



CJ1347 Mexico Unión Juárez Alfred & Annette Klein Jade Centennial Crown Jewel

April 24, 2020 | [See This Coffee Online Here](#)



Intro by Mayra Orellana-Powell

With too many producers on the brink of extinction in Mexico, we're happy to offer a comeback story with coffee from Chiapas.

The estate is called San Carlos, located at the border between Mexico and Guatemala on the western slope of Volcán Tacaná, and it has a rich heritage that dates back to 1896. The comeback story starts in 1996 when the grandson (Otto Hotzen) of the man who planted the first coffee trees at San Carlos offered to sell the farm to Alfred Klein.

Alfred had made his reputation in the coffee world as the guy who could restore old mill equipment and his work restoring mill equipment at San Carlos impressed Otto. For the next two decades, Alfred worked hard to pay Otto, but San Carlos suffered from every possible consequence of climate disaster (wind, hail, and hurricanes), peso devaluation, and skyrocketing inflation.

At the bottom in 2004, Alfred lost ownership of San Carlos due to his inability to make the agreed payments to Otto. Alfred continued to manage San Carlos another decade for the Hotzen family and developed a strong relationship with Royal during this time. But by 2012, more than 85 percent of San Carlos had been destroyed by leaf rust.

And now the comeback story: With some financial support from Royal, Alfred repurchased San Carlos from the Hotzen family in 2013. With his gift for restoration, Alfred immediately began an aggressive plan to renovate San Carlos to its original luster, legacy varieties and vintage mill equipment all included.

In 2020 we visited San Carlos and it's clear that Alfred, Annette, and their 40 full time employees have done the job. Processing coffee at San Carlos has no compromises. Coffee cherry is carefully sorted, depulped with the vintage vertical depulpers, slowly fermented for 48 hours in cold spring water, then double washed with a 48-hour soak.

There is versatility with drying strategies. Micro-lots are slowly dried on patios and raised beds, while mechanical dryers are used for drying larger lots. Although there is an abundance of spring water, Alfred has configured the mill to operate with 5,000 liters per day, which is recycled several times and then returned downstream, clean, pH balanced, and oxygenated thanks to a state-of-the-art water purification system and bio-digester.

All of these layers of efficiency are essential because weather patterns have become more and more unpredictable. Alfred also runs his own dry mill using a series of 3 vintage catadores (wind channels) to



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classify his coffee. He explained that cherry selection and classification at the wet mill is so good that he does not need any more equipment in his dry mill to sort the coffee.

Alfred's wife Annette is also deeply involved in the business, handling human resource and labor law compliance for employees, as well as all the export logistics from Tapachula, including refrigerated banana containers, expediting their shipping schedule.

Alfred and Annette have done much to save their coffee business against all odds but it is no less important to recognize that two-thirds of their 370 acre estate is dedicated to crop diversification (including guanabana, cardamom, macadamia, and banana trees) and preserving natural habitat for many native species. For further reading about Finca San Carlos, check out our three-part ([One](#), [Two](#), [Three](#)) producer profile series, a blog about [refrigerated banana containers](#), another about climate change, and an opinion piece Alfred wrote about [bees and coffee](#).

The Jade Centennial microlot returns to our menu for the third consecutive season, and we're pretty thrilled to have it back. Alfred & Annette Klein's attention to detail at the farm level, and their clever selection of reefered banana container shipping logistics has provided us with an exceptional early-landing Central American coffee. It has a lovely mild citrus acidity, sweetness like pralines and salted caramel, and generous sweetness with a silky mouthfeel; a truly special coffee.

Grower:	Alfred & Annette Klein Finca San Carlos	Process:	Fully washed after pulping, fermented underwater for 48 hours, then soaked for 48 hours in clean spring water, and finally dried in the sun on patios and raised beds.
Region:	Unión Juárez, Chiapas, Mexico	Cultivar:	Unknown "Jade" Variety
Altitude:	1100 – 1350 masl	Harvest:	October 2019 - March 2020

Green Analysis by Nate Lumpkin & Chris Kornman

This coffee from Mexico comes to us with about average density, moisture content a little below average, and water activity below average as well. This coffee's size is tight: the majority of it falls into screen size 17 and 18. Its low water activity should allow it to maintain its quality while green under good storage conditions, while its screen size and density should help it attain a stable, even roast.

