breadfruit saplings in Tahiti. Bligh's assignment was to transport the young trees from the Pacific to the Caribbean and thereby introduce a new source of food to the islands' slave camps. A century later, the U.S. Department of Agriculture sent several explorers to Turkey, Greece, Italy, and North Africa in search of desirable fig varieties, with the hope (ultimately successful) of launching a profitable industry in the similar climes of California. At about the same time, David Fairchild, for whom the Fairchild Garden is named, was conducting his own exotic plant
exploration for the United States government. Fairchild ultimately helped introduce pistachios, nectarines, Chinese soy beans, and mangos to Americans.
Today, scientists from many nations continue the hunt for new or exotic plants. Carrying GPS locators and traveling in jeeps, they pursue wild seedlings or unknown cultivated varieties throughout Asia, equatorial Africa, and Latin America and bring their finds back for propagation in botanical collections. The Fairchild Garden is just one facility of its sort. A vast apple collection in upstate New York, managed jointly by Cornell University and the USDA, includes some 8,000 accessions. Near Sacramento, Calif., the USDA and UC-Davis co-manage an orchard containing thousands of grape, walnut, almond, kiwi, persimmon, and fig varieties, among others. And in Corvallis, Ore., another government-university collection includes blackberries, raspberries, hazelnuts, and hops. The United States isn't the only player in this game, either: The Greek government, for example, keeps a huge assortment of olive trees near Kalamata. These collections, and many others like them, are genetic libraries that preserve natural diversity within species and offer farmers new varieties to grow and sell. (Even home gardeners may access many of the plants grown at these facilities.) Perhaps more importantly, varietal plant collections provide genetic building blocks for the use of fruit breeders, many of whom work with the USDA to develop tastier and higher-yielding fruits. Other breeders focus on creating disease-resistant or drought-tolerant varieties, both increasingly important as climate change begins to pose new challenges for farmers.
Plant-collecting outings are usually focused on known regions of indigenous abundance. For example, a major hotspot of apple and walnut diversity lies in Asia's Caspian and Aral basins, where many thousands of wild and cultivated varieties grow. Explorers targeting grapes have traveled in the Republic of Georgia, while those seeking bananas have looked to Southeast Asia and Central Africa. Typically, the most valuable material is found in wild forests and other wilderness regions, though populated areas are often the best places to look for high-quality fruits, since local people have usually already found (or bred) their region's most appealing varieties.
While jetlagged collectors can make valuable finds by driving rental cars through towns with one eye peering over fences and into backyards, an even better place to begin a fruit-hunting trip is a village's farmers market or bazaar. Here, among the many piles and crates of local fruits and vegetables, may dwell treasures-fruits harvested from backyard trees that aren't known outside the region. When hunting for new avocados, Campbell and Ledesma browse such outdoor markets in search of fruits with outstanding physical features. "We basically want trees that have unusual fruit-whether long, big, purple-skinned, without a seed, whatever," Campbell explains.
If the local market lacks interesting fruits, Campbell and Ledesma may work a trick that has many times drawn great avocados out from hiding: They drive slowly through the dirt streets of a village and, using a bullhorn, invite all the locals to bring their homegrown avocados to a weekend fruit competition, at which the best avocado will win its owner a new bicycle, previously purchased at a local shop on the expedition's expense account. A small crowd of locals, Campbell says, is almost sure to gather at the appointed place with samples of their backyard fruits.
The next step is tracing an interesting fruit back to the tree from which it was picked-an oftenchallenging feat that may depend on the assistance of a local guide familiar with the region's geography and its farmers. Even after the collector has pinpointed the location of a tree, another hurdle may be convincing its owner to allow branches to be cut. "They're often worried that we're trying to put them out of business or that they'll lose their income if they give us any wood," Campbell says. Sometimes, befriending locals in the village bar over several rounds of
beer can do the trick. And to quell any lingering suspicions, Campbell usually provides written assurances of royalties on fruit sales should the tree ever become a cultivated commercial variety.
Through their many expeditions and negotiations, Campbell and Ledesma have brought some knockout avocados back to the Fairchild Garden. There is one they found in a backyard garden in Rivas, Nicaragua called the Pura Vida. The Pura Vida bears gourd-shaped fruits averaging 18 inches in length, with some growing as long as 3 feet. Then there's the Juan Jose, an avocado Campbell and Ledesma found growing on a tree in Costa Rica and whose fruits contain no seed at all-just light, creamy flesh within a soft, green skin. Campbell and Ledesma dubbed another the "car wash avocado" after the rural outpost where they found the tree growing in Guatemala. Similarly, there are two "truck stop avocados," each collected from a roadside truckers' café in Guatemala.
Other fruit collectors have favorite stories from the hunt, too. USDA researcher John Preece tells of the seeds he culled from a grove of wild olive trees growing amid the ruins of the ancient Roman city of Butrint in Albania. He had seen the trees on a hillside from the distance, and access could only be gained by paying the admission fee to the popular tourist attraction. On the same trip, Preece followed a trail of rumors to locate a bizarre walnut with three kernels inside the shell instead of the usual two-not necessarily a walnut with commercial potential but certainly one of interest to a plant geneticist. This summer, USDA geneticist Malli Aradhya was touring Azerbaijan on the hunt for stone fruits, pomegranates, and figs-but the local government-run fig orchard was crawling with deadly gurza vipers. Four groundskeepers had already been struck that summer. Aradhya decided not to test his luck.
Deliberating whether or not to enter a snake-infested orchard to sample figs may seem crazy, but there's urgency in the work of Aradhya and other fruit collectors. In many centers of diversity, like Southeast Asia, Kazakhstan, and Central America, logging operations threaten to eliminate fruits before they've ever been discovered or tasted, let alone cataloged or named. Large-scale agriculture is a threat, too: Cotton farms in Nicaragua, pineapple fields in Costa Rica and Panama, and oil-palm plantations in Southeast Asia have replaced virgin forest and jungle, eliminating endemic treasures that will now never be known. As Campbell explains, "Big plantation agriculture is deadly to genetic resources of tree fruits."
As a result of deforestation, many of the parent trees from which Campbell and Ledesma originally acquired their accessions are now gone-mostly cut down by their owners and sold for lumber. This leaves some of the avocados growing in the Fairchild collection absolutely unique, bearing genes and fruit that now exist nowhere else. The security of the collection will improve as area farmers and gardeners adopt Fairchild's avocados into their own orchards. Certain governments have grown uncooperative with out-of-country agricultural explorers, whether because of political strife or because they recognize the financial value of plant genetics. But plant trade continues freely over many borders, and Campbell and Ledesma recently embarked on a 10-day mango hunt in Borneo. Here, valuable genetic material embedded in the wood, leaves, and fruits of wild trees, is threatened by chainsaws advancing into the jungle. Lumber hunters also scout villages in Borneo and other areas where large backyard fruit trees are increasingly considered more valuable as wood than as producers of a household's food. For every fruit tree saved by the world's plant collectors, many others are sold by their owners to sawmills. Tree stumps in front yards, and village markets stockpiled with imported foods, tell this quiet story.
"In some of these places, it's an emergency," Ledesma says. "We have to find the surviving trees and bring them home before they disappear. The time is right now."

