





TRUE  
TO  
TASTE

*An Exploration of  
Production Roast  
Evaluation*

*Story and photos by Anne Cooper*

## TRUE TO TASTE



ABOVE AND PRECEDING PAGE

Production roast evaluation cuppings.

WHETHER WE WORK AT SMALL, MIDSIZE or large-scale roasting companies, we all need to evaluate the success (or failure) of our production roasting in some form. How else will we know if the coffee we have roasted is as intended and the flavors of the end product are “true to taste”?

Members of the coffee industry often say that quantifying roast quality in general is a huge weakness in our industry, and I have to agree.

The historically low barrier to entry into coffee roasting brings with it a level of inconsistency in skills, technique and overall base understanding of the processes and procedures required for production roasting.

Also, to an extent, most roasters are self-taught (or were taught by another roaster who was likely self-taught) and, as a result, have developed their own methods. This also contributes to a lack of consistency and understanding of some key production roasting processes and procedures.

**ditting**<sup>®</sup>  
— USA, Inc. —  
US Distribution Center  
810-367-7125  
www@ditting.com

*Celebrating over 50 years of serving the  
Whole Bean Coffee World*

**50<sup>th</sup>  
ANNIVERSARY**

**25% off**  
**all new, in-stock grinders!**  
In lieu of SCA show specials, we are excited to  
extend these special deals to **EVERYONE!**\*

\* Available within the United States only.  
Offer valid thru June 30, 2020 or while supplies last.

Coffee roasting encompasses production and manufacturing, and as such, it needs to be considered more seriously. As a result of not being clearly defined and monitored, the roasting industry lacks strict procedures and unified documents for essential practices like production roast evaluation (PRE).

When I polled many roasters on the topic of PRE, it became clear that within the global coffee roasting community, roasters use varying techniques and documents to evaluate production roasts.

So, what should the coffee industry be considering to help roasters improve their PRE skills? What factors are involved, and how can we further improve PRE processes and procedures to ensure that we are all consistently evaluating our production coffees as being true to taste?

## WHY DO WE NEED TO PERFORM PRODUCTION ROAST EVALUATIONS?

PRE is a critical activity for coffee roasting companies to promote consistency, reinforce roasting skills, gain product knowledge, and stay true to the intended flavors of the final roasted product. As roasters, we are in the business of flavor.

Regularly performing PRE is an ideal opportunity to continually improve roast profiles, as PRE is the ultimate connection between the roast profile and desired end flavor of a specific product.

Along with assessing intended flavors, PRE also helps to assess and uphold a brand or individual's roasting style or ethos. For example, a business owner not involved in the roasting process might have a "rogue roaster" who is doing their own thing, being influenced by current trends and ignoring specific brand flavor requirements; this sort of individuality can destroy a business.

**Grown with Aloha**

**Learn more about Hawaii Coffees and culture through our events at [hawaiicoffeeassoc.org](http://hawaiicoffeeassoc.org)**

  @HCA\_Coffee  @hawaii.coffees  @HCA\_coffee

## TRUE TO TASTE

And if you are not the owner of the roasting business, you need clear guidance from management on how they want the coffees to taste so you can then use your roasting skill and knowledge to develop an appropriate roast profile that will deliver the specific product flavors to be reflected in the PRE.

Doing PRE also helps roasters to monitor, over time, the properties and flavor characteristics of the green beans they've purchased (which may be affected by roasting room and storage conditions), as more than ever we are in an era of experimental processing and unique flavors.

Additionally, PRE is beneficial for promoting better understanding of the roasting machine (its controls, burner, drum and probe types and more), as well as troubleshooting any roasting machine issues, such as general set-up and limitations in power and controls, which can cause tasting and roast defects from not being able to deliver the roast profile or "cooking strategy" you want to achieve.

PRE is also useful for building consistency in roasting teams. The process presents valuable opportunities to learn from other team members with different levels of experience, who calibrate and compare with each other. The team explores and learns how to properly evaluate what they are meant to be tasting and achieving in a product, brand and market with a specific roast profile and end flavor.

## WHEN IS THE BEST TIME TO ASSESS?

Ideally, as part of a roasting company's standard quality control procedures, roasters should be doing their PRE before the final, roasted product reaches the customer.

When polling roasters on when the best time is to carry out PRE, the majority said the day after roasting. Others would also assess over a range of time (anywhere from 24 to 48 to 72 hours to 7 days after roasting), as the coffee rests and degasses.

But still there is no industry standard for when to perform PRE, possibly due to the wide range of experience, strong individual opinions and influences, and number of samples to be evaluated, as well as scheduling and managing business costs among the many different small and large-size roasting companies in our industry.

