

Cocoa of Excellence Glossary of Terms for Cocoa Bean Flavour **Evaluation as Liquor and Chocolate**

29 August 2021

CITATION: Cocoa of Excellence Technical Committee (2021). Cocoa of Excellence Glossary of Terms for Cocoa Bean Flavour Evaluation as Liquor and Chocolate. Bioversity International, Rome, August 2021.

Attribute Intensity Scale	Meaning
0	Absent
1	Just a trace and may not be found if tasted again
2	Present in the sample but at low intensity
3 to 5	Clearly characterizing the sample
6 to 8	Dominant characterization of the sample
9 to 10	Maximum. Strong intensity. Overpowers some other flavour notes in the sample

NOTES on examples of origin typical of intensity level

- These examples are for illustrative purposes only and are not meant to be exclusive of any origins/types.
- Specific lots of individual origins can differ dramatically from these frequently encountered values.
- Currently available, widely traded and traditionally known origins and may be reviewed in future editions.

Descriptor	Description	Intensity level References notes	
Cocoa	Typical flavour of roasted cocoa beans that are well fermented, dried, free of defects.	0-2	Under-fermented cocoa, ancient Criollos
		3 – 5	Appropriately fermented "Nacional" and Papua New Guinean lots
		6 – 8	Appropriately fermented cocoa, some West African and some Dominican Republic Hispaniolan lots
		9 –10	Some West African lots
Acidity	Total acidity is the sum of the following individual acidities: Fruit: citric or other fruit acids Acetic: vinegar (can be smelled it in the sample) Lactic: typically occurring in sour milk and yogurt Mineral and Butyric: harsh metallic tasting (mineral) and rancid butter (butyric) Perception of acidity intensity is particularly dependent on the amount of sample in the mouth.	0-2	Some well-prepared West African lots
		3 – 5	Some Ecuadorian, Peruvian and Central American lots
		6 – 8	Some Dominican Republic Hispaniolan, Papua New Guinean and Malaysian lots
Bitterness	Basic taste, typically perceived in caffeine, coffee, kola nut, some beers and grapefruit.	1-2	Some ancient Criollos
		3-5	Well-prepared West African lots
	Perception of bitterness intensity is particularly dependent on the amount of sample in the mouth.	6-8	Severely under- and un- fermented cocoa



Descriptor	Description		Intensity level References notes
Astringency	Astringency could be perceived in two ways:	1 - : n	Normal intensity for most cocoa Normal intensity for most cocoa Typical of underfermented cacao Typical of
Fresh Fruit	 Total Fresh Fruit is composed of the following subattributes: Berry: red or black currant, strawberry, raspberry, blackberry, acai berry Citrus: orange, lemon, lime, grapefruit or generic sensation of citrus-like fruit Dark: cherry, plum Yellow / Orange / White flesh: apricot, peach, pear, banana Tropical: passion fruit, pineapple, mango or soursop 	0-2 3-5 6-7	Many West African lots Some Central and South American, well fermented Asia and Pacific country lots Madagascar, some Central and South American country lots, some Papua New Guinean lots
Browned Fruit	 Total Browned Fruit is composed of the following subattributes: Dried: dried apricot, banana, yellow raisin, fig that has undergone an un sulphured drying process Brown: dark raisin, dates, prune Over ripe: No longer fresh and severely over-ripe fruit, turning brown inside and outside, as a step towards over-fermentation. 	0-2 3-5 6-8	Many West African lots Fully fermented Indonesian and some Caribbean country lots Some Papua New Guinean and some Caribbean country lots
Floral	Total Floral is composed of the following sub-attributes: Grassy / Green vegetal / Herbal: Grassy – freshly cut grass, young green leaves Green vegetal – crushed mature leaves Herbal – hay, straw or herbal / dried green, herbs like thyme and rosemary Earthy / Mushroom / Moss / Woodsy: Earthy – smell of dampness rising from soil after rain Mushroom – smell of fresh mushrooms Moss – damp moss often associated with earthiness Woodsy – leaves and wood on a forest floor Orange blossom: orange blossom flavour Flowers: jasmine, honeysuckle, rose, lilac, lilies, etc.	0-2 3-5	West African lots Appropriately fermented "Nacional" and some Caribbean country lots
		6 – 8	Some Caribbean country lots and some Peruvian lots



