



CJO1402 – Crown Jewel Timor-Leste Organic Eratoi Home Processed and Raised Bed Dried

January 28, 2021 | [See This Coffee Online Here](#)

Overview

This is an organic, traditional washed coffee from Timor-Leste, produced and processed by a group of 15 farmers organized around an organization called Café Brisa Serena Timor-Leste.

The flavor profile is sweet, bright, balanced, and clean, with ample viscosity and tasting notes of apricot, nougat, and green grape.

Our roasters found the coffee to respond quickly to heat early in the roast, and produce balanced and interesting flavors at gentler, longer profiles.

When brewed, our baristas found good nuance and sweetness in conical drip filters and noted the strong potential for extraction as espresso and full immersion such as a French Press.

Taste Analysis by Sandra Loofbourow

This coffee blows away expectations. It has a bright, clean, and pronounced acidity with plenty of sweetness. The fruit characteristics are elegant and clean erring on the side of caramelized sugars with persimmon and applesauce, as well as maple syrup sweetness. It has great complexity, with gentle florals balanced by a thick body and cacao nib astringency. As the cups cool the simple sweetness of pecan and praline became more candy-like and intense, and the fruit notes became more and more distinct. From first sip to last, it's a tasty, sweet treat!



Source by Evan Gilman

This is the third year working with Café Brisa Serena Timor-Leste, and a great time to reflect on the work they have done with their partner producers and [Peace Winds Japan](#) to enhance coffee quality and get access to the international market. It must be said that their coffees have a level of transparency and traceability not commonly found. We can learn about this coffee's travels from the sub-village level, all the way to export from Timor-Leste; and this is true for all lots of coffee from CBS. They are truly doing some remarkable work. You can read more about them on our blog in [last year's](#) or [this year's interview](#), and we'll be having a webinar with them on March 5th, 2021 where you can ask questions!

As for the background of this relationship, the story begins with my trip to the Philippines to do some work with Kalsada Coffee. During this time, I met [Hirofumi Yamamoto](#), who was attending Benguet State University and doing some development work on the side as well. Hiro was doing work with various communities to introduce agricultural programs related to integrated pest management and coffee shrub rejuvenation, and it is from here that he traveled further afield to Timor-Leste, Myanmar, and many other places.

Hiro introduced me CBS Timor-Leste shortly after my return to the US, when I began working at Royal Coffee. After many exchanges of samples, emails, and (just lately!) video calls, we found their arrivals improving year over year, and have built a great working relationship with them.

The Eratoi 1 in particular comes from Ducurai village, in Letefoho, Ermera municipality. Peace Winds Japan has worked here for years; farmer training began in 2004, and in 2008 they undertook the major project of building a water tank for the community. In Eratoi sub-village, whose name translates literally as 'a prayer for water,' it is extremely important to have access to water. Their local spring emanates from a mountain named Usululi, which is widely regarded as a holy site.

Through this and other efforts (planting nitrogen-fixing [Casuarina trees](#), introducing composting programs), PWJ has helped support communities throughout Timor-Leste. Their current project focuses on agroforestry education, taught by the inimitable [Eko Purnomowidi](#), a regional expert from Java, Indonesia who has had a hand in innumerable development projects.

Each year, older coffee trees are culled, and less productive branches are cut after flowering and pollination. In the past, after Portuguese colonialization, trees were allowed to grow to heights up to 10 meters, which meant productivity was severely affected until the new measures were undertaken. Trees are much more productive now after years of training and uncompromising rejuvenation efforts on the part of the farmers in this region.

During the harvest season, everyone in the sub-village helps pick in a certain area, starting at 8am every morning until the area is finished. Working together to process the coffee using small home mills, the



group generally finishes processing by 5pm with coffee already on the raised drying beds. Many hands make light work!

Water usage and fermentation times are kept to a minimum here, and next year there is talk of trying natural processing. Something to look forward to in 2022...

