

roast



MAGAZINE

May | June 2013



Dedicated to the Success of Coffee Roasters



Tree close to the entrance to Finca La Mula, Panama.

Exploring *the* HOLY GRAIL

GEISHA COFFEE, 10 YEARS ON

STORY AND PHOTOS
BY WILLEM BOOT

I closed my eyes for a brief moment while savoring the warm liquid in my mouth, and I sucked the last drops from the silver spoon. In an instant I tasted the overwhelming aftertaste of jasmine, papaya, lime and honeysuckle. While the flavors gradually faded, I opened my eyes and explored the facial expressions of my colleagues. The tall American taster heaved a sigh of surprise, and the balding Costa Rican nodded with a smile. I felt blissful. It was April 2004. I was a cupping judge during the annual Best of Panama cupping competition. There, the coffee I had just tested—a geisha varietal grown in Panama—celebrated its world

premiere and was first presented to a select jury of professional coffee tasters.

At the time, the coffee sector had been plagued with a years-long crisis. The unprecedented low prices for green coffee, and the subsequent social impact, had hit producers the hardest. Especially for this reason, the discovery of the geisha coffee in Panama was considered a great revelation. Never in my coffee career I had tasted such an otherworldly beautiful coffee; eventually I gave this exceptional geisha a rating of 96 points.

continued on page 40 ►



Sunset above Gesha forest, Ethiopia.

From Anonymous to Exclusive

Geisha is originally an Ethiopian coffee that was first selected in the 1930s in the forested mountains of the western Ethiopian provinces of Maji and Goldija, near the town of Gesha. After journeying through Tanzania, Kenya and Costa Rica, geisha coffee eventually landed in Panama. A small group of coffee farmers planted the then-unknown coffee in different plantations around the village of Boquete in the Chiriqui province.

For at least 40 years, the variety enjoyed a relatively anonymous existence. For most of the 20th century, it was standard practice to plant a mixture of coffee varieties instead of planting varieties separately. Eventually, coffee producers took notice of the geisha plants because of its exceptional width and large, elliptical berries, which display a unique flavor profile by themselves with the taste of super-ripe papaya and spicy, minty finish. In addition, this variety is characterized by the elegant, oval structure of the unroasted bean and the strong perfumed scent of the blossom.

Since the discovery of the exceptional flavor profile of geisha, many coffee farmers in Panama have started to cultivate this exotic coffee variety. Every year the Panamanian coffee producers organize an Internet coffee auction for the global community of super quality coffee roasters. It is no surprise that geisha has been breaking many records; the highest bids have exceeded \$170 per pound.



Bronze tip Geisha tree at Fince La Mula, Panama

Geisha's sudden exclusivity was a fact not lost on producers in Panama. Price Peterson, proprietor of Hacienda La Esmeralda, recalls, "A local reporter here was talking to a Panamanian geisha producer and asked him, 'What are you farmers here in Boquete going to do with this famous seed?' And the producer answered, 'We're going to guard it; we're not going to let it out of Boquete. It's going to become a national Panamanian thing.' The reporter published this, and it went all over the world: 'Panama is going to guard its geisha seed.'

"I got an e-mail, a day later, from Ted Lingle (executive director of the SCAA at the time)," Peterson adds. "Ted said, 'Price, God gave geisha to the Ethiopians, the Ethiopians gave it to Costa Rica, Costa Rica gave it to Panama, and you guys think you're going to keep it from everybody else?' He was absolutely right; it was a silly idea."

Nearly a decade later, geisha is still turning heads. "Whenever we've done blind tastings with customers, roasters or baristas, the geisha on the table has nearly always blown the competition away—from the initial smell in the dry through to the final taste," says Damian Blackburn, owner of Bolling Coffee in the United Kingdom. "People perceive it as sweeter, juicier and having that little bit extra."

continued on page 42 ►



Cherries at Finca La Mula, Panama.