Descriptor	Description		Intensity level References notes
Woody	 Total Woody is composed of the following sub-attributes: Light wood: freshly cut cocoa wood, white pine wood, maple wood, ice-cream/popsicle wooden stick Dark wood: oak, walnut, teak, mahogany Resin: pitch of pine or other resinous wood 	0-2	
		3-5	Some "Nacional" and many West African lots
	Total Spice is composed of the following sub-attributes:	0-2	In most origins
Spice	 Spices: dried coconut, nutmeg, cinnamon, cloves, liquorice, tonka, vanilla, black pepper Tobacco: dried tobacco leaves Savoury / Umami: sodium glutamate, umami 	3-5	In some West African, Central and South American and Caribbean country lots
Nutty	Total Nutty is composed of the following sub-attributes: Nut flesh: the edible kernel of a light roasted nut — hazelnut, macadamia, pecan, walnut, cashew, almond, brazil nut Nut skins: the flavour of lightly roasted nut skins — hazelnut, macadamia, pecan, walnut, cashew, almond, brazil nut	0-2	In most origins
		3-5	Some Central and South American and Caribbean countries' lots and ancient Criollos
	Aromas reminiscent of caramel, brown sugar and panela (unrefined cane sugar)	0-2	In most origins
Caramel/ Panela		3-5	Some Central and South American and Caribbean countries' lots and ancient Criollos
Sweetness (only for chocolate)	Basic taste of white sugar solutions, typically perceived in foods like candies and desserts that contain sugar (or other sweeteners such as aspartame) also naturally found in other foods like fruits.		
		2-3	Low roast
Do not Do non	A measure of the extent of the roasting the beans.	4-6	Medium Roast
Roast Degree	Significant under or over roasting alters many of the attribute values.	7 8 –10	High roast Levels of burnt /over-
		8-10	roasted
Off-Flavours	Total Off-Flavours is composed of any unpleasant characters from the following: Dirty / Dusty: not related to texture but to an off-flavour Musty: stale, damp, mildew, decaying Mouldy: characteristic of mould growth Meaty / Animal / Leather: Meaty - cured meat, ham, rendered fat Manimal - dirty animal / farmyard Leather - used old leather Over-fermented / Rotten fruit: decomposing fruit Putrid / Manure: Putrid - wet decomposing vegetative matter Manure - farmyard animal manure Smoky: contamination from the smoke (any kind) Other off-flavours: rancid, diesel, oil fumes, petroleum, tar, paint, tyres, chemicals, burnt, etc.	0	Absent – clean, well fermented, dried and stored cocoa beans
		1-2	Low intensity
		3+	Clearly characterizing the sample as a defect



Descriptor	Description	Intensity level References notes
Global Quality	The Global Quality score reflects the overall impression of the: • expressed flavour potential • uniqueness of the sample • balance of flavour and cleanliness of the finish It celebrates the expression of genetics and terroir diversity through the farmer's knowhow.	Global Quality scores and meaning below. For a Global Quality above 7, select positive qualities that best characterize the quality of the sample from the following list: Uniqueness Complexity Harmony / Balance Clear / Clean / Bright Quality of Actidity Quality of Astringency Quality of Bitterness Quality of Finish / Aftertaste

Score	Meaning of Global Quality Scores
0	Serious off-flavours clearly characterizing the sample as defective
	NOTE: be as specific as possible on the type of off-flavours as valuable feedback to the producers
1	Core and complementary attributes masked by off-flavours
2	 Depending on the type, number and intensity of off-flavours, 0 would be the worst case and 3 the least
3	but still bad
	Off-flavours in low intensity
4	Core attributes seriously unbalanced
	Complementary attributes masked by off-flavours and unbalanced core attributes
	Off-flavours in low intensity
5	Core attributes unbalanced
	Complementary attributes partially masked by unbalanced core attributes
	Off-flavours in low intensity
	Core attributes unbalanced
6	Complementary attributes in low intensity, none outstanding, not in balance to core attributes
	Overall plain flavour – mainly characterized by the core attributes and less by the complementary
	attributes
	Absence of any off-flavours
7	One or more complementary attributes are outstanding but not in balance to core attributes
,	Overall plain flavour – mainly characterised by the core attributes and less of the complementary
	attributes
	Absence of any off-flavours
8	Core attributes well balanced with moderate base cocoa flavour
	One or more complementary attributes are outstanding, in balance to core attributes and to each other
	Overall flavour presents some complexity
	Absence of any off-flavours
9	Core attributes well balanced, good base cocoa flavour
	Many outstanding complementary attributes, in balance to core attributes and to each other
	Overall flavour presents a combination of complexity, uniqueness, harmony, brightness, clean finish
	Absence of any off-flavours
	Core attributes well balanced, in low to moderate intensity, good base cocoa flavour
10	Complementary attributes clearly recognizable, many outstanding, in balance to core attributes and to
	each other
	Overall flavour presents a combination of complexity, uniqueness, harmony, brightness, clean finish
	The sample is of extraordinary quality, rarely seen