Don Alfred chose the name for this coffee, and it certainly has a ring to it. Jade Centennial refers to the deeper than usual hue of the coffee and the hundred-year history of the farm. There's more to the story of course - a parcel of the farm called Centenario is home to many of the trees, and on the parcel a hand-carved Mayan jade figurine was unearthed.

The trees were planted on the farm by a Guatemalan worker who claimed to have brought the seedlings from Quetzaltenango. Sr. Klein isn't sure of the exact variety. Per his description, the bean size is close



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to Maragogype, the bean shape like old Bourbons, the tree structure like Catuai with large, deep green leaves and light green new growth. The tree is tolerant, though not resistant to roya and ojo de gallo. To my eye, the polished seeds appear long, more like Typica, Java, or Gesha.

<u>Screen Size</u>	<u>Percent</u>	<u>Density</u>
>20	2.76%	682 g/L (free settled)
19	13.71%	705 g/L (Sinar)
18	28.10%	
17	26.16%	<u>Total Moisture Content</u>
16	16.57%	9.6% (Sinar)
15	8.38%	
14	3.39%	<u>Water Activity</u>
≤13	0.92%	0.479 @ 20.50C (Rotronic)

Ikawa Analysis by Chris Kornman

We've updated our V2 Ikawa Pro machines with the latest Firmware version (24) and run on "closed loop" setting. Our roasters underwent full service in October of 2018 which included replacement heating elements and an updated PT 1000 temperature sensor, and were recalibrated in September 2019.

Mexican coffee from Finca San Carlos is always a treat. I look forward to tasting this Jade Centennial microlot every year, in part because it's excellent coffee and has an incredible story behind it, and in part because it reminds me of the personal connection I've had with Don Alfred over the past few years via email correspondence. Our conversations have covered a wide range of topics, from [climate change](#) to [immigration](#) and [leaf rust](#), and his perspective is always enlightening.

Samples arrived at my home from our office and I promptly tossed a few roasts into the Ikawa to check out this year's arrivals. I'd been lucky enough to taste the press shipments as well; San Carlos' production is up this year and Alfred & Annette were able to offer some very nice macrolots as well this season.

This particular funny little cultivar microlot, however, is always a unique opportunity for the roaster. With its oblong seeds and moderately high density, I'd have predicted a lower charge temp might've worked well, but I found myself at the cupping table with a strong preference for our standard profile with a high charge and rapid heat delta. The coffee cracked on-profile for both roasts, just as the program began to level off heat increases.



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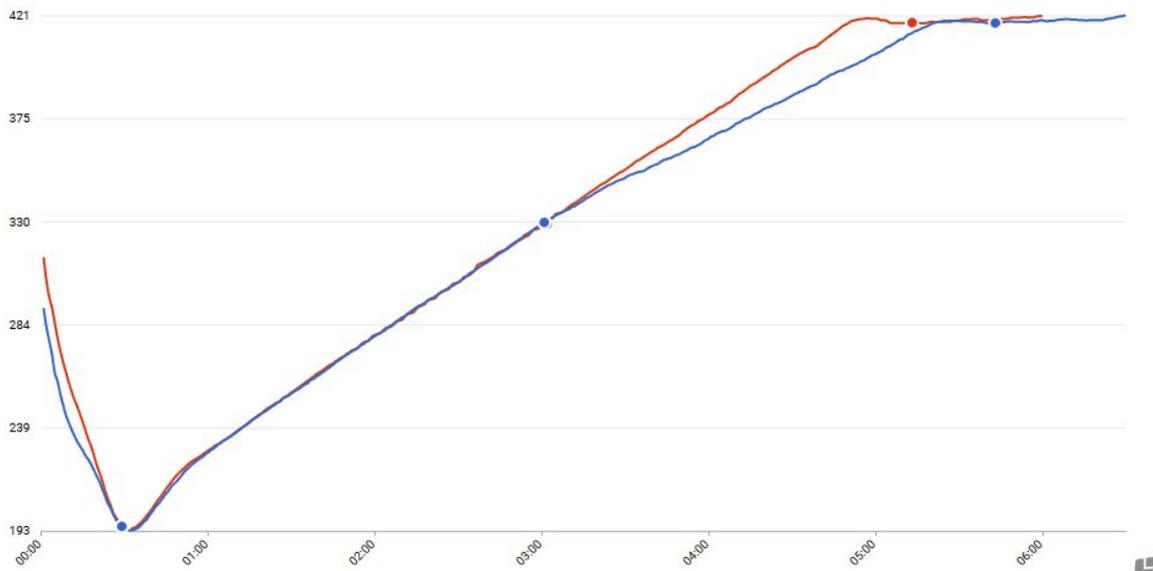
Roast 1 (Blue) was thick and sweet, lots of caramel and fudge, marshmallow, and graham cracker with some praline notes. You'd be forgiven for mistaking it for a s'more.