Grower:	15 producers of the Eratoi 1 group, organized around Café Brisa Serena	Process:	Home Processed: Depulped and dry fermented, washed, and dried on raised beds
Region:	Ducurai Village, Letefoho Sub-District, Ermera Municipality, Timor-Leste	Cultivar(s):	Timor Hybrid, Typica
Altitude:	1300 - 1500 masl	Harvest:	June - September 2020

Green Analysis by Chris Kornman

A unique green coffee selection here with some interesting physical specs. Relatively large screen size, widely distributed in the 16-19 screens, accompanies slightly lower than average density and very low moisture readings.

One inference we can draw here is that the coffee has been nicely dried prior to transit. Transit delays, climate fluctuations, and the simple fact that Timor-Leste is practically on the other side of the world make drying a critical part of this (and any) coffee's success, and I'd far rather see dry coffee than wet, given the choice.

Additionally, the combination of large beans at lowish density means that the coffee has a relatively high surface area to volume ratio. In the roaster, this will supply more surface area for heat to interact with, but without a lot of density to soak up all that heat energy. In combination with low moisture and water activity levels you may find the coffee picks up momentum quickly in your roaster. Be sure to check Candice & Evan's notes on manual roasting styles to get a better understanding of how all this theory plays out in practice.

The green here is comprised of two cultivars, both historically important globally and with local Pacific Island origins. Typica is the name of the first arabica variety cultivated on nearby Java in Indonesia. It was transported from India's Malabar, where it had been planted by Baba Budan and/or the Dutch, both of whom selected / stole it from a Yemeni garden. Colonizers, especially the French and Dutch, then spread its cuttings widely and, despite its low yield, became the world's first truly global coffee plant. It remains coveted by roasters for its high sensory quality potential, and is usually characterized by oblong cherries and seeds.

The Timor Hybrid is a double-edged sword. This spontaneous arabica-robusta cross saved the Pacific from coffee-extinction in the wake of a 19th century rust epidemic. It also provided the genetic baseline for most of the modern cultivars developed for disease resistance, higher yields, larger screen sizes, and general hardiness. Of course, it also has a reputation for qualitative similarities to its "robust" parent species, so it is often shunned by specialty roasters. I'm pleased to say that, at least in this case, the genetic predisposition has been overcome by



conscientious cultivation, immaculate prep, and attention to detail at every step from the farm to your cup. For that, we surely have the farmers of Eratoi and the logistics and quality support of Café Brisa Serena to thank.

Screen Size	Percent		Density
>20	4.89		678 g/L (free settled)
19	16.28		740 g/L (Sinar)
18	29.06		
17	20.61		Total Moisture Content
16	19.73		9.5% (Sinar)
15	8.6		
14	0.82		Water Activity
≤13	0		0.449 @ 19.66C (Rotronic)

Diedrich Analysis by Candice Madison

Roasting without green metrics is not a preference of mine or recommended for consistency and repeatability, but boy, it can be a lot of fun! This gorgeous coffee from Ermera municipality ended on my desk before the data had been sent over, and I decided to roast it anyway – break up the pandemic monotony a little!

In the interest of education (yours and mine!) and being aware that I wanted to be able to show the changes that I recommend to you, after I have had an initial crack at roasting a coffee, I decided to pop a second batch in the roaster and illustrate the differences in the cup, that a couple of small changes to the first roast made.

I wanted to be somewhat cautious with my first roast, and hesitant about what to expect, I decided to start at the higher charge temperature I have been trialing – 380F, but I kept the gas at 20%. I kept the air fully closed. As always, my aim is to always get to stage 2 quickly but giving enough heat stress to the coffee in stage 1 to encourage the enzymatic reactions and acid development to express all the lovely fruit and floral notes of this exceptionally complex coffee.

When the 4lb batch dropped over 200 degrees, and seemed to hover around the turning point, my heart sank a little, even turning up the gas to 90%, I realized that this coffee was going to need a push up the hill, because it hadn't had the heat it needed from the start. I had been worried that I would under-compensate for a potentially dry coffee – which this is, I discovered between roasts – but, in fact, I had overcompensated. The size of the beans more than made up for my caution going into the drying phase. Their volume allows for higher heat from the start; however, the moisture level indicates that this batch will fly in the roaster without careful management.

As the first roast proceeded, I made no gas changes before stage 2 and no changes to the airflow, which remained at 0%. The roast remained steady and once coloring had been marked, I opened the air 50% and dropped the gas twice, in order to try an eke out some extra time in stage 2, but my decision to drop the coffee in at a low heat soak at the charge.



