**PA** COFFEE NEWSLETTER\_

YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS. THIS ISSUE:

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#### **COFFEE GROWERS' OPINION**

The recent first flowering, that has been excellent in many important producing areas of Brazil, made growers happy in spite of the expected drop in coffee prices. However, to some growers' chagrin, rains have not come yet to all areas where flowering occured and chances are that this very promising flowering may be "lost" in these areas. Prices have not recovered or gone up...

## () STUDY SHOWS THAT COFFEE BIOCOAL RECOVERS SOIL CONTAMINATED WITH HEAVY METALS

Two kinds of biocoal obtained from coffee rejects, pulp (generated by coffee wet pulping) and coffee grounds (generated in the production of instant coffee), are efficient at reducing contamination caused by heavy metals and improving soil quality when embedded in it. The biocoal increases the pH of the soil. In addition, it has specific characteristics like porosity and functional groups on its surface that contribute to the sorption of heavy metals, reducing their presence in the soil. The results of the study were used to calculate the Soil Quality Index (SQI), that measures the impacts of the biocoal. The soil with coffee pulp biocoal presented a higher SQI and both types of biocoal were able to reduce the concentration of metals in the soil and contributed to its quality improvement. The study was carried out by the Campinas Agronomy Institute (IAC for its initials in Portuguese) working together with the Brazilian Agricultural Research Corporation (Embrapa).

Source: Embrapa

#### STORING RIPE CHERRIES IN WATER TO PRESERVE QUALITY WHILE DELAYING PROCESSING

Smallholder specialty coffee growers can keep ripe cherries in water for up to five days in order to increase the volume of the lots to be processed later. The new experiment, carried out by the Brazilian Agricultural Research Corporation (Embrapa), can help smallholders retain the quality of their coffees harvested in different days and to be processed at once using less labor. The main result of the research was that cherry storage in water does not affect the aroma and flavor of coffee, preserves its quality and allows a larger volume of coffee to be processed at once which in turn enables the use of technology to remove impurities and separate cherries to be processed and dried. The water used gets rich in nutrients that come from coffee and can be used as a fertilizer for coffee itself and other crops.

Source: Globo Rural

## BSCA'S CUP OF EXCELLENCE TO INCLUDE NEW "EXPERIMENTAL" CATEGORY

The Brazilian 2023 Cup of Excellence competition will have a new category called "Experimental" intended for coffees that have gone through an induced fermentation process with or without the addition of commercial yeasts. The traditional categories "Natural" and "Pulped Natural" will remain. The International Jury, composed of 20 judges from all over the world, will define the 10 winners for each of the three categories. The 30 winning lots will be offered in what has become a very disputed global auction via Internet. The host of the Cup of Excellence - Brazil 2023 will be Cocatrel, a coffee growers' cooperative in Três Pontas, state of Minas Gerais, that has over 8,000 members.

Source: BSCA

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## BRAZILIAN GIS ANNOUNCE DIGITAL PLATFORM AND RELEASE MAP

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The Brazilian Agency for the Promotion of Small Business (SEBRAE, for its initials in Portuguese) held an event in São Paulo that brought together all the Brazilian Geographical Indications for coffee. The Brazilian National Confederation of Agriculture and Livestock (CNA, for its initials in Portuguese) announced in the event the name of the company that will develop a coffee traceability system from production to final consumer. Supported by SEBRAE and CNA, this initiative

aims at strengthening coffee growing regions. With the implementation of this digital platform, Brazil will be ready to meet growing digital demands for quality and standardization. Another highlight of the event was the release of the Map of the Brazilian Origins. Source: A Folha Regional

## ()) FEDERAL GOVERNMENT SIGNS AGREEMENT TO ENSURE LABOR RIGHTS IN COFFEE GROWING

In order to avoid informality in the coffee sector and to create job opportunities, a Good Labor Practices and Decent Working Conditions in Coffee Pact was signed in Brasília in August. The Pact promotes sustainable working practices with emphasis on formal labor contracts for part-time coffee workers. The Ministries of Labor and Social Development were behind the development of the pact.

