



CJO1417 – Crown Jewel Colombia Organic RFA SMBC Aratoca Mildred Muñoz Solar Dried Natural

June 4, 2021 | [See This Coffee Online Here](#)

Overview

This is an experimental natural coffee from Santander, Colombia, produced by women on Mildred Muñoz's Finca Santa María. It carries Organic, Rainforest Alliance, and Smithsonian Migratory Bird Council certifications.

The flavor profile is full of tropical fruits and berries with hints of rose, pineapple, dark chocolate, and vanilla.

Our roasters found the coffee fairly easy to work with. The coffee may be a little later than average to reach first crack, and will accelerate afterwards (as is common for natural coffees).

We brewed this coffee as a light roast in pour-overs and as a dark roast using a batch brewer. Our baristas found the coffee to brew quickly, retaining its fruit-forward nature while showcasing remarkable versatility on different drip methods.

Taste Analysis by Sandra Elisa Loofbourow

Thrillingly tropical but elegantly balanced, this coffee is a wild and delicious ride. Expect the full gamut of tropical fruits and sweet things in this cup: ripe yellow peach and pineapple, rosy florals and juicy berries, underpinned by vanilla bean, dark chocolate, and a pleasant mint or pine finish.

Source Analysis by Chris Kornman

This is a very unique coffee for so many reasons, but let's start with the story of the producer and her farm.

Mildred Muñoz and her husband Oscar founded Finca Santa María in 2015 as an operation to support and employ women. Agricultural production around the city of Aratoca in Santander, Colombia, was largely dependent on a plant fiber called [fique](#), a historically and culturally important textile material used in clothing and other applications, including exported coffee bags. However, since the 1970s it has declined in popularity due to cheap plastic alternatives and imported jute, leaving many local fique farmers with significantly reduced profit.



According to Muñoz, the women employed on Santa María earn in one week what used to be a month's worth of fique income. When asked about the farm, one of the farm's leaders, Alba Bueno, said, "Our work provides us a sustainable source of income. In my case, I am married and I can contribute with my income to the household. I can buy my husband a present for Father's Day with my own money. I have been able to register my kids in after school music lessons. For my fellow team members who are single mothers, their work at Finca Santa María is the source of income and stability for their families. But beyond income and work and our basic needs, we love coming to Santa Maria, talking, laughing and supporting each other. We are a part of a community."

Muñoz elaborates, "The main challenge and accomplishment has been to be able to break the paradigms and fully operate our farm with an extraordinary team of ladies that have built a community and are growing and thriving through their work in coffee."

The coffee is processed by the women at facilities nearby on Oscar Muñoz's Finca La Pradera, and they've done something very special. Coffee cherries are picked and selected for ripeness, washed and then floated twice to remove foreign objects and underdeveloped coffee. The coffee is then placed in open bags to ripen and macerate for 12 hours, at which time the bags are sealed for a further 48 hours of "anaerobic" maceration. Once complete, the macerated cherries are placed on drying beds in a solar dryer for about two weeks.

This meticulous, multi-step process has produced a wildly fruity coffee with a lot of complexity and intriguing flavors, and one which is taking a step toward gender equity and empowerment. Additionally, the coffee carries Organic, Rainforest Alliance and Smithsonian Migratory Bird Council certifications.

Grower:	Finca Santa María Mildred Muñoz	Process:	Cherries picked, washed and double-floated before two-stage maceration, then dried in the whole fruit on raised beds inside solar dryers
Region:	Aratoca, Santander, Colombia	Cultivar(s):	Castillo
Altitude:	1700 - 1950 masl	Harvest:	October 2020 - January 2021

Green Analysis by Chris Kornman

Overall, this is a nicely prepared green coffee selection with slightly large and tightly distributed size, high density, and moderate moisture content and water activity. I feel like many of the cutting edge processed coffees we're seeing these days could take a page from this book. The work put into post-harvest handling is evident, and it's certainly no accident when a coffee comes to us in such great shape. Credit is due to the women working with Mildred Muñoz on Finca Santa María.

Castillo's reputation is complicated, but experimental processing has largely obscured whatever you think you might know about its flavor, as it's presented here. The seeds themselves represent intensive research and development by the Colombian Coffee Growers' Federation (FNC) and present growers with excellent trees to resist rust fungus and produce high yields.



