



# CJO1445 – Crown Jewel Ethiopia Organic Chelbesa Raised Bed Natural

October 15, 2021 | [See This Coffee Online Here](#)

## Overview

This is a traditional raised bed natural coffee from Gedeb, Ethiopia, grown by smallholders organized around METAD's Chelbesa washing station.

The flavor profile reminded us of peach cobbler, with a smattering of caramelized and toffee flavors, accented by bright fruit notes like green apple and passion fruit.

Our roasters took many different approaches but largely agreed that shorter post-crack development percentages performed best.

When brewed, the coffee takes its time to extract as a pour-over and has occasional tendency towards high TDS. Our most delicious brew was on a V60, and is currently in service at the Crown; come taste it!

## Taste Analysis by Chris Kornman

Some coffees, like this natural from Chelbesa, have a unique tendency to alter dramatically in flavor profile depending on the style of roast. Understanding the coffee's true character can be a challenge after just one or two roasts as a result, so we put this selection through a number of different iterations before collecting notes on flavor.

At its core, the coffee is a peach bomb, with a strong desire to caramelize. Notes of toffee and brown sugar attach themselves to the strong stone fruit notes. Around the edges, tarter fruit notes like green apple, passionfruit, and cranberry linger, and floral notes flutter in the backdrop, somewhere close to the borderline between botanical and herbal – think lemon basil, oolong tea, and lilac.



## Source Analysis by Mayra Orellana-Powell

This coffee is sourced from METAD Agricultural Development PLC (METAD). METAD is a third generation family owned business with a rich history that began after World War II when the Ethiopian Emperor awarded Muluemebet Emiru, the first African female pilot and family matriarch, with land in the Guji and Sidama zones that has become the Hambela Coffee Estate.

METAD is managed by Aman Adinew who returned to Ethiopia after many years working abroad at the executive level for multiple fortune 500 companies because he wanted to make a difference for his family and community. Through Aman's leadership, METAD has strengthened the local community with employment opportunities including a workforce that is over seventy percent women, educational opportunities including sponsorship for a state-of-the-art elementary school with more than four hundred students, and healthcare for employees.

METAD was also first to partner with Grounds for Health in Ethiopia to implement a successful cervical cancer screening program for women within the coffee growing communities. METAD provides technical assistance and shares modern farming equipment with other local farmers. METAD also has the first and only private state-of-the-art SCAA certified coffee quality control lab on the African continent used to train both domestic and international coffee professionals.

<b>Grower:</b>	METAD Agricultural Development plc (METAD)	<b>Process:</b>	"Natural" dried in the fruit on raised beds in the sun
<b>Region:</b>	Gedeb District, Gedeo Zone, Southern Nations, Nationalities, and Peoples' Region, Ethiopia	<b>Cultivar(s):</b>	Indigenous Landraces & Selections
<b>Elevation:</b>	1900 – 2200 masl	<b>Harvest:</b>	October - December 2020

## Green Analysis by Chris Kornman

This typically dense coffee from southern Ethiopia, processed by METAD, also measures as small and compact bean sizing. The moisture and water activity here is a little higher than we typically see in Ethiopian specialty selections but still well within the "normal" realm. As Evan notes and as I discovered through trial and error, this slightly elevated water activity figure suggests that the coffee will respond quickly to heat application during Maillard and may have the potential to taste a little better with additional caramelization.

While there are certainly true heirloom coffees grown in much of Ethiopia, it's also true that a relatively small number of highly controlled cultivars -- both lab-crafted hybrids and selected landraces -- are often the main components of specialty coffees throughout the nation. The selections have not been denoted here for us, but it's fair to assume they are similar stock to the greater southern coffee regions, hearty and well adapted for cultivation in this, one of the world's most coveted terroirs.



Screen Size	Percent		Density
>20	0.00%		710 g/L (free settled)
19	0.00%		759 g/L (Sinar)
18	1.76%		
17	8.06%		<b>Total Moisture Content</b>
16	27.15%		10.8% (Sinar)
15	36.13%		
14	21.04%		<b>Water Activity</b>
≤13	5.86%		0.577 @ 20.83 C (Rotronic)

## Loring S15 Falcon Analysis by Chris Kornman & Doris Garrido

This is a fun and complex coffee, and one that ultimately challenged Doris & I in our expectations of natural Ethiopian coffees. After each roasting an iteration on the Diedrich IR-5, we were disappointed with both results. The coffee ran away quickly at the end of the roast, and while Doris had cut her profile short and I'd intentionally tried my slow and low approach, neither felt right.

We ordered a full 22lb box and decided to take the coffee to the Loring. We've been playing with some smaller batch sizes and had fairly comfortably developed a 12lb roast on the machine, so again we split our coffee into two batches, one for each of us, at 11lbs each.

For the first roast, I took the controls, hit the gas hard early, and put on the breaks a bit in order to stretch Maillard. The strategy worked well, but despite reducing the gas to minimum 20% almost a full minute before first crack, the drum had accumulated so much momentum the roast threatened to fly off the rails. I panicked and hit the manual air cool button (usually used to cool the roaster down during idling), which "opens the purge gate and turns on the cooling fan." Unfortunately, when the burner is on it also ramps it up to 100%, so the curve (in blue) represents a part of the picture (increasing heat from the burner) but not the air quench. Despite a remarkably short post crack development, I opted to just drop the coffee rather than risk further errors. The cupping table would tell if I'd ruined the batch.

