CJO1423 – Crown Jewel Sumatra Organic Jagong Jeget Gayo Lauser Antara Raised Bed Natural

July 9, 2021 | See This Coffee Online Here

Overview

This is a natural coffee from central Aceh, Sumatra, produced by farmers organized under the Gayo Lauser Antara Cooperative.

The flavor profile is full of watermelon with hints of mango, sweet basil, and pipe tobacco.

Our roasters found the coffee resisted heat during the early stages and may need a higher charge temperature.

When brewed, at higher extraction percentages more complex tropical notes emerge. This coffee is in service at The Crown as a pour-over.

Taste Analysis by Sandra Loofbourow

This week, we served a coffee in the Tasting Room bar before it was released as a Crown Jewel! That means our Oakland neighbors got a sneak peak of our upcoming coffees, and even got to participate in brew analysis as we dialed this tasty Sumatra in on the pour over bar.

At its most delicate, this coffee packs watermelon and gentle mango juiciness. With more concentrated ratios, it develops a tobacco astringency that helps bring balance and body to the cup. With higher extractions I found that the finish got more tropical. We had several customers come to compliment us on new barista Colin Cahill's dial, which you can read about in the brew analysis section below!

Source Analysis by Chris Kornman

This is a unique Indonesian coffee produced by around 500 farming families located in Jagong Jeget, in central Aceh province, located at the northwest tip of the Sumatran Island. The greater region of Aceh is the source of what were once called “Mandheling” coffees, though that term is used more as a marketing idea than a true region when applied to coffee at present. Aceh is sometimes referred to as Gayo or Gayoland, a nod to the Gayonese population whose presence in Aceh dates to the 11th century.

Farmers in this group are organized around the Gayo Lauser Antara Cooperative, a recent initiative founded in 2015. The coffees produced by the coop are certified organic, and Royal Coffee purchased this lot directly from the cooperative.

Forgoing the typically seen wet-hulled process, this small lot of coffee was fruit dried as a natural on raised beds, and the flavor profile reflects this wild and unconventional mish-mash of cultivar, region, and processing methods.

Grower:	Family farms organized around the Gayo Lauser Antara Cooperative	**Process:**	"Natural" dried in the fruit on raised beds in the sun
Region:	Jagong Jeget, Aceh Tengah Regencies, Aceh Province, Sumatra, Indonesia	**Cultivar(s):**	Local catimors Tim-Tim and Ateng Super, bourbon and typica cultivars
Altitude:	1500 – 1600 masl	**Harvest:**	September 2020 – April 2021

Green Analysis by Chris Kornman

Sumatran coffee is almost always mold-breaking in one way or another when it comes to expected norms in green grading. This natural is no exception, though it breaks in unusual directions, even for those accustomed to grading Indonesian offerings.

Very dry coffee that tastes like this is rarely a concern for me in terms of green storage: the volatile aromatics and flavor compounds are well preserved here, reinforced by low water activity. Yet, overall the coffee may offer some unique challenges in roasting, as the moisture figures are met with moderate density beans and accompanied by a wide range of screen sizes which trend on the larger end, mostly 16+.

Keep an eye on the roasters’ notes on this coffee, it’s sure to provide a wild, rewarding ride!

Screen Size	Percent		Density
>20	7.90%		682 g/L (free settled)
19	20.86%		729 g/L (Sinar)
18	25.88%		
17	19.77%		**Total Moisture Content**
16	16.89%		9.1% (Sinar)
15	6.21%		

14	1.99%		**Water Activity**
≤13	0.50%		0.507 @ 23.99 (Rotronic)

Diedrich IR-5 Analysis by Candice Madison

Sumatra is an origin that always makes me smile. Although Indonesia is a vast origin in the sense that, especially in recent years, and has become one with a wealth of flavor profile diversity across the well-known islands, Sumatra has one of the most unusual and distinctive profiles I have personally ever tasted. I am used to tasting the bamboo/pineapple/lemongrass triumvirate in most of the washed or giling basah processed coffees I've tasted, so I was interested how these flavors would be expressed in a natural coffee.