Screen Size	Percent	Density
>20	0.50%	690 g/L (free settled)
19	4.28%	744 g/L (Sinar)
18	21.41%	
17	34.16%	
16	31.37%	
15	7.87%	
14	0.00%	
≤13	0.40%	

Diedrich IR-5 Analysis by Candice Madison

What a difference a processing method makes! We've been lucky enough to have had quite a few Colombian coffees in the table in my tenure here at The Crown, and pandemic-logistic-nightmares notwithstanding, we've had a fairly steady flow this year too. From washed to differently processed 'natural' coffees, this unique coffee comes to us via Mildred and Oscar Munoz from Finca Santa Maria, which you can read all about in Chris' source analysis – it's incredibly inspiring!

This distinct coffee has been anaerobically fermented (in this case, involving an intricate multi-step process) that lends a particular and singular flavor profile to the coffee, but in this case, no more challenging in the roaster than other naturally processed Colombian coffees that I've roasted on our trusty IR-5.

I wanted to be sure to get a balance of flavor from the spice notes that I was sure were present – and confirmed on the evaluation table – and the heavy sweetness I also suspected was present. I wanted to get a jump start on the roasting, so I took a quick look at the green specs that were read – the aggregate of beans seemed to be middle/large screen sizes 16-19, and with a low moisture, and average-high density, I knew the beans could take a little heat at the start and proceeded accordingly!

I was determined to get out of stage 1 as quickly as possible and spend most of the rest of the roast in stage 2, browning and caramelizing all those proteins and sugars to produce a rich sweet cup. I started the roast at 380F, turning the gas all the way up to 100% on our gauge. With 0% air at the start, I turned the gas right down to 70%, and the air to 100%. This allowed me to use airflow to speed the roast up at this stage, without having to worry about adding any more gas to get up the 'hill' towards the coloring stage. To ensure that I would have enough space to lengthen the middle of the roast, I turned the gas down twice, once just before and once just after observing the color change.

Even at only 50% heat and the air open 100% to slow things down (as is the case on my machine at this stage), the roast proceeded at a steady pace, but I managed to get down to my preferred RoR going into first crack of around 18-20 F/min. Be aware that first crack on this coffee is sparse and quiet, it caught me by surprise, twice. I'm not



proud of that, but here we are! You'll notice the bump in the RoR before I caught the crack, opening up the air and turning the gas, first to the minimum and then off. Yes, this coffee wants to fly away from you at first crack. This can be mitigated by lowering your gas in anticipation of first crack, raising it again as first crack rolls in order for that energy to take you through your post crack development.

In the cups, it was as I thought, but much better than expected! What a lovely coffee and having Doris experiment with a dark roast of it, I know that it tastes delicious roasted a variety of ways. This particular roast was smooth and velvety, almost buttery in its body. Notes of blackcurrant compote, vanilla and stewed pear were elevated by the allspice, clove and cinnamon notes I have come to expect from well produced anaerobically fermented coffees. Those stewed fruit notes with a base of milk chocolate made this almost taste like a mug strudel – and that is not a bad thing at all in my book. I would drink this as an afternoon pick me up from our batch brewer, but I'd be rather intrigued to know what a cortado of this coffee would do to my morning!

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](#).

This is a fine example of the type of coffee that really screams Crown Jewel to me, in a full-throated and fruity yodel. Perhaps fitting because of the elevation this coffee was grown at, the crisp cleanliness of fresh alpine air cuts through the fruit like... well, a fruit knife or something. This coffee had me flabbergasted.

I am used to fruit dried, dry process, natural coffees (whatever you like to call them) taking off after first crack, so this propensity didn't catch me off guard, much like Candice mentioned above. In fact, this coffee was remarkably easy to work with, though certainly not easier to handle than it was to drink.