Not ever tasting or evaluating your roasts is poor practice but was surprisingly prevalent among roasters I polled. No roaster should be roasting coffee without taking the time to taste/evaluate their own coffee. Some roasters say they use customer feedback as their evaluation gauge—but waiting for customer feedback to roll in weeks after roasting the coffee is too late, especially if the feedback is not good.

When possible, tasting in-store with your customers (after you have done your own PRE) is good practice and a wonderful



## Better Beans from Better Performing Equipment

- Installation
- Troubleshooting
- Layout & design
- Service
- Repair
- Parts

Specializing in all brands of roasters, grinders, material handling systems, storage systems, and more.



John Larkin and Co., Inc. (973) 627-7779 [www.johnlarkinandcompany.com](http://www.johnlarkinandcompany.com)

SAMPLE	AROMA	ACIDITY	BODY	SWEETNESS	FLAVOUR	AFTER TASTE	TRUE TO TASTE	COMMENT (&/or any ROAST DEFECTS)
1.	LMH	LMH	LMH	LMH	LMH	LMH	1 2 3	

FIGURE 1 | PRODUCTION ROAST EVALUATION

way to get to know your customers and build a good, trusted business relationship with them as well.

Often, roasters also claim that they are too busy or do not have enough time to do PRE.

If you are short on time, be more strategic and do your PRE during the pre-heat cycle of your roaster—this is a great time to be doing your tasting. I certainly understand and relate to the pressure for time, the need to multi-task and “get things done”—a sentiment that was strongly echoed by many roasters I polled. However, not supporting your PRE with a reliable sample

and data collection routine will affect your ability to make any good evaluations about your roasting.

Throughout your production day, you can also prep your samples to be tasted while roasting (that first 5 minutes of the roast is a great time to do this—social media and other distractions can wait!) or use other strategies, like having your packing team collect samples based on your instructions with the sampling code/number so that it matches your roast data, and you can keep multi-tasking and smashing out your production roasting.

While the timing of when to do PRE may vary between roasters



## ORPHAN ESPRESSO

The Hand Grinder People

Specializing in the design and manufacture of manual coffee grinders and unique products for the home coffee enthusiast.

[www.oehandgrinders.com](http://www.oehandgrinders.com)



## TRUE TO TASTE



Quality control processes in action.

based on their company's specific operating procedures, one should always head into a roasting session with an idea of what the coffee should (or will) taste like—as every roasting session is an opportunity to improve or fix a previous mistake.

How else will you know if your roast profile is on point and the end product flavors are true to taste?

### KNOWING THE PURPOSE

The No. 1 rule of cupping, tasting or evaluating roasted coffee is to always know the purpose. Why are you evaluating this coffee—is

it for purchase or production?

If you are determining whether to buy a specific green coffee, then you are looking for characteristics inherent to the green, thus requiring a scoring scale relevant to a level of quality that reflects specific green characteristics.

But for production, in my experience, it is more about evaluating the intensity of a specific quality (in terms of low, medium or high) that contributes to an overall flavor expectation (see Figure 1 on page 79).

We can then assess whether those flavors have met product flavor expectations (are true to taste) on a scale of 1 to 3 (1 = not

FULL PAGE AD

Coffee Holding

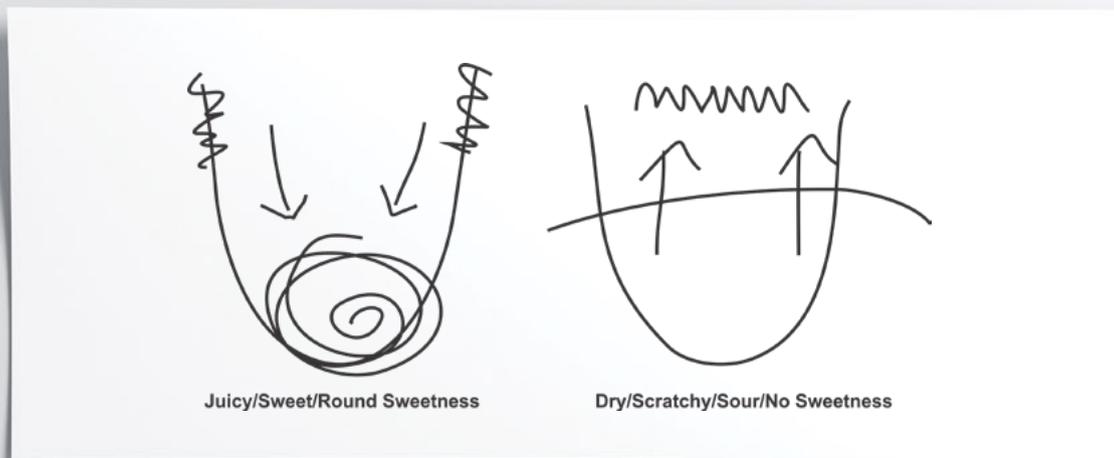


FIGURE 2 | FLAVOR TONGUE MAP

ideal; 2 = O.K.; 3 = ideal), because now we are also thinking about suitability for an intended brew method or recipe, such as filter or espresso.