Source: CaféPoint

## ()) SPECIALTY COFFEE PROMOTION FOCUSES ON MIDDLE EAST

The Brazilian Specialty Coffee Association (BSCA) and the Brazilian Trade and Investment Promotion Agency (ApexBrasil) renewed their project focused on commercial promotion of Brazilian specialty coffee in the international market for the next two years. One of the main targets of the project "Brazil. The Coffee Nation" is the Middle Eastern countries, especially Saudi Arabia and the United Arab Emirates. Other targets are China, Indonesia and Malaysia. The goal is to promote Arabica coffees and a 100% blend of these coffees as well as Robusta, which is less used and contains more caffeine than Arabica. The BSCA members have invested on crop management, harvesting, processing and cupping training in order to improve their product and to offer a better sensorial experience to clients.

Source: ANBA

## ) BRAZILIAN COFFEE MUSEUM IN EXPO CHILE

The Brazilian Coffee Museum booth at the Expo Chile Agrícola, held in Santiago in August, featured the new itinerant exhibition Cafés do Brasil, a World Heritage. In partnership with the Brazilian Embassy in Chile and sponsored by the Brazilian Coffee Exporters Association (Cecafé), the participation at Expo Chile also included presentations about the Brazilian coffee business and the role of the museum.

# () COFFEE PRODUCTION GROWING IN BRAZIL'S FEDERAL DISTRICT

Coffee production in the Distrito Federal, the Federal District around Brasília, has been increasing. Although fairly new, its production has grown 11% in 2022 in relation to the year before due to favorable geographical and weather conditions. According to the Technical Assistance and Rural Extension Institute of Distrito Federal (Emater-DF), the region has 83 coffee growers who produced about 20,000 bags in 2022. The coffee grown is all Arabica, some of it organic.

Source: Peabirus

#### **Brazilian Prices** August 31, 2023 Main Producing Regions / Farm Gate Arabica Naturals (R\$/ 60 kg bag) Conilon / Robusta (R\$/ 60 kg bag) Cerrado MG 815.00 Colatina-ES fair average price 668.00 810.00 Mogiana 810.00 South Minas Real R\$ / Dollar US\$ BM&F (US\$/60kg Arabica bag) + 5.5% Arabica Pulped Naturals (R\$/ 60 kg bag) Sept 2023 189.50 August 31, 2023 4.95 855.00 | Dec 2023 187.70 Cerrado MG Mar 2024 189.00 South Minas 850.00





Source: Revista Cafeicultura



# FERMENTED COFFEE, QUALITY COMPETITIONS AND CONSUMER PREFERENCES

As the production of fermented coffees increase so does the debate about whether to have them in a different category in coffee quality competitions. The same type of debate happened before, first when pulped natural/honey coffee was introduced in Brazil in the 1990s and then after, when it entered other countries.

There are today competitions that treat coffees processed by different methods – natural, pulped natural/honey and washed – together or separately. Will the case of fermented coffees be the same?

In spite of what I call a "brave new processing world", with naturals being produced in traditional washed coffee producing countries and vice-versa and fermented coffees produced everywhere, there is still some sort of understanding of whether a country's national competition should entail primarily natural or washed coffees. This picture was first blurred with the arrival of pulped natural/honeys, that are today treated as a different category in many quality competitions in Brazil.

The Brazil Specialty Coffee Association has announced, as reported in the news section of this Coffidential newsletter, that the Brazilian 2023 Cup of Excellence competition will have three categories: naturals, pulped naturals and experimental, meaning fermented coffees. However, this is still the subject of much debate in other Brazilian quality competitions with a substantial division, with both organizers and cuppers on each side.

I am more aligned with the idea of having fermented coffees as a separate category based on my non-cupper experience of watching cupping sessions abroad and in Brazil and talking to cuppers and organizers there. I justify this opinion based on the polarization between "lovers" and "haters" of fermented coffees which I have witnessed in these cupping events. I fear that this polarization may cause biases in the cuppers' evaluation of coffees in competitions with several types of processes together to the extent that their evaluations may end up by being considered "outliers" in extreme cases.