View from Finca La Mula, Panama

First Attempt to Discover Geisha Roots In Ethiopia

The memorable tasting in Panama turned my world upside-down. I felt an intense desire to discover the origin of geisha and possibly become a geisha coffee farmer myself. I had dreams where I wandered through an

immense forest. A flurry of intense jasmine scent wafted through the air, and suddenly I was standing face to face with a lush, wild coffee tree in full bloom.

During a 2006 trip to the birthplace of coffee, Ethiopia, I traveled with a group of coffee experts to the areas west of the provincial capital of Jimma. We admired the vast landscapes, interrupted by beautiful rainforests and dry, barren plateaus.

Unfortunately, deforestation has had a devastating impact on western Ethiopia. An Ethiopian coffee planter told us about the immense diversity of coffee varieties abundantly growing in the remaining tropical forests of the country. One of our explorations led to a vast, virgin forest southwest of Bonga. My grandmother used to say, “Forewarned is forearmed,” and on that day I learned the essence of her life lesson. Our hike was grueling. The rains of the previous day had turned the narrow trail into a quagmire of red clay. Nevertheless, we profoundly enjoyed the unforgettable surroundings.

Coffee pickers, called “collectors,” who autonomously collect coffee berries picked in the forest, came to meet us with their heavily laden mules. After a long and tiring walk, we eventually reached a higher part of the forest. Thousands of proud, wild coffee trees greeted us defiantly. We felt like we were chosen to arrive at this sacred site. I plucked some ripe, red berries of a mature, elongated coffee tree and tasted the lively sweetness of honey and papaya. I felt a tingling bliss, like a blanket of cotton candy covering my tongue. I was silently pondering the thought that this could be a wild geisha, and then I realized the minuscule, less-than-1-out-of-50,000 chance of such a miraculous epiphany. The journey back through the forest appeared to be surprisingly easy. A cacophony of birds, monkeys, frogs and crickets echoed through the forest. While I daydreamed about the possibility of encountering an original geisha coffee tree in this forest, we were startled by the load roar of a lion. It sounded dangerously close. With racing hearts, we accelerated our pace. The local farmers later told us that it had been a close call; we could have fallen prey to an aggressive group of lions had recently started to terrorize this part of the forest.

Growing Geisha in Panama

Shortly after my first encounter with geisha, I was approached by a fellow Panamanian coffee farmer—Graciano Cruz—who told me about a unique piece of land on the slopes of the dormant Baru



Inside the Gesha coffee forest, Gesha, Ethiopia

Volcano. The elevation of 1,700 to 1,800 meters and the beautiful view of the valley south of Boquete gave me enough reasons to turn a dream into reality. The land was renamed “Finca La Mula,” and eventually we planted more than 6,000 coffee trees on the steep, wooded slopes of this new geisha coffee farm.

The planting of the geisha babies was a true challenge for a team of 15 indigenous Ngöbe-Buglé workers. Since the beginning of the 19th century, the indigenous population has been indispensable in securing the existence of the Panamanian coffee culture. They perform all the essential farming tasks, from weed management to pruning and fertilizing the coffee trees, to picking the ripe coffee berries. The hardest work, planting, requires the most physical effort—in particular at La Mula. In the absence of a regular road, all coffee seedlings had to be hand-carried and transported on foot through the trails winding through the forest.

Just recently, I had the opportunity to taste a few cups from the first “nano-lot” produced by Finca La Mula. Fortunately, the flavor profile of my own geisha didn’t disappoint any of the participating cuppers.

Experimenting With Altitude and Processing

Geisha in Panama is processed in various ways: semi-washed with a mechanical mucilage remover, honey style (by drying the parchment beans with all mucilage on the beans) and sun-dried natural processing (by drying entire ripe cherries on a patio, on raised beds or in mechanical driers).

The Hartmann family in Panama produces geisha coffee with all three processing styles. Each method produces distinct flavor profiles; the washed geisha has luscious, ripe papaya and passion fruit flavors; the honey variant is sweeter with more body and the sun-dried natural features a refreshing, minty acidity with a mild fruity flavor. Interestingly, all

these Hartmann-produced geishas display the wonderful and epic jasmine flavor tones which have created for geisha a new category in today’s specialty coffee industry.