So, with PRE, we are essentially assessing the success of our roast profile—how have we as roasters influenced the intensity of individual qualities and desired flavors with our roast profile?—regardless if it is a commercial or specialty grade coffee/product. Furthermore, we are now looking at the question of whether the coffee we are evaluating suits an intended brew method—as each brew method has its own specific roast profile approach suited to individual markets or palates.

This is where the “weakness” theory and PRE starts to get a little bit more layered and complicated. However, a clear quality control process will help to give better insight to your PRE, roast profile and everything else involved in creating your desired end flavors.

### ESTABLISH A CLEAR QUALITY CONTROL PROCESS

Currently with PRE, there are many different quality control (QC) approaches and techniques being employed by roasters worldwide and traditionally always done in a cupping format. When doing

Q-grading or evaluating green coffee for purchase, there are strict QC industry guidelines to follow that could (and should) be the case for evaluating production roasts as well.

In my experience, and among polled roasters, a good QC process for PRE involves:

- **Evaluating a range of samples.** Always include a mix of random and targeted samples.
- **Managing the number of samples.** Evaluate no more than 12 samples per session so you can stay focused. For more samples, break them up into multiple, smaller tasting sessions. If there is a roast defect present in the sample, it will generally extend across the whole batch. If cupping a blend, set up at least two cups to make sure there is a representative amount of all coffees in the samples being evaluated.
- **Ensuring good table placement.** Products with a certain roast level can really influence and affect an evaluation. The ideal would be placing the samples from light to dark roast, or if basing your table placement on origin, start with more mellow origins like Brazil and finish with the more vibrant origins like Kenya.

**ENERGY SAVING • LOW MAINTENACE • RELIABILITY  
HIGH TECHNOLOGY • USER FRIENDLY • CUSTOMIZING**

# Simply Opem,

**your partner of excellence in the world  
of filling and packaging machines for  
coffee, tea and soluble products.**



**Opem**  
*green*

solutions to package your quality

[www.opem.com](http://www.opem.com)

USA AGENT: GPI Solution LLC 1671 NW 144th Terrace Suite 108, Sunrise FL 33323 USA  
Phone: 954-389-1959, 786-333-7500 Email: [contact@gpisolution.com](mailto:contact@gpisolution.com) Web: [www.gpisolution.com](http://www.gpisolution.com)

## TRUE TO TASTE



Practice tasting and describing different flavors.

- **Having correct brew ratios, grind size and water quality.** Follow the SCA cupping protocols. Coffee roasters can sometimes grind the coffee too finely or brew with an incorrect ratio, making it difficult to clearly judge and assign any out-of-spec tastes to a specific part of the roast profile.
- **Not only looking for defects.** Look for what is right so that when it does not meet expectations, you will know how to relate back to your data and roast profile to adjust/fix your approach.
- **Doing triangulations to compare samples.** If you do get stuck in an evaluation where something is slightly off-spec or didn't roast to profile, but you think it still tastes good, then do a triangulation with an in-spec roast and see if you can tell the difference.
- **Ensuring correct calibration of evaluation equipment.** If your sampling or handling technique is not consistent, a false reading

### Gentle Clean Reliable Conveying

Decades of Global Experience  
Worldwide Experts in Cable  
and Disc Conveying Solutions

48

Years  
in Business

66

Countries  
Served

900+

Products  
Moved

30,000+

Conveyors  
Commissioned

**NEW 8" Systems**  
Moves up to 80,000 lbs/hr (36,287 Kgs/hour)

**System Capacity:**

- 8" (203.2mm) tube diameter
- Moves up to 2,000 Ft<sup>3</sup> (56.6 M<sup>3</sup>)/hr
- Moves up to 80,000 lbs /hr (36,287 Kgs/hour)

(depending on bulk density of materials)

**8" Cable Conveyors**  
Typically used to convey:

- Mixed products
- Nuts
- Extruded snacks
- Pet Food
- Chips
- Popcorn

**Turnaround Unit**

**Turntable Unit**

(641) 673-8451

www.cablevey.com

The Gentle Way to Convey

Cablevey is a registered trademark of Intraco, Inc. 04/2020

can negatively influence a thought or decision about the suitability of a roast profile. This goes for lab equipment such as roast color analyzers, too.