You have to be early and quick with this coffee. Although my strategy may have been successful with a different coffee, it still only managed a far smaller percentage of time in stage 2, before the coffee cracked, loudly, at 376F. The end of the roast was as I prefer, 15% development (around 1.30 mins), finishing at 399F

If you look at the roast curves, they show that I made the decision, in the second roast, to charge the drum at 90% gas. This change meant that the turning point was around 10F higher and 10 seconds faster in the second roast. Interestingly enough, this is the only change I made to the second roast, other than to make the airflow change of 50% occur before stage 2, rather than after. All other gas changes made echoed the first roast, they just happened far earlier in the roast. Both roasts finished within 20 seconds of each other, and both had the almost exact same post-crack development time/ratio, but there was a statistically significant difference between the time spent in stage 1 and stage 2.

It wasn't that I had been unhappy with the first roast entirely, I just knew that the decisions I made to the second roast plan would produce a more complex and crowd-pleasing cup from this change to stage 2 of the roast.

The proof is in the cups – as it always is – so I dove in. I was really pleased with the first roast; tons of brown sugar sweetness, fudgy, almost, with a lovely note of vanilla bean and stone fruit, balanced by a piquant sweet lime acidity. Where the first roast was pleasing in its balance, the second hit it out of the park with its complexity. The lime acidity was accompanied by notes of kumquat and hints of mandarin. Blossom notes lifted a lovely stone fruit, as well as persimmon and stewed green apple. Sweetness hits from brown sugar and butterscotch. And flavors of black tea and cacao all softened by a creamy body.

I'd make a tasty morning pour over at home of the first roast, but I think you'd get the most versatility out of the second roast. I can't imagine a brew method it wouldn't shine on, from espresso to pour over! Enjoy!!

Quest M3s Analysis by Evan Gilman

Unless otherwise noted, I follow a set standard of operations for all my Quest roasts. Generally, I'll allow the machine to warm up for 15 minutes until my environmental temperature reading is at least 250F, weigh out 150g batch size, and begin roasting when I've reached my desired charge temperature. [Read my initial post here](#) and my [updated post here](#).

Roasting this coffee was a treat, though I must admit I got taken on a little bit of a roller coaster ride! This week, I didn't have access to the green metrics before roasting, so I was going in a bit blind. All of what you see below will make sense with that knowledge.

For this coffee, I decided on a lower charge temperature (384F) and introducing airflow just a touch later (right before Maillard). The largest difference in my roast for this week was that I opened the back of the Quest to stop



as much airflow as possible, allowing the coffee to soak up heat until drying stage was over. The goal here was to push through the drying stage and reserve as many tasty acids as possible. At 275F / 3:08, I closed the back of the roaster and increased fan speed to 3, which boosted my rate of rise considerably - so considerably that I ended up rushing through Maillard process much faster than anticipated!

I was able to temper the rate of rise by really raking back the heat application and increasing fan speed to maximum. In fact, the last two minutes of this roast didn't see any heat application at all! I increased fan speed to full at 345F / 4:35 and cut heat to 0A at 367F / 5:20 and coasted into first crack at a leisurely 12F/min.

While I didn't get to spend as much time in Maillard as I would have liked *proportionally*, I still think that the flavors popping from this roast were right what I was after. This was a zippy cup, even with nearly 20% of the roast spent in post-crack development. The roast itself was only 7:30 in total after all.

Look for zesty clean lime acidity, plenty of clean brown sugar sweetness, and a toasted hazelnut aromatic that really fades on cooling. As I sip through this cup, it only improves, leaving behind any trace of (to my palate, pleasant) nuttiness behind. On full cooling, I got tons of vanilla wafer and hard candy sweetness. I finished my first cup of the day faster than I'd like to admit.

Try this coffee as an espresso and full immersion, though you're going to be rewarded very nicely by filter drip. There's so much sweetness here, I can't wait to taste an espresso made with this coffee!

Ikawa Pro V3 Analysis by Nate Lumpkin

As of September 2020 we are running all Crown Jewel Analysis roasts on an Ikawa Pro V3, using the most recent app and firmware version on "closed loop" setting.