Roast 2 (red) was my preferred, a little shorter with a quick Maillard phase. A lot more light fruit notes were present in this roast: apricot, meyer lemon, plum, and orange marmalade. The body was still substantial, but silkier and I enjoyed the mild herbal undertone: a refreshing hint of rosemary and crème de menthe were a welcome treat.

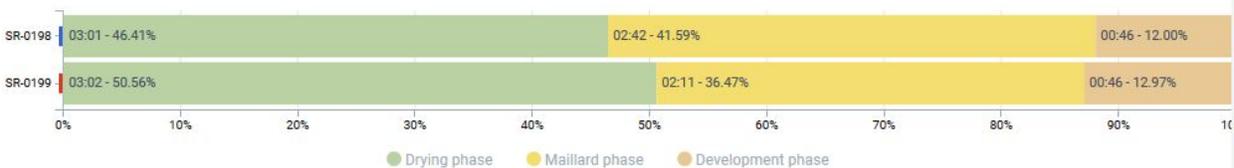
You can download the profile to your Ikawa Pro app here:

Roast 1: [Crown Maillard +30 SR 1.0](#)

Roast 2: [Crown Standard SR 1.0](#)



Modulation chart





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Roast Analysis by Candice Madison

Things are proceeding much more smoothly with the Quest, thank goodness! And roasting the gorgeous Jade Centennial offering from Sr & Sra Klein was as much of a pleasure to roast, as to drink. As mentioned in previous posts, since the shelter in place (SiP) order came down, I felt lost without a roaster to hand, so managed to squirrel the Quest M3 away, where I now roast with it on my kitchen table.

I wanted to be able to do this year's coffee justice, and made sure to follow the new protocol. Warm up to 390 degrees F, using 6 amps of power and 5 on the fan. I let the roaster cool twice to just below 300 degrees F and on the third rise, dropped my coffee in at 390 degrees F.

I have found working around a few points means I have effected a sort of shifting profile to deal with all coffees on this machine and the Jade Centennial took to my meddling like a dream. I started the roast at 5 Amps, 0 Fan speed. At the turning point, I turned the heat up to the maximum (9) and the same with the fan speed (9). I wanted to rush through the drying stage as much as possible, as I knew that I wanted to extend Stage 2 and really allow time for the Maillard and Sugar Browning reactions to take place.

Therefore, I cut the heat to 7amps at 280 degrees F, turning the fan speed down to 5. The coffee hit the coloring stage at 306 degrees F and managed to spend almost 60% of the roast time in this stage. Anticipating first crack, I turned the heat down to 4amps at 386 degrees F and turned the fan up to 9. Just a few degrees past first crack, I turned the fan to 0 - the smoke abatement being taken care of, I wanted to ensure that the coffee had a chance to develop all of those sugars from the extended Stage 2.

I was a little quick in taking the coffee out and only managed 13% PCD (post-crack development), ending at 398 degrees F in 10mins 45 seconds.