- **Having a set of roast defects.** Obtain, and regularly update, your own collection of roast defect samples to help you compare and learn how to identify roast defects or other differences and their causes.

- **Knowing what a sample is.** This can help immensely when evaluating levels of intensity and targeted flavors. PRE does not always need to be a blind tasting or cupping to evaluate a sample effectively.

- **Having the right people involved in the QC process.** Involve team members who are familiar with your process and approach to roasting, and the intended flavor profile of the roasted product.

- **Evaluating at consistent times.** Make it a strict part of your roasting schedule to evaluate coffees the same number of hours or days after roasting each time.

- **Keeping it simple and organized.** Ensure that your QC process is clear and organized to make it as easy as possible to perform regularly.

- **Drawing a flavor tongue map.** Interpreting, describing and communicating what you're tasting is definitely the hardest part of production evaluation. I often advise those who don't want to do a production evaluation form because it feels too overwhelming and complicated to draw what they're tasting and focus on the finish—where do they want to taste flavors/finish/intensity on their tongue? This is a great way way to practice tasting and communicate flavors you like and don't like (see Figure 2 on page 82).

QRTR PAGE VERT AD  
Coffee Review

**SM** Safely Transport & Deliver Your  
Coffee & Espresso Equipment

Demtruk Folding cart with roll-off platform  
capable of handling up to 500 pounds

**DEMTRUK**

800.821.4140  
SalesMakerCarts.com

# TRUE TO TASTE

● **Practicing tasting and describing specific flavors.** If you don't think you're good at tasting, then practice by tasting the actual ingredients you are wanting to express in your roasted flavors

so you can create a memory tongue map that will make it easier for you to recognize and describe specific flavors when you are evaluating and tasting your own coffees.

FIGURE 3 | DAILY ROAST LOG



### DAILY ROAST LOG

DATE: 1/1/19

ROASTING MACHINE: George-Plz

OPERATOR/S: etc

ROASTING ROOM ENVIRONMENT - TEMP °C/HUMIDITY %

BEFORE PRE-HEAT: 14°/51% MID-MORNING: 20°/49%

AFTER PRE-HEAT: 16°/53% MIDDAY: 25°/45%

COFFEE	YELL TIME	YELL TEMP	YELL TO 1C TIME	FIRST CRACK TIME	FIRST CRACK TEMP	TOTAL ROAST TIME	END ROAST TEMP	STRETCH TIME	STRETCH DEGREES	DEVELOP. RATIO %	GREEN KG IN	END WEIGHT	WEIGHT LOSS %
1. Pezzer	5:35	164	3:51	9:28	202.6	12:10	216	2:44	13.4	22.4%	10	8.54	14.6%
2. El Sol	5:26	163	3:45	9:11	202	12:16	216	3:05	14	25.13%	10	8.47	15.3%
3. Urc	5:20	163	3:50	9:10	201	12:20	215	3:10	14	25.6%	10	8.48	15.2%
4. El Sol - Sample	5:25	163	3:50	9:15	202	11:56	212	2:42	10	22.3%	10	8.5	14.5%
5. Kampa - F	4:45	162	3:40	8:25	199	10:05	205	1:40	6	16.5%	A	3.46	13.5%
6. Nat. Col. - F. #	5:05	163	4:00	9:05	203	10:20	208	1:15	5	12%	A	3.48	13%
7.													
8.													
9.													
10.													



Ethiopia - 10% / 73.4 kg/hL  
 Guatemala - 10.1% / 70 kg/hL - Chris  
 Costa Rica - 11% / 71.8 kg/hL - Patrice  
 Colombia - 11.3% / 72 kg/hL - Matt