## Some of the Uncommon Varieties of Avocados:

September 10, 2022
You may have dipped into Chouquettes, visited the Hall of fame, and witnessed the beauty of avocado Monroe -but did you know there are even more types of tropical avocado varieties out there?
It is the subject so nice, we decided to write about it twice: Odd, exotic, or rare avocado breeds. So for anyone keeping score at home, that's 10 total tropical avocados you should know about-or 10 more reasons you should nail your next round of pub trivia, as long as the trivia master is all about gardening.

## Mexicola Avocado

Mexicola avocados are small-typically growing around the size of a plumb-and sport a dark black skin. But do not let their looks fool you: These avocados aren't bad at all.
In fact, they're one of the most giving varieties of the natural treat, with skin and even leaves that are edibleand count as delicacies in some Mexican cultures. Aside from that, Mexicolas have a higher oil content than most, giving their fruit an almost buttery texture and taste. Yum!

## Reed Avocado

Reed s another avocado with a deceptive side. Reed Avocados are particularly robust, responsible for the world's largest example of the fruit, which came in at an impressive 5.5 pounds, stretched far wider than a grown person's fully outstretched hand, and even snagged a spot in the Guiness Book of World Records. Still, good things take time. Due to their impressive size, these avocados must mature for nearly a year on their tree before they're ready for harvest.

