

The SCAA Flavor Wheel

The Flavor of Coffee: Using the Coffee Cupper's Kit to Analyze Coffee Profiles from Source

Welcome to our second in a series of educational articles on coffee. In this installment, we will discuss the Coffee Cupper's Kit and its use in describing the flavors of different sources of coffees. (By Dolf De Rovira)

It all began between 1995 and 1996, when a group of roasters at the Coffee Enterprises building in Burlington, Vermont, decided to begin the project, The Coffee Cupper's Kit. The group featured talented coffee cuppers like Don Schoenholdt of Gilles, Inc., Dan Cox of Coffee Enterprises, Jerry Baldwin of Peet's Coffee and Tea, Doug Carpenter of McGarvey Coffee Company and later Ronnoco Coffee,

Russ Kramer from Green Mountain Coffee and Coffee Enterprises, Ted Lingle of the Specialty Coffee Association of America (SCAA) and George Howell, who gained notoriety when he sold his company, The Coffee Connection, to Starbucks.

Within the next three years, the group worked to translate the coffee industry's vernacular into a standardized tasting nomenclature. The final product of these meet-

ings, Flavor Dynamics' Coffee Cupper's Kit, is a teaching tool approved and marketed by the SCAA. It is intended to help teach roasters, buyers and other interested coffee cuppers to identify and knowledgeably discuss coffee's defining flavor characteristics.

The kit itself is comprised of 15 dropper-styled bottles containing flavors that, when added to coffee, provide all but two of the 17 attributes represented in the Coffee Cupper's Wheel. Each of the flavor notes describes an aspect of roasted coffee's flavor: Chocolatey, Floral, Grassy, Winey, Sour, Turpeny, Herby, Peanuty, Salt, Sweet, Caramelly, Earthy, Fruity, Nutty and Spicy. The final two characters, Roasted and Bitter, are not represented in the kit, since they are the flavor notes most familiar to cuppers and laypeople alike.

The Kit's Procedure

When participating in serious sensory analysis, the environment must be cleared of all distractions. This includes removing all impediments for total concentration; from unrelated odor sources to ringing cell phones. Once the environment has been prepared, the procedure for using the kit can begin by lightly roasting a mild

(Coffee Flavors)

coffee. The examples of mild coffee suggested in the kit include varieties from El Salvador and Panama. Additional coffees that are often used successfully include light Columbian, Mexican, Kenya A, or generic Costa Rican varieties. Regardless of the coffee source, it should be roasted to 800-ppm in strength, and 18% extraction, with 40-g of coffee to a liter of water.

Once the coffee is roasted, grounded and brewed, it should be presented to each cupper in two coffee cups. The first of these cups (the blank) is presented to everyone's left, while the second cup, which is the one that will be obtaining the essence drops, is presented to everyone's right.

Efforts must be made to keep the temperatures of the two cups as identical as possible throughout the cupping process, so as to maintain a consistent sensory environment. The number of cups to be tasted should be kept to a minimum as well. It is far better to be accurate and repeat the test more often than to inaccurately work on several different characters in one sitting. Remember that the kit's purpose is to help cuppers become finely calibrated tools for sensory analysis, not merely people who are aware of the differ-

ent flavor characteristics of coffee.

It is at this point that the character from one of the dropper bottles should be added to the working cup, one drop at a time. When honing their senses over a series of days, the cupper should record the number of drops needed to create flavor recognition. At first, some of the characters, like Sweet and Salt, might take a lot of drops before recognition while others, like fruity, might be observed in one drop. Some characters will be accentuated depending on the coffee source and roast level. Further, everyone's taste and odor acuity is quite different, and as such

their "progress" might be different than that of other users. While a user might taste one thing very well, another charac-