### DAILY ROAST LOG

DATE: 1/2/20

ROASTING MACHINE: Robot Plz

OPERATOR/S: Roasting Course

ROASTING ROOM ENVIRONMENT: TEMP °C/HUMIDITY %

BEFORE PRE-HEAT: 25°/51% MID-MORNING 9am: ✓

AFTER PRE-HEAT: 27°/51% MIDDAY 12pm: ✓

NAME	YELLOW TIME	YELL TO 1C TIME	FIRST CRACK TIME	FIRST CRACK TEMP	TOTAL ROAST TIME	END ROAST TEMP	STRETCH DEGREES	STRETCH TIME	DEVELOP. RATIO %	GREEN KG IN	ROAST KG OUT	WEIGHT LOSS %	WB	GND	DELTA SPREAD
1. Anne - E	5:05/163	4:37	9:42	204.2	12:21	214.2	10	2:37	21.5	4	3.45	14.6%	58.1	67.9	9.8
2. Anne - F	4:51/164	3:41	8:32	204	10:49	216.5	12.5	2:17	21.1	4	3.45	14.3%	60.3	70.1	9.8
3. Matt	5:11/164.7	4:06	9:11	204.3	11:49	213.7	9.4	2:37	22.2	"	3.41	14.75%	59.6	70.4	10.8
4. ETHIO	4:56/165.9	4:19	9:15	206.3	11:48	218.2	11.9	2:33	21.6	"	3.4	15.00%	58.5	65.2	6.7
5. CHRIS	4:44/165	3:47	8:36	205.5	10:52	216.2	12.8	2:16	20.9	"	3.41	14.1%	57.9	68.2	10.3
6. Patrice (F)	4:46/164.5	4:10	8:56	208.9	10:29	209.9	1.33	1:40	14.8	"	3.455	13.62%	66.1	80.7	14.6
7. Matt - 2c	5:05 - 164.5	3:16	7:21	205.4	12:32	229.5	24.1	4:12	33.5	"	3.3	17.5%	44.9	45.2	0.3



**MASTER EVALUATION - TRUE TO TASTE - PRODUCTION ROAST EVALUATION**

SAMPLE	AROMA	ACIDITY	BODY	SWEETNESS	FLAVOUR	AFTER TASTE	TRUE TO TASTE	COMMENT
								Specific Flavour Notes (&/or any Roast Defects)
1. Brazil, Yeast Fermentation – Espresso: Milk	L M <b>H</b> 3	L M H 3	1 2 3	Smooth, Milk Chocolate, Syrupy Body, Big Sweetness, Low Acidity				
2. El Salvador, La Aradona – Espresso: Milk	L M <b>H</b> 3	L M H 3	1 2 3	Milk Chocolate, Big Body, Brown Sugar Sweetness, Hazelnut, Toffee,				
3. Nicaragua, Segovia – Espresso: Milk	L M <b>H</b> 3	L M H 3	1 2 3	Caramel, Toffee-Praline, Brown Sugar Sweetness, Hint of Ripe Mandarin				
4. El Salvador, La Aradona – Espresso: SOE	L M <b>H</b> 3	L M H 3	1 2 3	Hazelnut, Toffee, Cherry-Like Acidity, Sweet, Good Body				
5. Kenya Gatuya – Filter	L M <b>H</b> 3	L M H 3	1 2 3	Cherry, Red Currant, Crisp Green Apple Acidity & Toffee-Like Sweetness				
6. Colombia Natural, Pink Bourbon – Filter	L M <b>H</b> 3	L M H 3	1 2 3	Pink Champagne, Sparkling Acidity, Rose, Raspberry, Guava,				
7.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
8.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	

FIGURE 4 | MASTER PRODUCTION EVALUATION SENSORY FORM

There are great tools out there to help with practicing flavor identification, but nothing beats the real thing—especially from a cultural palate perspective, as you quickly learn that tasting a strawberry in Australia (quite acidic) is very different from tasting a strawberry in Korea (incredibly lush and sweet), and this does have an effect on perceived cultural palate flavor descriptors in coffee.

Some roasters do go over the top with their QC process and get a case of analysis paralysis by evaluating far too many cups at once. This technique can hinder your ability to make good decisions about your roasting, as you’ll be greatly fatigued from the large number of samples. You won’t have enough time to evaluate properly and provide appropriate feedback or comparison among team members, thus defeating the purpose of the cupping/tasting in the first place. Cupping and tasting should not be done simply for the sake of tasting, but rather with a purpose to evaluate

and learn from your roasting successes and mistakes.

Another QC issue to highlight is determining the best method of brewing/extraction for PRE. Should production roasts be evaluated using the intended brew method, such as espresso, rather than in the cupping format?

Many roasters are comfortable enough to QC their production roasts as espresso the day after roasting and determine whether it is on track or not. This may challenge the theories around freshness for espresso extraction that exist in our industry, but if a roaster is consistent with this evaluation technique and can successfully move on to their next roast session confident that everything is as it should be, then they are achieving the main goals of their PRE.

So, a good, clear QC process is essential to the success of your PRE, but it also needs support from your roast data.

# TRUE TO TASTE

## DATA IS KNOWLEDGE, KNOWLEDGE IS POWER

Data collection is an area of weakness for some roasters, who can fall victim to the “I’m too busy” excuse. On the other hand, it can also be overdone to the point that the wrong kind of data is being collected, which then bears no value in terms of being able to use it to make good roasting evaluations/decisions.

