SCIENCE AT FAIRCHILD:
Conservation and
Biodiversity on Pacific
Ocean Islands
WALTER SWINGLE, CITRUS GENIUS
The discovery of a handcrafted wooden cabinet leads to a treasure trove of botanical information.

RESEARCH AT FAIRCHILD
The garden’s research and conservation program is making a difference in the islands of the Pacific.

GARDENING WITH GEORGIA
Vegetable gardens are becoming outdoor classrooms for the next generation.

PLANTS THAT CHANGED THE WORLD
We take a look at the world’s second most popular beverage, tea.
Two for Tea

By Jeff Wasielewski

You haven’t really had tea until you have sat down for a few cups with Barbara and Terry Glancy, tea enthusiasts and owners of Pine Ridge Orchids.

The Glancys’ spacious home sits on 15 acres of well-maintained pine rockland west of Krome Avenue and south of just about everything else. I took tea with Barbara and Terry in preparation for my article on tea for The Tropical Garden’s “Plants that Changed the World” series. The Glancys were very generous with both their wonderful tea and their encyclopedic knowledge of tea history, types and growing methods.

Barbara and Terry like tea in its purest form, loose as opposed to bagged and with nothing added to it but hot water. Sugar and milk are foul words at tea time in the Glancy home. They first got into tea when a friend from Taiwan made the offhand comment that they, as Americans, were bound to a life of bagged tea and could not master loose teas. “Tell me I can’t do something, and I will do it,” Barbara proudly proclaimed. And do it they did!

Taking tea is about slowing down and making time for the experience and relaxing the soul.

Barbara and Terry have traveled multiple times to China and Taiwan since their first trip in 2000 to study, enjoy and purchase teas that cannot be found in the United States. These trips included a 1,200-mile car trip through parts of China hidden to most visitors. The Glancys learned that whether tea is served in an elegant setting with kings and queens or in a brothel on overturned milk cartons, it still must be savored properly.

Barbara and Terry have a collection of teapots and tea cups that is second to none. There are over a hundred pieces in their collection and many of them were handcrafted and painted by Chinese masters. We took tea from a pot that was made of rare purple clay that is found only on the west coast of Lake Taihu in Yixing, China. Because the pot is made of clay, it takes on the flavor of its tea and is therefore used with only one flavor of tea.

The Glancys feel that there is only one way to drink tea—slowly. Barbara thinks that, “Americans are just now coming around to the proper way to drink tea. If you appreciate it enough, you can work it into your lifestyle.” They also worry that the small, family tea growers of China and Taiwan are being ousted by commercial growers that are only interested in the bottom line. Terry said, “You can have 20 different tea farmers on one hill that produce 20 different types of tea.” If China continues to move to a more factory-directed method, these distinctions will be lost. The Glancys are helping to support the small tea farmers of China and Taiwan by getting the message out and promoting the superior tea products that these farmers produce.
Tea

“A true warrior, like tea, shows his strength in hot water.”
Chinese proverb

By Jeff Wasielewski

Tea has spread from its ancient roots in China to blend into hundreds of cultures and countries that are as diverse as the many thousand types of tea they consume. It is the second most consumed beverage in the world behind water and has the ability to soothe, heal and comfort. In many parts of the world, business cannot be completed or friendships sealed without first drinking the customary cups of tea.
History

Tea, *Camellia sinensis*, has a legend that surrounds its discovery. It is said that the revered Chinese emperor, Shen Nong, first noticed the tea plant and drank tea when tea leaves serendipitously fell into his boiling water. Because Shen Nong, known as the father of Chinese medicine, was interested in the medicinal qualities of plants, he drank the water and found it soothing and pleasing. This legend has withstood the test of time and is found in countless books, articles and online resources. Drinking tea medicinally in China dates as far back as anywhere from 2500 to 650 B.C., but tea was not consumed as a common beverage in China until around 800 A.D. in the form of seeds brought by a Buddhist priest named Yeisei who later became known as the "Father of Tea" in Japan. The Japanese valued tea to such an extent that they created a tea ceremony called cha-no-yu, which is so elaborate and important that the person performing the ceremony must train for many years to properly make and serve a single cup of tea in the most graceful, polite and perfect way.