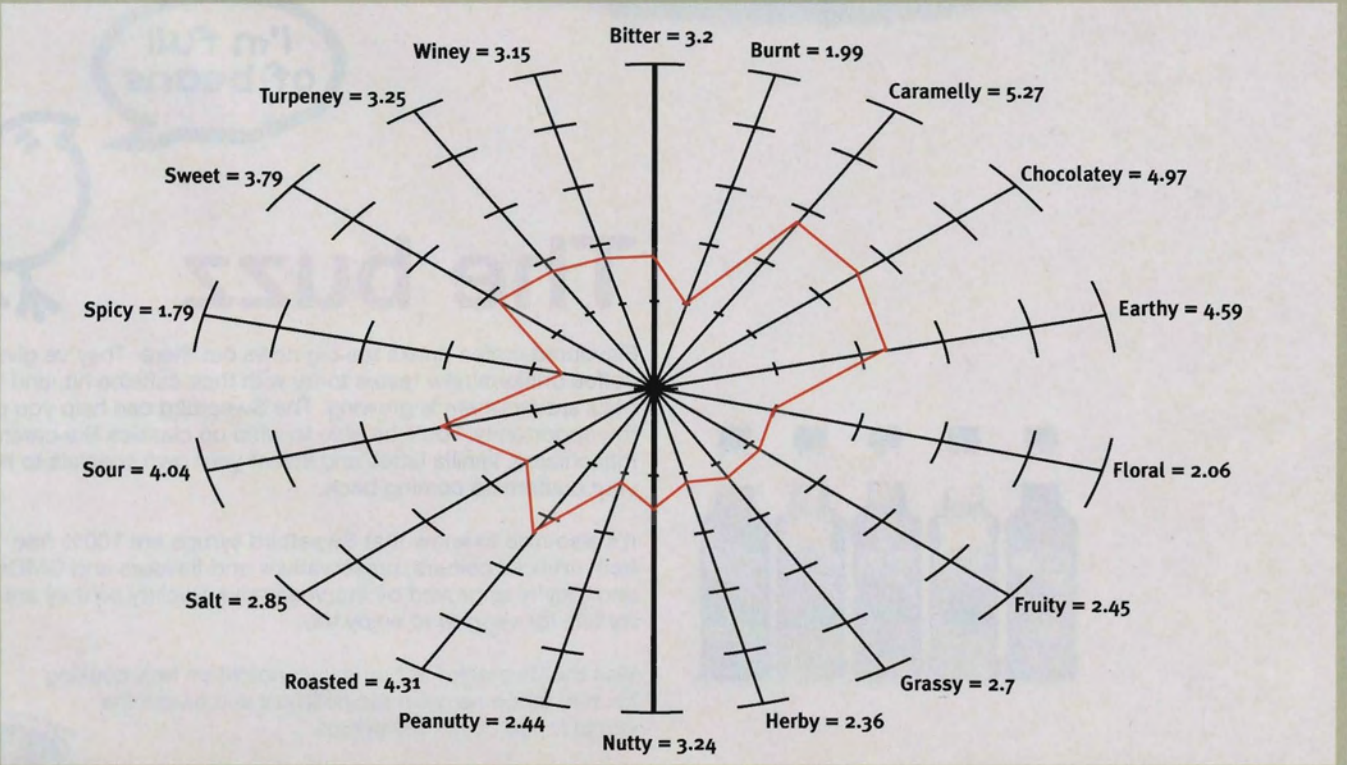
The Flavor Dynamics Coffee Cupper's Kit Calibration Chart

Name:	Date:		
Comments:			
Flavor Character	Drops to Threshold	Drops to Recognition	Drops to Over-Flavored
Salt			
Sweet			
Sour			
Bitter **			
Floral			
Herby			
Nutty			
Turpeny			
Chocolatey			
Winey			
Caramelly			
Grassy			
Fruity			
Peanutty			
Earthy			
Spicy			
Roasted **			

**** These characters are not included in the kit.**

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TESTER – AVERAGE: Flavor Profile for Costa Rican Tarrazu



ter might take many drops to be perceived. For this reason, each user of the kit must undergo individual calibration.

The Three Levels of Progression

There are three levels for individual calibration. The first is "threshold," defined as the level of a character that is observed so that the taster can perceive a difference, but can not distinguish what that difference is. The second level, which is for individual calibration, is known as "perceived." At this level, the character is not only distinguished as creating a perceived difference but can also be named. This active recognition of a flavor characteristic creates a sensory memory for the cupper that will make it increasingly obvious in future sensory evaluations when the given character is present.

The last level for individual calibration is "over-flavored." This level is used as a binding point and is recognizable to the cupper by a perceived chemical, burning or off flavor. Essentially, this is the point at which the tester has "gone too far," and at which an over-saturation of the added character is unpleasantly powerful. When a cupper reaches this point, they should start from the beginning with a new cup of coffee and try to learn the character from scratch. Everyone is different, and occasionally there are people that are either blind or desensitized to a certain character. This is normal. A typical calibration chart is on the top of page 48.

The Final Steps

When the cupper has reached recognition with each of the characters identified in the kit, they can quiz themselves to see if they can guess the different characters in a blind cup. More advanced cuppers can challenge themselves even further by creating blind cups with complex combinations of characters, or by making quizzes that can be developed to hone the cupper's skill.

Once all of the characters in the kit are perceived and learned, then those that have gone through the course can be perceived as a "calibrated" cupper, and they are now qualified to go on to the next phase – analysis. In this phase, a cupper can cup a roasted coffee and use magni-

tude estimation to rate the level of intensity of each flavor character on a scale.

The results of analyses done by the cuppers can then be plotted on radial graphs that act as a fingerprint of a coffee's flavor profile, like this one for the Costa Rican Tarrazu variety on the bottom of page 48.

In the next article we will explore these fingerprints in more detail, includ-

ing several real-world examples of radial graphs culled from Flavor Dynamics' sensory lab's analyses of different coffee varieties. Until then, good cupping! ☕

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