In my experience, whenever I am tasting or evaluating my production roasts, I always have these key data documents

available for reference during PRE discussions on the success or failure of a roast profile (and I encourage others to do so):

- **Daily Roast Log** | Keep a record of the day’s roasting session, including key roast profile events/checkpoints, roasting room conditions and, if applicable, color measurements as well (see Figure 3 on page 86). Even when using computer profile programs for recording roast curve data, it is important to collect this information on a separate roast log sheet (regardless if you’re

FIGURE 5 | PARAMETERS CHART

### ROASTING PARAMETERS - ‘GUIDE’ TO END ‘ROAST STYLE’ DEFINITION

	<b>WEIGHT LOSS %</b> <i>Depending on/ Affected by the initial Green Moisture Content</i>	<b>DEVELOPMENT RATIO %</b> <i>‘Time Ratio’ in relation to FC &amp; the Overall Time of the roast</i>	<b>STRETCH DEGREES</b> <i>1<sup>st</sup> Crack to End of Roast</i>	<b>STRETCH TIME</b> <i>1<sup>st</sup> Crack to End of Roast</i>	<b>AGTRON DELTA SPREAD</b> <i>Whole Bean to Ground (EK grind #8 &amp; Lightells)</i>
<b>SAMPLE</b>  Green - Yellow: 4:30-5min. Yellow – FC: 3-3:30min.	<b>12% - 13%</b>	<b>10% - 11%</b>	<b>+ 3-4°C</b>  Example: 1ST Crack @ 200°C End Roast @ 204°C	<b>1min. – 1:15</b>	<b>15-20pts</b>
<b>FILTER</b>  Green – Yellow: 4:30-5min. Yellow – FC: 3:30-4min.	<b>13.25% - 13.9%</b>	<b>15% - 19%</b>	<b>+ 5-7°C</b>  Example: 1ST Crack @ 200°C End Roast @ 205°C	<b>1:30 – 2min.</b>	<b>10-15pts</b>
<b>ESPRESSO</b>  Green – Yellow: 5-5:30min. Yellow – FC: 3:45-4min.	<b>14% - 15%</b>	<b>20% - 25%</b>  SOE: 20%-23% Milk Blend: 23%-25%	<b>+ 9-12°C: SOE</b> <b>+ 12-15°C: Milk</b>  Example: 1ST Crack @ 200°C End Roast @ 210°C SOE End Roast @ 215°C Milk	<b>2:30 – 3:15</b>	<b>5-10pts</b>

*Note: Data has been developed on a BRZ Sample Roaster & Probat P12 w/3mm k-type probes*

This is a guide and is dependent on the bean and specific flavor preferences.

Always taste—taste is king!



FIGURE 6 | COLOR CHANGE THROUGHOUT THE ROAST

doing four or 40 roasts) to help understand the results of the tasting. In addition, some roasters also like to input data in a spreadsheet on their computers. (There are many different roasting software apps, one of which I am an ambassador for,

but I also want to consider those roasters who don't have access to using these apps and offer some basic, practical solutions to key roast data collection that will support their PRE.)

FIGURE 7 | PRODUCTION CUPPING FORM

DATE: \_\_\_\_\_ CUPPER: \_\_\_\_\_ ROAST DATE: \_\_\_\_\_

SAMPLE	AROMA	ACIDITY	BODY	SWEETNESS	FLAVOUR	AFTER TASTE	TRUE TO TASTE	COMMENT (&/or any ROAST DEFECTS)
1.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
2.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
3.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
4.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
5.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
6.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
7.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
8.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
9.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
10.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
11.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	
12.	L M H	L M H	L M H	L M H	L M H	L M H	1 2 3	

<b>Fragrance/ Aroma</b>	<b>Flavour</b>	<b>Aftertaste</b>	<b>Acidity</b>	<b>Mouth Feel</b>
Berry Chocolate Vanilla	Sweet Woody	Short Clean	Delicate Vibrant	Buttery Dry
Floral Spicy Hidy	Sour Flat	Dry Sweet	Mild Grassy	Creamy Chalky
Fruity Earthy Musty	Salt Greenish	Bitter Floral	Nippy Hard	Smooth Gitty
Caramel Nutty Leather	Delicate Fruity	Sour Fruit	Piquant Acid	Rich Rough
Malty Lemon Carbon	Rich Balanced	Harsh Lingering	Sweet Soft	Velvety Astringent
Grapefruit Pepper	Intense Exotic	Dirty Resonant	Tangy Sour	Watery Metallic
Butter Toast Smoke	Pungent Chocolate		Tart Winey	Oily
	Musty Spicy Past Crop		Lemon Grapefruit	

<b>Intensity Scale:</b>	<b>Quality Scale:</b>
L – Low	1 – Not Ideal
M – Medium	2 – Ok/Passable
H – High	3 – Ideal