As a general rule, the quality of coffee can increase by cultivating the tree at higher elevations. A regular, repetitive weather pattern with warm days and cold nights will slow down the maturation cycle

of cherries and stimulate the complexity of oils in the beans, which are responsible for aromas and flavors. At higher elevations, the intensity of ultraviolet rays increases significantly, which can benefit the trees under most conditions.

Growing at high elevations is not without risk, however. In Panama, I founded a farm called Finca Sophia with my friends Helen

continued on page 44 ▶



Coffee blossom at Finca La Mula, Panama



Willem Boot at Finca La Mula, Panama



Coffee cherries at Finca La Mula, Panama

Russell and Brooke McDonnell of Equator Coffee. Finca Sophia has altitudes over 1,900 meters. Under these conditions, growing geisha coffee trees is extremely challenging. The UV radiation can actually burn the leaves of the trees, and under the impact of wind and cold a plant disease called *derrite* (dieback) is likely to occur, caused by the fungus *Phoma Costarricensis*.

But when high-altitude growing succeeds, the result can be sublime. “Every time we go higher, it just gets better,” Peterson says. “We have some coffee here in Cañas Verdes that’s at 1,750 meters. Every year it’s just that much better than the coffees that are below. [My son] Daniel has now planted some at 2,000 meters. It really gets cold up there. I’m part of the school that believes that good coffee requires cold nights.”

Approaching the Holy Grail in Ethiopia

Since the first discovery of the exotic flavor profile of the Panamanian geisha, I felt compelled, almost obsessed, with the thought that somewhere in the western Ethiopian highlands the original mother tree of this geisha could be found. After the unsuccessful geisha exploration tour that I organized in 2006, I became convinced that the real answer



On our way to Gesha, Ethiopia; inspecting the river

to this fascinating coffee mystery could lie in a heavily forested area, situated on a 1,900-meter plateau north of the town Gesha in the region of Maji and Goldiya. My inquiries with local officials in the nearest town of Mizan (at least 120 miles away from Gesha) provided only few clues. No one had firsthand knowledge of how to get to Gesha and what the local conditions were like. Some claimed that the area was inhabited by indigenous nomadic tribes and that the presence of lions and crocodiles would complicate the access to the plateau. My curiosity only grew stronger and my daydreams returned.

Several years went by, and in 2009 I met Adam Overton, an American documentary filmmaker, and Rachel Samuel, an Ethiopia-born photographer. They told me about their idea to start a coffee farm in Ethiopia, and after much persistence they found a prospective 400-hectare plot of land available for lease near the town of Gesha. Their first descriptions of the site after an initial exploration in the summer of 2011 made my heart beat like a samba drum.

Shortly after, we flew to Addis Ababa and made the long two-day journey to Gesha with a well-equipped Land Rover. The plan was to complete our assessment of the possible farm site and to evaluate whether or not the land could be developed with coffee. Traveling to western Ethiopia in September is a bad idea, as we would find out. Dirt roads had changed into mudslides, and gentle streams were transformed into treacherous rivers. To make matters worse, our vehicle



▶ Inside the Gesha Forest; interesting shape of coffee leaves



On our way to Gesha, Ethiopia; getting stuck in the river



Johannes Samuel at an old growth tree near Gesha (photo by Rachel Samuel)

got stuck in the middle of one of these waterways with not a single tree around to attach the winch of our Defender. Ultimately, we got ourselves out and continued our coffee pilgrimage.

Upon entering the forest near Gesha town, two guards carrying dangerous-looking spears, for safekeeping against rogue lions, were leading us. I felt an exhilarating sense of excitement despite getting drenched by rain and feeling the bone-cold breeze on this high plateau. Strangely, we found only a few wild-growing coffee trees, and we figured that the forest, under threat of being decimated altogether, might have mysteriously absorbed the original native population of coffee trees. We did find a spectacular countryside, interlaced with patches of jungle and inhabited by indigenous Minit people and other local tribes. I felt like Henry Stanley right before having his epic “Doctor Livingstone, I presume?” moment.