Doris Garrido, one of our baristas, has been our roasting intern for the last few months. Our method of working together is as follows: I roast a batch of coffee – sometimes before we've even given our colleagues a chance to produce the green metrics! We talk about the roast, how it felt and what I would have done differently, how she would approach the same second batch situation and more. We then load the roaster again, and Doris makes the changes we've chatted about, and we see how that turned out. I always say, if it doesn't taste better, that's on me, and if it tastes great, that's on her – seems fair! This week we tried this method with this coffee and our upcoming Crown Jewel, and we wanted to share it with you.

Seeing that the moisture level of this coffee is a little lower than ideal, and it was a natural, I decided to start with my new normal charge temperature of 380F and a moderate gas application of 50%. I figured that the processing might have made the bean soft, the lack of available water would mean there would have been less of a thermodynamic buffer at the start of the roast and the range of bean sizes, including around 8% 15/16 screen size (not many, but enough to be statistically significant) may mean the beans could scorch at the start of the roast. I was hoping my caution would be rewarded, instead my roast felt bloated.

Try as I might, I couldn't move the dense coffee up the hill of stage 1 fast enough and felt I needed to balance stage two rather than extend it, so that the roast wouldn't be in danger of stalling. I had raised the gas to 90% after the turning point, but instead of needing to turn the gas back down to 50% or so, at the color change, I had to keep the gas going until almost halfway through stage 2. First crack was very soft at the beginning (be aware of this!) and although data analysis helped me to catch it, controlling the end of the roast still takes a deft hand – naturals do tend to fly, as we all know.

Doris instituted the changes I suggested (the timings being all her own!) and had a much easier go of things. Starting the roast 10F higher than mine, at 390F and going with 90% gas straight out of the gate, Doris was able to come out of the gate hot, but then reduce the gas, immediately at the equilibrium to 50%. Even though her roast ended up being hotter and faster than mine, she managed to effect an interesting change to the roast stage time ratios, her drying phase being longer and her Maillard stage being shorter. As we moved to the cups, we realized why this worked so well for this coffee.

By stressing the coffee before the coloring stage and concentrating the most heat on stage one. Doris was able to bring the fore and develop, the fruit and floral notes, bringing forth a complexity my coffee lacked. Where I had noted 'fresh herbs', Doris had managed to pull out sweet basil. The fresh watermelon tasted in the first roast, developed into a more complimentary note of fresh cucumber, and where I had found a mulled wine note from the ferment stage of the natural process, Doris found a brighter and more effervescent note of grape jelly. At the end of the day, both roasts were tasty and servable, but I would advise going in hot and don't be afraid to treat your roast like a race car – this coffee likes to go fast. And that being said, I can't imagine it will be around for long!

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.

Not so long ago, many coffee professionals would have scoffed at a Natural/Fruit Dried/Dry Process coffee from Sumatra. Now, more coffees just like this have become available as producers perfect their processes and recipes, and the results are incredibly tasty.

I know from experience that natural coffees tend to rush through first crack, regardless of heat application. This coffee was no different than many others, but did set itself apart in that it was relatively easy to balance the ratio of my first and second stages, in counterpoint to Candice and Doris' experience on the heavy-drummed Diedrich IR-5. This is not always the case with natural coffees, and looking at the green metrics, I chalked up the relative ease to the low moisture content in comparison to a fairly wide spread in screen sizes. These two factors may have had a balancing effect in regards to the effect of heat application, with a wide spread of screen sizes resisting heat application and low moisture reducing resistance.