**Production Cupping Form**

# TRUE TO TASTE

SAMPLE	AROMA	ACIDITY	BODY	SWEETNESS	FLAVOUR	AFTER TASTE	TRUE TO TASTE	COMMENT
1. Brazil Yeast Fermentation - Espresso - MILK	L M H 3	1 2 3	Good body, milk chocolate, smooth, sweet, no acidity, rounded					
2. Colombia Natural Pink Bourbon - FILTER	L M H 2	1 2 3	Confirmation of profile running too hot & overall flavors not as balanced as usual					

FIGURE 8 | EVALUATION FORM EXAMPLE

● **Master Production Evaluation Sensory Form** | Use this form as a benchmark reference guide of the expected sensory attributes of a sample, and to compare and determine whether PRE assessments are within the desired flavor specifications (see Figure 4 on page 87).

● **Parameters Chart** | Key roasting data to support sensory, specific to a roasting machine's probes, defining an end roasting style/flavor for a product suited to a particular brew method (see Figure 5 on page 88).

**NEW AeroPress® Go™**  
Available Now!  
See Demo:  
[aeropress.com/aeropress-go](http://aeropress.com/aeropress-go)

**AEROPRESS® GO™**  
The Better Travel Coffee Press

AeroPress is a registered trademark and Go is a trademark of AeroPress, Inc.  
1-650-493-3050 • info@aeropress.com  
[www.aeropress.com](http://www.aeropress.com)

**Coffee Freshness System**

Extends the peak freshness of coffee beans with pressurized CO<sub>2</sub>.

**Benefits**

- Automatic pressure management
- Capable of preserving multiple canisters

[www.coffeefreshness.com](http://www.coffeefreshness.com)  
marketing@coffeefreshness.com

THIRD PAGE  
VERTICAL AD  
Artisan Imports  
Roast building



FIGURE 9 | SCA CUPPING FORM (NOT IDEAL FOR PRODUCTION ROASTING EVALUATION)

It is essential to keep some form of daily roast log with a record of key milestones and checkpoints achieved throughout the roast. In my production roasting, I always record the timing of physical changes—from green to yellow, yellow to first crack, and first

crack to end—because this is the key to consistency in the roast profile and end flavors. (For more on this, see “Can You Taste the Roasting System?” in *Roast*’s May/June 2019 issue.) Some may say it is “old school” to follow the color/physical change of the beans

HALF PAGE HORIZONTAL AD

Astra



## TRUE TO TASTE

or that it doesn't matter—don't let them convince you of this. Color change, or more specifically the *timing* of color/physical changes and milestone events throughout the roast, is imperative to consistently creating specific flavors (see Figure 6 on page 89).

Specific products will then each have their own desired timing for these milestones, as well as parameters for defining the overall end roasting style. I specifically developed a parameters chart through my own extensive roasting and training experience to help support roasters, and show them how to finish their roasts for a particular product in line with their specific machines' probes, because knowing and deciding how to finish a roast is one of the most terrifying and daunting parts of learning how to roast!

If you have these documents next to you when evaluating your production roasts and identify a product's flavor as being "out of spec" in comparison to the benchmark Master PRE, you'll be able to confirm this by checking the roast profile data on the daily roast log against your unique, desired product parameters chart, see where it's not quite right, and then know how to fix or adjust your roast profile accordingly. It's a great feedback loop and can make doing PRE much easier.

## HOW BEST TO COMMUNICATE

Finally, alongside the clear QC process and supporting data documents, we need to be able to consistently communicate and record our PRE in an appropriate format. Communication is the last piece in the "weakness theory" puzzle because PRE requires a more specific production evaluation form, which our industry doesn't seem to have—yet.

A PRE form I created for myself (and others) to use is focused on being able to properly record and communicate levels of intensity of a particular quality (as low, medium or high) and then decide whether those levels assessed are true to taste for the specific product flavors, on a scale of 1 to 3 (1 = not ideal; 2 = O.K.; 3 = ideal). This format can be used for different brew methods as well (see Figure 7 on page 89).

**EVERYTHING YOU NEED IS IN THIS JAR**

- BACKFLUSH DETERGENT
- LIQUID SOAKING SOLUTION  
Cleans utensils, portafilters, etc.
- COFFEE POT CLEANER
- THERMOS & AIRPOT RINSE
- STEAM WAND & MILK PITCHER CLEANER  
Quickly removes dried milk residue

JoeGlo.com

GIFTS • BACK ISSUES  
BOOKS • POSTERS

roastmagazine.com

Figure 8 (page 90) is an example of an evaluation form where the Brazil is in spec and the Colombia is not quite in spec but, because the supporting roast and product data is available for reference and comparison, we can determine how to start fixing the roast profile for the Colombia and get it back into spec.