## Maluma Avocados

One of the most mysterious avocados out there, this variety wasn't even on the map until 1990, when it was first discovered in South Africa.
The ultra-rare variety also sports one of the most beautiful coverings in the avocado world, growing a skin that registers as a lovely dark purple, albeit with a bumpy, lumpy texture that leaves a bit to be desired. And with a pit that makes up a majority of its 14 -inch circumference, this probably isn't the best variety to plan a menu around.
Still, the Maluma gets bonus points for a cryptic back story: Scientists still aren't sure where this variety came from!

## Pinkerton Avocados

As the Mexicola and Maluma show, avocados can come in all colors. And, as the (colorfully named!) Pinkerton can vouch, the fruit can also come in a variety of shapes.
This cultivar is particularly noteworthy for its odd, elongated appearance, looking far less like the pear avocados are often compared to and much more like a zucchini. Still, this oddly proportioned fruit is noteworthy in a number of other ways: The Pinkerton carries a high oil load, giving it a buttery texture and nutty taste. And the avocado is also known for its resistance to cold and frost, making it a great pick to grow in a variety of environments.

## Wurtz Avocados

Rounding out the shapes these fruits can come in is the Wurtz Avocado, which is the only dwarf variety of avocado currently out there. The Wurtz, also known as the Little Cado, bears the name of its creator, Roy Wurtz, who first bred it in 1935 in Encinitas, California.
While average avocado trees can surpass 80 feet, these grow on trees that barely reach 10 to 12 feet-and the size of the fruit matches the size of the source, with these types of avocados only reaching 12 ounces on the high end.
Still, Wurtz Avocados are noted for their delicious flavor and happy green appearance, and they've proven capable of withstanding temperatures as low as 32 degrees F - exemplifying the Shakespearean quote "Though she be but little, she is fierce."

## Hawaiian Varieties:

Compiled in part by the Hawaii Avocado Association, (808) 329-9729, PO Box 925, Kealakekua, Hawaii, 96750

## Beardslee avocado

Beardslee avocados were introduced to Honolulu in 1911, Beardslee is a fall to early winter variety bearing fruit weighing between 24 and 40 ounces. The fruit are oval to pyriform in shape, with a purple skin, and a rich and creamy flavor.

## Fujikawa

The Fujikawa avocado has a consistent heavy bearing spring season. The pear-shaped fruit has a medium-sized seed and green skin with excellent flavor.

## Sharwil Avocado

The Sharwil avocado is an excellent tasting green skin winter variety originally from Australia. It is the main commercial variety grown in Hawaii and is perfectly suited to our tropical climate. The Sharwil has a rich, smooth, creamy texture, and nutty flavor. It has a very high average oil content of $28 \%$, and a small seed. It is easy to peel and resists browning when cut. The size varies from around 7 oz to 18 oz . The Sharwil avocado is the only variety permitted to be exported to the U.S. mainland. Read more about identifying the Sharwil variety.
Mainland exports are permitted from 1 November to 31 March to 43 northern states. To learn more about the Sharwil export requirements, contact your local USDA/APHIS/PPQ office, or contact the HAA.

## Green Gold Avocado

Green Gold is a cultivar developed by the University of Hawaii, considered by many to be superior to the Sharwil avocado. Trees have a long and heavy bearing season generally between January and April. The fruits are medium size, pear-shaped with a small seed, high oil content, and a rough green-gold skin. Type A flowers.

## Kahalu'u Avocado

The Kahalu'u avocado is a large green skin Hawaiian variety that matures in the fall. It has a high oil content which gives it a delicious flavor and soft creamy texture. It has a thin skin and the size ranges from approximately 10 oz to 28 oz. It is usually availably in Hawaii from late October to December.

## Lamb Hass

The Lamb Hass avocado is a California selection bearing spring and summer fruit. It is a heavy regular bearer, with fruit averaging 10 to 18 ounces with skin black when ripe. Fruit may have a larger seed when grown in rainy areas. Type A flowers.

## Linda

The Linda avocado is a regular, heavy bearing tree with fruit that ripens in the spring. The avocados are large and roundish with a medium seed, dark purple skin when ripe. It is often referred to as the "dieter's avocado" due to its lower oil content and good flavor.