I put this coffee through the Ikawa on a handful of our usual roast profiles after getting the chance to taste Candice's roast on the Diedrich last week. I enjoyed its mix of tropical fruit, gummy candy, floral, and cookie-like notes, and was curious to see how it would behave on different profiles in a small roaster.

Our standard hot and fast profile cracked surprisingly late, at 5:37 out of a 6 minute roast, which made me think it would taste somewhat under-developed. It had a difficult to place floral aroma, like magnolia, and notes of starfruit, pomegranate, cherry, toffee, and honey. As it cooled, its acidity became a touch over-pronounced and sharp, particularly on the finish. Though I really enjoyed its broad and juicy flavor profile, I found this cup somewhat unbalanced. Perhaps these less dense beans needed more time earlier on in the roast to absorb enough heat.

Our second profile, which lengthens the Maillard phase by thirty seconds, cracked at a more appropriate time and produced a more proportional development phase as a result. Its aroma was like a fresh-baked chocolate cookie—quite different from the previous cup!—and had tasting notes of red grape, passionfruit, and cocoa powder. It was



noticeably sweeter than the previous cup, again like baked sugar, and had a bright, sweet acidity, which reminded me like the crunchy sugars in sour gummy candy, which I'll treat myself to sometimes. This was much more well balanced than the previous profile, but I missed the floral notes.

Our last, longer and cooler profile moved through its phases at more appropriate timing, like the previous profile. The cup had an aroma like cut dates, and tasting notes of fig, blueberry, grape, cinnamon, allspice, and again that signature note of cocoa powder. It had a coating body and its overall quality was quite clean and sweet. This was quite delicious and I loved those spice notes, which I didn't recognize in the other cups. It was well balanced and pleasant, and I highly recommend a flavor profile like this one, though the hotter profile with the emphasis on the Maillard phase had a more pronounced acidity, which I also loved.

You can download the profile to your Ikawa Pro app here:

Roast 1: [Crown Standard SR 1.0](#)

Roast 2: [Crown Maillard +30 SR 1.0](#)

Roast 3: [Crown 7m SR LowAF 2](#)

Brew Analysis by Nate Lumpkin

I decided to brew this coffee on the Fellow Stagg and Hario V60, two common brew devices that can give a wide contrast in filter style. I did not know what to expect from this coffee—though I've tasted many coffees from neighboring Indonesia, I think this may be the first coffee from East Timor I've had the chance to sample!

On Hario V60, this coffee brewed through a little longer than I'm used to, at 3:09, but showed an appropriate TDS and extraction of 1.39 and 20.39%. In the cup I tasted a surprising variety of flavor notes: it had an aroma of pecan and oolong tea, and when hot, tasted of cedar, apple, pecan, and maple. As it cooled, a variety of fruit notes emerged, including persimmon, starfruit, white tea, apricot, date, and praline, and a candy-like sweetness, like gummy bears. Its body was syrupy and pleasant. This was a great cup!

On the Fellow Stagg, this coffee brewed through just a little faster, at 2:38, and produced only a slightly higher TDS and extraction, at 1.41 and 20.69%. In the cup however it had a heavier and denser body, with a slightly simplified flavor profile. I tasted apple juice, dried apricot, baked apple, pear, toffee, and sage, with a hint of rose petals, and a long, Baker's chocolate finish. This cup wasn't quite as clear as the previous cup; its flavor profile lacked some clarity, and its body felt a touch chewy. As you can imagine, my preference was for the first cup! I usually associate the Stagg with higher extraction rates, so even though the math showed only a small increase, I'm not surprised that it showed up in the cup this way. I would recommend a cone-shaped brew device or another method to keep overall extraction on the lower end, as some of its flavors seemed to get lost in the stronger cup.



Roast	Method	Grind (EK43)	Dose (g)	H2O (g)	Ratio	Bloom (g)	Bloom (s)	Total Brew Time	TDS	Ext%
Diedrich	Hario V60	8.5	18	300	1:16.6	42	30	3:07	1.39	20.39%
Diedrich	Fellow Stagg	8.5	18	300	1:16.6	42	30	2:38	1.41	20.69%