Starting off this roast, I thought it would be a good idea to charge at a relatively high temperature, much as Doris did – I started at 390F. Unabashedly, this was mostly due to my general experience with Sumatran coffees, but it did end up working to my benefit in this case. 10A heat application and full fan were my starting point, and I moved to cut off fan just before turning point. Waiting until rate of rise peaked to make my next adjustment, I reintroduced fan to 3 and reduced heat to 7.5A (rather earlier than usual) at 260F / 2:55. The roast was progressing very quickly indeed at this point, and I wanted to have a significant portion of my roast spent in Maillard. In order to accomplish this, I increased fan speed to full at 300F / 3:55, and reduced heat application to 5A just before what I thought was going to be crack, at 380F / 7:00. Crack was late in coming, and I reduced heat further to 0A at 390F / 7:30. While there were some pops at this point, I felt that crack in honest didn't occur until 395F / 7:45! This was quite late in the game, so I didn't feel bad only having 0:45 / 8.8% post crack development; in fact, if someone were to have counted crack as being earlier, that development number would have been very different.

Regardless of the way this roast progressed through post-crack development, the flavors in this coffee simply came screaming through. Bright pink grapefruit, fruit leather, jackfruit, and peach cobbler came through very clearly. I was very satisfied with this roast, and I could recommend this coffee for nearly any preparation method, as long as

you're adventurous. If you have the tendency to stay away from fruity coffees, this is certainly not a coffee for you – but, as one of my personal heroes once said, "don't take my word for it!"

Ikawa Pro V3 Analysis by Author's Name

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.

As it turns out, we've been serving this natural-processed Sumatra for several days now at the Crown, and our customers' curiosity about it has been a lot of fun to encounter. Many of them have never tasted a natural Sumatra before, and it may be possible I haven't either! I ran this coffee through the Ikawa V3 on our usual profiles and really enjoyed the results, and it's been performing beautifully on our pour-over bar as well.

Our standard, hot and fast profile produced a syrupy cup with notes of pine, chamomile, peanut butter, and dark chocolate, with a thick, syrupy body. I wouldn't expect a profile like this to work particularly well with a dry, average density coffee like this one, so I wasn't surprised that it ended up tasting a little simple. It also cracked a little too late in the roast, so while I liked this cup, I might recommend staying away from short, hot roasts like this one.

Our longer, extended Maillard profile still cracked a little late, though performed a little closer to expectation. It produced a creamy, chocolate-forward cup with notes of pine and peppermint. Altogether however it tasted a little bit hollow--it seemed to lack some central fruit notes to hold its profile together, and it had a mild astringency.

Our longer, slower profile had more success overall. It cracked as expected, giving it plenty of development time, and produced a bright cup with some tropical fruit notes. I tasted kiwi, mandarin orange, pink apple, red wine, raisin, and sweet peanut butter, as well as a heavy dark chocolate finish. I would vote this profile as the most successful of the three, so I recommend giving this coffee plenty of time in your roaster to development its flavors, and to keep in mind that its delicate acids may tend to roast out on higher heat.

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 Colin Cahill

I am super excited that my first brew analysis with Royal Coffee is of this natural process coffee from Sumatra. Having lived another life as an anthropologist working with coffee farmers from across the island, I have had my mind changed over and over again about the diverse coffees coming from growing regions across this massive

island. This one is no exception, offering a complex range of flavors. This is a fun coffee to play with, and for dialing it in on our pour-over bar, I chose the Saint Anthony Industries C70 for the combination of the narrower body and those heavier filters that can yield complex and oh so clean brews. For my analysis, after a quick experiment with dose size, I focused on playing with the variable of grind size on our EK 43.

The watermelon notes on this coffee really shine through with almost every brew. My first brew on the C70 yielded a complex coffee with a concentrated, tart, watermelon flavor (think watermelon candy), notes of pipe tobacco and tamarind, and a molasses sweetness with a syrupy body. As I coarsened the grind, the body lightened significantly, yielding a soft, marzipan sweetness, with cleaner jasmine floral notes, and a dominant, juicy watermelon flavor. This is a coffee that can really transform depending on your brew recipe.

Roast	Method	Grind (EK43)	Dose (g)	H2O (g)	Ratio	Bloom (g)	Bloom (s)	Total Brew Time	TDS	Ext%
Diedrich	C70	8	18	300	1:16.6	50	40	3:30	1.41	21.5
Diedrich	C70	8.5	18	300	1:16.6	50	40	3:20	1.37	20.9