## Murashige

The Murashige avocado is a variety that is a heavy bearer with fruit ripe in late spring and early summer. The fruit is large and pear shape, with a small seed and a dark green skin. It has excellent flavor, but ripe fruit does not store well.
Ota
The Ota avocado is a Hawaii selection with a long and heavy bearing season from late in the fall and all through the winter months. The fruit holds well on the tree and is round with great flavor and a small seed.

## San Miguel

The San Miguel avocado bears pear-shaped fruit in fall and winter. The green skinned roundish fruit is about 8 to 20 ounces, with creamy texture that melts in the mouth. It is a productive spreading tree. Type A flowers.

## Malama Avocado

The Malama avocado is a purple skin early fall variety. It is a medium size fruit with excellent taste and a small seed. It is usually available in Hawaii from September to November. Read more about the Malama variety.

## Yamagata Avocado

The Yamagata avocado is a late spring, early summer variety that is generally available from May to June. It has a light green rough skin and excellent flavor.
Nishikawa Avocado
The Nishikawa variety of Avocado is originated in Hawaii. Oval fruit is somewhat resembled Hass variety of avocado, but larger. Has very high oil content. Harvest November and December.

## Nogami Avocado

Not much is known about this variety of avocado, but it has been reported (March 9,2915) that it has been grown very well on the West coast of Florida.

# tropicail fruite 

## Who We Are \& What We Do

The Bonita Springs Tropical Fruit Club, Inc., is an educational not-for-profit organization whose purpose is to inform, educate and advise members and the public in the selection of plants and trees, to encourage their cultivation, and to provide a social forum where members can freely exchange plant material and information. The club cooperates with many organizations, and provides a basis for producing new cultivars. We function in any legal manner to further the above stated aims.

## General Meeting:

The General Meetings will be held on the second Saturday of each month starting at 4:30 pm. The Meetings will be pot luck dinners at the Bonita Springs Fire Control \& Rescue District Station at 27701 Bonita Grande Drive, Bonita Springs, FL Please bring a dish to share.

## Workshops:

Workshops will be held on the forth Saturday of each month starting at $4: 30 \mathrm{pm}$. at the Bonita Springs Fire Control \& Rescue District Station at 27701 Bonita Grande Drive, Bonita Springs, FL and will be pot luck dinners... Please bring a dish to share. This open format encourages discussion and sharing of fruits, plants, seeds, leaves, insects, photos, recipes, etc. This is a great change to receive answers to specific questions.

## Trips:

The club occasionally organizes trips and tours of other organizations that share our interests. The IFAS Experimental Station and the Fairchild Nursery Farm are examples of our recent excursions.

## Membership:

The annual dues are $\$ 30.00$ for both individuals and families. Name tags are $\$ 6$ each.
Send checks to: PO Box 367791, Bonita Springs, FL 34136, or bring to any regularly scheduled meeting.

Feel free to join BSTFC on our Facebook group, where you can post pictures of your plants, ask advice, and find out about upcoming events!
https://www.facebook.com/groups/BSTFC/
Link to the next meeting: https://www.facebook.com/groups/BSTFC/events/ Meetup Link (events/meetings sync with the calendar on your phone!):
https://www.meetup.com/Bonita-Springs-Tropical-Fruit-Club/
Our Website (and newsletters with tons of info):
https://www. BonitaSpringsTropicalFruitClub.com/
Officers and Board of Directors:
Jorge Sanchez, President
Mario Lozano, Vice President
Tom Kommatas, Secretary Janice Miller, Treasurer
Crafton Clift, Director
Eric Fowler, Director
Luis Garrido, Director

## 2022 GFG BOARD OF DIREGTORS

The Collier Fruit Growers Inc. (CFG) is an active organization dedicated to inform, educate and advise its members as well as the public, as to the propagation of the many varieties of fruits that can be grown in Collier County. The CFG is also actively engaged in the distribution of the many commonly grown fruits, as well as the rare tropical and subtropical fruits grown throughout the world. CFG encourages its members to extend their cultivation by providing a basis for researching and producing new cultivars and hybrids, whenever possible. CFG functions without regard to race, color or national origin.

www.collierfruit.org

REMEMBER TO RENEW YOUR MEMBERSHIP!
CFG Officers
President, Crafton Clift
Vice President, Bonnie Hawkins
Secretary, Lisa Hare
Treasurer, Rodger Taylor
CFG Board Members
Jorge Sanchez Micah Bishop Lisa White