Cupping this coffee solo, I was pleased to see similar notes coming from Evan and Chris, lots of sugar, basically! Chocolate fudge notes, buttery caramel, hints of warming spices, including clove and a sweet lime acidity. The coffee has a syrupy smooth body and a long, silky after taste. I could drink this all day long! Definitely a really charming and smooth start to the day, but as an espresso, I would expect a big chocolate base, with a soft, complimentary acidity and lots of body for a syrupy milk-drink base. Yum!

Behmor Analysis by Evan Gilman

Unless otherwise noted, I follow a set standard of operations for all my Behmor roasts. Generally, I'll use the 1lb setting, manual mode (P5), full power, and high drum speed until crack. [Read my original post and stats here.](#)



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It's beginning to feel a lot like old, familiar friends stopping by when I get a package in the mail from our sample room to roast at home in the Behmor. The same names, but each crop has its own unique flavor, just like going to the farmers' market.. Which I am missing right now!

Anyhow, this coffee is just as sweet this year, and I believe the best word for it that's not a flavor descriptor would be 'smooth.' Easy roasting, easy drinking, and just plain sweet. A great remedy for cabin fever, too.

I loaded Sr Klein's coffee into the barrel of the Behmor, noting the pointy nature of the seeds as I did. I knew at first glance that these might have the tendency to get stuck in the barrel's perforations, so I made sure to look for stuck beans once the roast was over.

Starting the roast at P5 (100% power) and manually roasting, I waited until 10:00 to hit P4 (75% power) as I began to hear the first telltale puffs before first crack. Lo and behold, crack occurred at 10:10 and I allowed the coffee to develop a bit before opening the door for 20 seconds at 10:30. After 1:05 development, I decided to stop this roast before too much development occurred, and got a roast loss percentage of 12.7%, one of my lowest on the Behmor to date.

But the coffee was certainly not underdeveloped! Sweet brown sugar, chocolate fudge, and a hint of lime came through on my first tasting. And the texture of this coffee is undeniably smooth, as well. I tried to bring out more of the lime through my brews below - follow along and see what I found.

Brew Analysis by Evan Gilman

[This coffee](#) is almost like a confection. I approached this coffee knowing that I'd enjoy a clean cup that emphasized the sugars in this coffee, but knowing that some body would be sacrificed by using a filter. I used the Chemex anyway, because I knew this coffee would be smooth no matter what.

My first brew was super delicious, but not as distinct as I would have liked. I wanted to grind as coarse as I dared for the Chemex and try to pull out some of the brighter citrusy acidity in this coffee. I did accomplish that, as lime acidity came up front of my first brew. Nice, but clearly my refractometer needed to be recalibrated. 26.51% extraction!? This is not a reasonable measurement for the cup I had - so remember to calibrate your refractometers regularly!

I ground the coffee for my second brew a bit finer, since my first try seemed a bit thin. This did get me a stickier cup, with pleasant dark chocolate bitterness and some tangy tamarind flavors - but it seemed a bit muddled. Turned out that it was a bit underextracted as well (counterintuitively) at 17.82%. Just on the cusp of a good cup. Still incredibly chuggable.

My final brew had me return to a slightly coarser grind at 22 on the Baratza Virtuoso. I decided to pour extra slow for this brew, and to add an extra pulse pour in order to pull out a bit more from the coffee. The resulting cup came in at 18.12% extraction, and really exhibited the best of this coffee: zesty



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tamarind, black cherry sweetness, and serious chocolate cream pie with graham cracker crust flavor. Super sweet!

I would suggest doing your best to pull the most from this coffee you can. As my extractions ramped up percentage-wise, I got even sweeter and more expressive cups, as one might expect. Don't be afraid to agitate, pour slow, and even experiment with some longer dwell time with a device like the Clever brewer. This coffee is sweet and rewarding to the avid brewer!

Roast	Method	Grind (Virtuoso)	Dose (g)	H2O (g)	Ratio	Preinfusion (g)	Preinfusion (s)	Time	TDS	Ext %
Behmor	Chemex	24	40	680	1:17	75	45	4:15	1.76	26.51?!
Behmor	Chemex	20	40	680	1:17	75	30	4:55	1.19	17.82
Behmor	Chemex	22	40	680	1:17	75	45	4:30	1.21	18.13