Doris stepped up to the machine next with her usual cool-under-pressure attitude and took nearly the exact opposite approach. Using a hot charge temperature but low gas setting, she didn't start increasing the burner power until relatively late in the roast cycle, extending drying phase to roughly equal her Maillard development. She continued ramping up gas into first crack, and then dropped fairly quickly in several small adjustments. With a well-controlled rate of rise, she finished with a longer (although, still quite short) post crack development.

ColorTracking the coffees revealed that my shorter, hotter roast had a darker exterior at 64.7 compared to her 62.41, but lighter at a 54.4 ground, and Doris' gentler, longer approach was a 56.2. The next day, the cupping table suggested that my approach brought out lighter, brighter fruit notes and while not tasting scorched did have a slightly dry finish. Initial comparison led us to believe that Doris' roast was a little bitter at first, but as the coffee cooled it opened up a lot, revealing sweet berries, peach, syrupy body, and a delightful chocolatey underpinning. We ended up split on scores, and with less than 0.2 difference between the roasts, and happy with both results,



we passed the coffee to Sandra, Nate, and Kaleb to brew. Their strong preference was for Doris' smoother roast as pour-overs, which is now featured on our menu at The Crown.

Why did our Loring roasts succeed where the Diedrich roasts failed us? A couple of common points include much shorter post-crack development periods, better equilibrium between drying and Maillard times, and overall lighter color. I'd suggest that this coffee is probably best suited for lighter styles, and would caution that it tends to fly after it hits first crack. A steady hand and solid roast plan will be your keys to success.

## 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 200g batch size, and begin roasting when I've reached my desired charge temperature. [Read my initial post here](#) and my [updated post here](#).*

Another familiar name graces our position, and while I recall this mark, I am particularly enthusiastic about this year's lot. This incredibly dense and well-dried coffee is also imbued with a decent amount of water activity, and the sugars you'll be able to pull from this coffee in Maillard stage are thus enhanced a bit. Due to the aforementioned density, I decided to start this coffee out with a hot drum, but with gentler heat application, much like Doris did above on the Loring.

Charging the coffee at 388F with heat application at 7.5A, I allowed full airflow to continue until just before turning point. At that point, I utilized my old technique of cutting airflow entirely by opening the back of the roaster, only introducing airflow again to 3 on the dial at 230F / 2:22. From there, I made a few decisive adjustments. First, I ramped up heat to 10A at 295F / 4:30 as my delta was dropping quickly. Then, I reduced heat again to 5A at 340F / 6:25, and increased fan speed to full at 370F / 7:45. Just before first crack at 380F / 8:15 I cut heat application entirely to allow the coffee to develop slowly through the post-crack portion of the roast.

The result of these manipulations was a sharp drop in delta until just before Maillard, then a nearly flat (but slowly declining) delta until crack, where thermal 'inertia' cut out almost entirely. I would have liked less rate of rise going into first crack (I was at about 16F/min); I was only able to get 10% post-crack development at my final temperature of 399.5F.

But in the end, as Linkin Park would have you know, it didn't even matter. This coffee is truly remarkable.

The Chelbesa is ridiculously delicious as a filter drip. I kept coming back for more and getting different notes every time I did. Just the fragrance of the ground coffee had huge Merlot wine notes, along with a hint of coconut and ginger. Hot, the bright kumquat-like acidity punched through black tea and chocolate notes, and as it cooled the coffee opened up into soft ginger candy sweetness while retaining a final zip of citric acidity. Aspirating this coffee across my palate brought out a very refreshing watermelon tinge, and I just kept coming back for more.. I'm pretty sure I could get a different note every time, every sip a story.



I don't know if I'd recommend this coffee for anything but filter drip, I loved it that way so much. I'm sure it would perform remarkably well in any case.. But the filter drip was just so nice! This has to be one of my favorite Ethiopian arrivals so far this year. Gesha eat your heart out.

## Brew Analysis by Nate Lumpkin

This is just the latest of many Ethiopian coffees that are finally arriving after a long wait, so it's been a real treat getting the chance to taste them. Actually, there are so many I haven't been able to taste them all! This natural organic Ethiopia Chelbesa showed a wide range of delicious candied fruits, teas, and tropical flavors however we brewed it, so I'm sure whatever dripper you reach for will work just fine.

We used the Hario V60 and the Kalita Wave, which we experimented with in preparation for serving this on our pour-over bar at the Crown. On V60, this coffee brewed through in 3:43, a little bit long but not unusual, and showed a TDS of 1.37 and extraction of 19.81%, both suitable. In the cup, we tasted peach, cranberry, rose, violet, white tea, and toffee, with a sticky syrupy body and pleasant graham cracker finish.

On the Kalita, it brewed through much faster, at 3:02, and showed a much higher TDS of 1.53, with an extraction of 22.13%. We tasted passionfruit, goji berries, tutti frutti, tootsie roll, and black tea, with a thick and juicy body. This brew had a high TDS and above average extraction, but we found it delicious, bright, and juicy. In fact, we felt the Kalita brew was more complex and tropical than the V60, so we chose to use it for our pour-over bar!

Roast	Method	Grind (EK43)	Dose (g)	H2O (g)	Ratio	Bloom (g)	Bloom (s)	Total Brew Time	TDS	Ext%
Loring R2	V60	8	18	300	1:16.6	45	30	3:43	1.37	19.81%
Loring R2	Kalita	8	18	300	1:16.6	45	30	3:02	1.53	22.13%