The majority of roasters I polled do generate their own PRE forms, which confirms the need for a more consistent, industry-wide PRE document. Many other roasters simply make general notes on a blank piece of paper, noting what they like and don't like without any supporting documentation, which clearly doesn't help them to benchmark, progress or adjust their roasting accordingly.

But a lot of roasters still make the mistake of using the wrong form of assessment for evaluating their production roasts. Unfortunately, that means using the SCA arabica quality/purchasing evaluation/cupping form (see Figure 9 on page 91). In PRE, this form can really send a roaster on the wrong path because its evaluation structure of generating a "quality score" doesn't match or reflect the purposes of evaluating and focusing on the "intensity" required in production roasting.

I can understand that roasters—especially those who are new to the industry—want to find something with a base of consistency to use for their production evaluations (which is possibly how the use of the SCA form gained traction), but does it really allow us as roasters to see how to connect to our roast profile and identify anything that needs fixing? Unfortunately, the answer is no.

Hence, this is where a major weakness lies in PRE.

I also believe that misusing the SCA form for PRE is contributing to the degradation of the true value and purpose of the Q/SCA 80-point specialty coffee evaluation cupping form. Thus, I appeal to roasters to stop using this evaluation form for their production roast evaluations.

There are fabulous cupping apps out there, but I have chosen not to delve into these as not everyone uses them or likes using them. Using these apps is not currently an industry standard, although perhaps it could or should be. Even though they are still score-

**ENTRY LEVEL**  
**PACKAGING EQUIPMENT**  
 Add as you Grow

Loader by **PNEU-CON**  
 PNEUMATIC CONVEYING, INC.

Scale by **WEIGH RIGHT**  
 AUTOMATIC SCALE CO.

Bag Sealer by **PLEXPACK**  
 Call us Toll Free 877-688-3311

Get more information today!  
**800-571-0249**  
**weighright.com**




## Tools for Coffee Perfectionists

### PESADO 58.5

Tampers & Portafilters

Designed for **precision**.  
 Made with **optimum efficiency**,  
**durability** and **luxury** in mind.

Available in a range of colors  
 and finishes for multiple machines.  
 Visit our website to order today!



### Rebel Espresso Parts

*The Professional's Choice*

Parts for Espresso Machines & Grinders  
 Espresso Grinders · Barista Accessories

www.REBELPARTS.com · (916) 315-2535





REDGONI  
WORLD COFFEE PURVEYORS

CONSISTENTLY DELIVERING THE  
WORLD'S FINEST COFFEES



sales@redgoni.com | 424-228-4822  
WWW.REDGONI.COM

## DAILY COFFEE NEWS

BY ROAST MAGAZINE



ESSENTIAL ONLINE  
READING FOR  
SPECIALTY COFFEE  
PROFESSIONALS

DAILYCOFFEENEWS.COM

## TRUE TO TASTE

based, some cupping apps are certainly leading the way by adapting the PRE documents that roasters have created for themselves into an easy format to help them carry out their PRE more consistently and efficiently.

All this being said, though, one can understand why many have commented that quantifying roast quality in general is considered a weakness in our industry.

Coffee is essentially loved by everyone, and everyone has a strong opinion about how it should taste, and how it is best roasted and evaluated across different brewing methods and cultural markets.

A first solution could be as simple as replacing “balance” with “true to taste” as the more clearly defined end purpose in our production evaluations. In fact, true to taste must become a universal part of our PRE vocabulary, as it brings with it so much clarity, consistency and confirmation of a decision on what an end product flavor should be, and it clearly captures the essence of what PRE is all about—we either nailed our roast profile and intended flavors, or we didn’t.

And regularly doing production roast evaluations with supporting data, a clear QC process and a purposeful PRE form will always ensure success in your roasting and an end product flavor that is always true to taste.

The reality is, due to the range of roasting companies (commercial and specialty) in our industry, we’re not all operating in a “protocol evaluation world” as much as we would like to. So, as an industry, we need to find some consistent ways to help satisfy this variation in companies and PRE techniques—just how, and through whom, remains the conundrum.

Overall, as roasters, we are in the business of flavor, and we need to know what we have done to influence end flavors, how we did it and how to fix it if needed. And a unified, standard, purposeful, overall-industry-accepted production roast evaluation document will definitely help to set our dynamic industry on the right track.



**ANNE COOPER** is an Australian roaster who has gained extensive experience in her 25 years in the coffee industry. A former member of the Roasters Guild Executive Council and Education Committee, Anne now works with her training and consulting company, Equilibrium Master Roasters. There, she continues to inspire flame keepers and develop her extensive roasting skills and knowledge while working on a wide range of roasting machines with small- and large-scale roasting companies, employing various roasting processes and techniques.