During my second visit to Gesha in February 2012, we explored other remaining forests in the area. According to the locals, at least 30 years ago a giant fire swept through the district, destroying massive amounts of woodland but creating thousands of acres of arable land for the local population. By now, Overton and his Ethiopia-born business partner Yohannes Samuel had founded Gesha Village Forest Estate, and we started a collaboration that includes the production, promotion and marketing of genuine Gesha coffees produced through this venture.

During one of our explorations we passed through a small settlement with elegantly shaped roundhouses and natural fences made of cacti. The locals offered us a cup of “chello,” an ancient coffee drink made of toasted coffee leaves infused with garlic, cloves, forest onions and other spices. I savored the liquid from a smudgy cup and felt the invigorating caffeine jolt with a minty, spicy aftertaste.

Less than 30 minutes later, we found ourselves entering the nearby forest, and I felt as if I were in heaven. We had stumbled upon an uncountable number of wild coffee trees growing under the soothing protection of primary shade. Practically all of the trees were in full blossom with orange and black butterflies circling about, lending the scene a “Coffee in Wonderland” feel. An invigorating scent of jasmine perfumed this pollen-infused paradise. The reality had become better than the dream itself! Overwhelmed by the experience and drunk with joy, we returned to our vehicle, which was surrounded by a large group of curious and playful Gesha kids.

In this forest, we probably encountered many Panama geisha-related coffee genotypes, which should be proven through scientific studies (genetic comparative research) and by performing cup tasting research. As coffee genetics experts explain, geisha took on new characteristics as the original cultivar journeyed from Ethiopia to the New World.

“The geisha cultivar presently in Central America originated from the progeny of seeds



Near Gesha, Ethiopia (photo by Rachel Samuel)



Butterfly in the Gesha forest



Coffee cherries in the Gesha forest



Sipping "chello" near the Gesha forest, Ethiopia.



Young tribe member near Gesha, Ethiopia



Harvesting cherries in Gesha forest (photo by Rachel Samuel)

collected in the Gesha area in 1931, and was selected after several cycles of multiplication (with possible genetic drift and genetic introgression) in different countries (Kenya, Tanzania, Costa Rica)," says Jean Pierre Labouisse, who works with CIRAD, a French research center working with developing countries on agricultural and development issues. "It is a unique genotype that can be multiplied by cloning or by seeds in isolated seed gardens."

Though the geisha cultivar and the coffee trees I encountered in the Gesha forest likely have some common genes, they are not identical, says Labouisse, who spent multiple years performing variety research in Ethiopia. "The characteristic of Gesha coffee in terms of yield, resistance to coffee rust, [and] quality can be very variable. By using appropriate DNA markers like micro-satellites you can assess the genetic variability of those populations of gesha."

What's Next for Geisha

What's the outlook for geisha? For sure, she's here for the long run. Coffee professionals and aficionados seem to unanimously recognize the unparalleled flavor profile of geisha coffee. Most likely, producers around the world will continue to plant the "queen of all coffees"; they will strive to select better-performing geisha varieties and reproduce the seeds of these sub-strains. While some producers in Panama already discovered a distinction between the "green tip" geisha (more acidity with intense jasmine) versus the "bronze tip" (more sweetness and creamier body), the trend of trying to elevate the quality of this variety to the highest possible levels will continue.

On the consumption side, it appears that certain consumers fully embrace the flavors of geisha. When Starbucks introduced geisha at \$7 per cup in some of their outlets last year, consumers did not hesitate and within days, their limited inventory of this unique coffee was sold out.