Much like Candice, I wanted to get this coffee through green stage and on to Maillard with some sense of alacrity, so I started with a charge temperature of 388F, 10A heat application, and full fan speed. I turned off fan just a bit before (rather than at) turning point, in order to get this coffee to climb in temperature from its lowest point. This coffee was cooking nicely, so I engaged fan to 3 at 250F / 2:45, a bit sooner than usual, to get it to slow down through Maillard. Reducing heat at 265F / 3:05 helped slow it down a bit, too, and at 310F / 4:15 I ramped fan speed up to full to really draw down the momentum, then turned heat application to 0A at first crack, which occurred at 389F / 7:45. First crack is very soft on this coffee, so keep an ear to the rail on this one.

Despite my full airflow and zero heat application, this coffee continued to move at a respectable clip. After a little less than a minute and only 10.9% time spent in post-crack development, the coffee reached 402F and I decided to drop the batch. Make sure to slow your roll later in the roast with this one. Also, you will definitely need to clean your chaff collector after roasting this coffee – it's a chaff monster!

Despite taking off after first crack, this coffee was plainly delicious. Heavy blackberry, gentle baking spices, black tea and lemon came through in abundance. The finish on this coffee was clean clean clean. There was an air about



this coffee that just gave me flashbacks to excellent coffees of years past. Even while enjoying this cup, it had me reminiscing about coffees of yesteryear. There's a flavor here that I can't quite put a name to, that I like to think of as 'the taste of great coffee.' Love went into this crop.

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 ran this coffee through our Ikawa v3 on our three standard profiles and cupped them with Chris Kornman to compare notes. I had already tasted a dark roast of this coffee by Doris Garrido, which I had found to be a lovely, complex, deeply fruited, and smooth dark chocolate cup, so I was excited to see how it tasted on much lighter profiles. The results were very interesting: though all three had a lively acidity and popping fruit notes, our low airflow profile gave us the best overall cup.

Our standard hot and fast roast cracked very late in the roast, giving us only thirty seconds of development. In the cup, it had an extremely bright and lively acidity, with notes of raspberry, strawberry and watermelon candy, sour cherry, vanilla, and dark chocolate. As the cup cooled, the flavor profile diminished somewhat, and the bright acidity seemed to overwhelm the more delicate berry notes. Similarly, our lengthened Maillard profile cracked even later, and gave us an even shorter development. In the cup, this roast was somewhat thicker and heavier, with notes of Coca-cola, cherry syrup, watermelon candy, white grape, brown sugar, vanilla, and cocoa powder. Like the previous roast, it lost a little balance as it cooled and overall, its flavors were a little less defined than the next roast.

Our low airflow profile, which is a longer and cooler profile than the other two, also had a late crack and shorter development. However, its profile was more well-structured and sturdier, in that it maintained its balance and flavor throughout the cupping. This was a more delicate cup, with notes of mango, pomegranate, cherry, lime, fresh watermelon, and raspberry, with a hint of black tea and rose. Overall, I would recommend a roast like this one, though I might be interested in experimenting with a lengthened development time for all of these, as the coffee had a little trouble reaching first crack.

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 Elise Becker

This triple-certified Crown Jewel isn't just good for the environment and a testament to the women who worked hard to produce it, it's also truly delectable! It's exceptionally fruit-forward, and was a pleasure to brew and consume for analysis as both a light and dark roast.



For the dark roast, I thought it would be fun to sub this one into our standard dark roast batch profile on the Curtis brewer we use in the Tasting Room at The Crown. The result was a velvety, rich, yet still fruited cup featuring prominent notes of lemon custard, blackberry jam, molasses, and baking spice. I also put this one through its paces on the Fellow Stagg and Hario v60. The Stagg brewed a fast, juicy, clean cup bursting with peach, tangerine, tropical fruit, and black tea. The v60 yielded a heavier and more complex cup, with fresh herbal notes of sage, delicate yellow florals, dark chocolate, and ripe cranberry. Overall, this coffee clearly has a lot to offer in terms of complexity, versatility, and drinkability!

Roast	Method	Grind (EK43)	Dose (g)	H2O (g)	Ratio	Bloom (g)	Bloom (s)	Total Brew Time	TDS	Ext%
Light Diedrich	Stagg	9	18	300	1:16	50	40	2:27	1.43	22.19
Light Diedrich	V60	9	18	300	1:16	50	40	2:45	1.46	22.66
Dark Diedrich	Curtis	8	86	1440	1:16	240	1:00	4:20	1.28	19.83