Tea began to spread from the Far East and by the 1600s the Dutch East India Trading Company was trading tea all over the world. Europe got its first taste of tea as early as 1610, but tea was enjoyed only by the rich because of a hefty price tag of over $100 a pound. As tea came down in price, more and more people enjoyed it, including the settlement in the New World known as New Amsterdam (later named New York), which drank more tea than all of England combined at the time it was acquired by the British. England was, in fact, slow to warm to the idea of drinking tea and did not readily accept it until King Charles II married Catherine of Braganza in 1662. Catherine hailed from Portugal where tea was already widely accepted, and she quickly replaced the official English royal beverages of wine and ale with tea. The people of England emulated their queen and a country’s love affair with tea was born.

Tea has recently been in the news in the United States as television personalities and common citizens voice their displeasure of the current administration through the Tea Party Movement, a movement that wishes to invoke the rebellious spirit of the Boston Tea Party of December 16, 1773. The Boston Tea Party occurred when irate colonists loosely disguised themselves as Native Americans and threw hundreds of boxes of tea into the Boston Harbor. This action was a response to a series of taxes, including one on tea, placed on the Colonies by England’s Parliament. The colonists believed that they should not pay taxes to a government where they did not have representation. This belief combined with other factors to boil over into the historic dumping of tea into the Boston Harbor, which lit the fuse for the powder keg that would become the American Revolution.

Types

Tea is separated into three main types: green tea, oolong tea and black tea, with their differences coming primarily from how the leaves are processed after they are picked. Much like wine, tea has individual taste differences that are based on where a plant is grown and the nutrients it receives. Almost all tea is picked by hand because machines damage the leaves and disturb processing methods.

Green tea has a natural flavor and receives the least amount of handling after it is picked as its leaves are very quickly processed after picking. White tea is a sub category of green tea and is somewhat of a specialty tea as it is picked only two days of the year when the tea leaf buds have not opened yet. Oolong tea is a favorite of tea connoisseurs and falls somewhere between green and black tea in the way it is treated after picking. Its leaves are allowed to oxidize only briefly while black tea’s leaves oxidize for 18 to 20 hours. Black tea has a strong flavor and is the most popular tea in the world, representing 75 percent of global tea production. Teas sold to consumers are typically a blend of between 20 and 40 teas of different characteristics from a variety of estates. Tea is sold either loose or bagged and most true tea enthusiasts prefer a loose tea because bagged tea is usually an inferior mix of tea leaves. Loose tea is also favored because it has the ability to expand properly when exposed to hot water, which allows the tea to release its flavor completely unlike bagged tea, which is bound and is sometimes only dust-like remnants of tea leaves. Herbal tea does not contain any true tea leaves and is a blend of flowers, berries, peels, seeds, leaves and roots of many different plants. Iced tea is extremely popular in the United States and some estimates put it at 80 percent of our tea market.

Benefits

Tea was a medicinal beverage in ancient China for over a thousand years before it was consumed for pleasure. The ancient Chinese knew what science is proving now, that tea has beneficial qualities that go beyond the natural calming effect. Tea’s main benefit is that it contains antioxidants, which work to slow the process of oxidation within your body. Oxidation is everywhere and is caused when oxygen molecules react with the molecules of everyday things. When you bite into an apple, it is oxidation that turns the apple brown. When metal is exposed to air, it is oxidation that causes it to rust. Oxidation also introduces free radicals to human tissues and organs that can cause cancer and heart disease. Antioxidants, like the ones found in tea, fruit and vegetables, work to control free radicals and render them harmless to your body. The more tea that you drink, the more antioxidants you consume and the more free radicals you remove. The proven medical benefits of tea combine nicely with its soothing effect to make tea a good choice for both physical and mental health.

Tea has a well documented history, a wide variety of flavors and numerous health benefits. Cultures around the globe have embraced it for hundreds, sometimes thousands, of years and its popularity is still on the rise. From ancient China to the American Revolution, from England’s tea time to the new tea houses opening across the globe, tea has truly changed the world.