After its discovery at the Best of Panama competition, most of the country's geisha was purchased by a select group of roasters in the United States before it expanded to a wider audience in the United States, especially in Asia, says Peterson, who has been producing geisha for more than eight years. "I don't think we will ever get over \$100 per pound again," Peterson says. "It's very nice, frankly, to see the price settle down to a \$20 to \$50 range, which is much more solid and much more reasonable."

"I believe that geisha will become a category in itself in the industry with duration," says Yiannis Taloumis, founder and general manager of Athens-based Taf Coffee. "The interesting thing with the geisha compared to Blue Mountain is that its growing and



Young Minit tribe member near Gesha, Ethiopia

continued on page 48



Preparing a germination bed for coffee seeds near Gesha, Ethiopia

processing can take place in several countries in Central America as well as Colombia.”

Nearly all of the coffee professionals I interviewed seem to agree that trying to establish some sort of certification scheme for geisha coffee is a bad idea. They claim that the most important step to procure “real” geisha coffee is the relationship with the producer of the beans because he or she is the only one who can truly guarantee the authenticity of the product.

“I think the mother of all gesha is here in Ethiopia, and we should be trying to find and secure seed stocks and tissue culture from here, versus worrying about certification,” says Darrin Daniel, Stumptown Coffee’s head green buyer. “I have never doubted [the authenticity of the coffee we have purchased], but we have only bought gesha from known sources” in Guatemala, Panama and Honduras. “Each has its own terroir and

microclimates. I love them all,” he adds. “Who you buy from [is] the certification in and of itself.”

Sander Reuderink, a trader at InterAmerican Coffee in Hamburg, agrees. InterAmerican has been purchasing geisha since 2011 and was the largest buyer at the 2012 Esmeralda auction. “I have no reason to believe that we have ever been offered non-genuine geisha lots, since the bean morphology is normally very clear,” Reuderink says. “We have, however, often received samples of geisha that were not interesting cup-wise, probably due to lack of altitude or because the trees were still too young. Therefore, we do not think that certifying beans as geisha is a guarantee for quality.”

Jaromír Tuček of Doubleshot in the Czech Republic also is concerned about producers growing the variety at lower altitudes. “I am little bit worried that the name/brand will be partially damaged by



Friday market in Gesha, Ethiopia

many low-grown geishas that are starting to appear from countries all around Latin America—plus, for example, Malawi geisha, sold in Europe to many roasters who believe it's the famed geisha variety," he says.

Like any specialty coffee, geisha needs to be treated with care as it makes its journey from the farm to the roastery. "In the green form, I've heard first hand stories of geisha coffees that have died on arrival and been rendered unsellable when there's no 'wow' factor aromatics to back up the hefty price tag. However, this could be true of any coffee that's not been dried or shipped correctly," says Blackburn of Bolling Coffee. "In vacuum or GrainPro, we've had no problems with the green, but I'd consider protective methods to be critical for the shipping of geisha."

Ultimately, Blackburn adds, "From roasting to customer, I think any coffee with fine floral aromatics needs to be

treated carefully and in the hands of the end consumer as soon as possible. Washed geisha needs to be brewed fresh."

Super-Premium Varieties of the Future

The geisha variety was pulled from obscurity a decade ago. As the specialty industry moves forward, what other varieties will appear at the firmament of super-quality coffees in the near future?

Initiatives of quality pioneers like the Peterson family in Panama, which has been planting a large number of varieties selected through the CATIE research center in Costa Rica, might result in other spectacular discoveries of previously unknown coffee varieties. Other options for top-quality producing coffees are varieties like pacamara, San Ramon, maragogype, typica and various bourbon selections—for



Geisha cherries at Finca La Mula, Panama.

example the bourbon pointu from the island of Réunion. Only time will tell what coffees will set our taste buds tingling in the future.



WILLEM BOOT *lives and works near San Francisco. His company, Boot Coffee, specializes in consultancy and training for the international specialty coffee industry. Coffee courses are held in San Francisco, Panama, El Salvador and The Netherlands. E-mail him at willem@bootcoffee.com.*



View West from Gesha plateau, Ethiopia (photo by Rachel Samuel)