Cupping competitions are mostly related to the specialty coffee business and these lots are primarily sold as single origin to consumers that are first and foremost sensitive to cup features but may be aware of processing methods. If cup features come first and I understand, from a hear-and-say perspective, that fermented coffees have a specific range of distinctive aromas and tastes, they should be identified as such and treated separately in cupping competitions. If it may be easier for an "untrained" consumer to identify a fermented coffee than to differentiate between natural, pulped natural and washed coffees there is even a stronger reason to treat fermented coffees separately in a cupping competition lest they will "hide" the features coming from the other methods and confuse the judging process... and the specialty coffee consumer!

Extrapolating here, there is a trend today not to expect Robustas to taste like Arabicas or instant coffee to taste like roasted and ground coffee. In other words, they should be treated as different products with their own specific features. Shouldn't fermented coffees be treated the same way?

In closing, my layman's question, that refuses to go away, is whether some types of fermentation can render Arabicas and Robustas undistinguishable in the cup. This is for experts to reply... even though I have witnessed this in at least one cupping session with some of them. If their answer is yes, at least in some cases, this is still another reason to consider fermented coffees a category of its own in both quality competitions and communication to consumers.



### **OPTIMIZING PERFORMANCE OF MACHINERY**

Several coffee machines have parts that incur wearing and/or fatigue as they are used. The extent of this process depends not only on the intensity of use of the machinery but also on the characteristics of the product being processed and, very important, on the presence of foreign materials, e.g. stones, mixed with the product being processed.

Regular maintenance of machinery should pay special attention to the checking of the conditions of these parts that are exposed to wearing and/or fatigue. They should be replaced from time to time to ensure that the capacity and efficiency of the machines do not fall as these parts become old and fail to perform as they should.

Some of the most critical parts that should be checked periodically and exchanged when needed are listed below, after the name of the machine and following the flow of processing.

GREEN (UNRIPE) CHERRY SEPARATOR – The screens that hold the unripe cherries and let the ripe ones pass through are exposed to wearing that causes the quality of separation and capacity itself to fall. Stones and other impurities not separated before can also damage not only the green cherry separation screens but also the rotor of the machine.

PULPER/REPASS PULPER – The **pulping screens and channels** must be replaced periodically, the former much more often than the latter. Worn out **pulping screens** affect the efficiency and capacity of pulping and the efficiency of separation of pulp. **Channels**, that are much more durable than the screens, affect pulping efficiency as they wear out. Impurities, specially hard ones like stones and metal parts (e.g.: nuts, bolts and nails), can damage both **pulping screens and channels** that should be replaced immediately after this happens.

MUCILAGE REMOVER – The screens wear out as they are used and affect primarily efficiency of mucilage removal. Hard impurities can damage both the screens and the rotor of the machines.

DRIER – These machines are themselves very durable but their **driving systems** should be checked periodically. The **heat exchangers**, whose useful life is usually shorter than the driers', have to be monitored for leaks or cracks in the heat exchanging system that allow smoke to be mixed with clean hot air and affect negatively the quality of coffee being dried.

SCREEN HULLER – The **hulling screens** of cold hullers, also called cross-beater hullers, are subject to wearing that affects primarily the capacity of the huller if not replaced when needed. More durable, the **beaters or blades** that force coffee through the screens and out of the hulling drum also suffer from wearing and should be replaced periodically, after the 4 edges are used, to avoid capacity losses. Wearing is faster when hulling dry cherry rather than parchment. Hard impurities can damage both **screens** and **beaters/blades**.

HULLER-POLISHER – The **rotor** and the **case** that involves the rotor wear out with use over the years in a slow process that will compromise the capacity and efficiency of hulling and polishing. More critical in this type of machine is damage caused by hard impurities that may require the replacement of the **rotor** and/or **case** irrespectively of "aging".

SIZE GRADER – The continuous cleaning of the grading screens is performed by **rubber balls** that bounce in the boxes under the screens. These **balls** lose flexibility as they are used and should be replaced from time to time to ensure that the screens are properly cleaned and the full sieving area is retained open and available in order to have full grading capacity and precision.

These above are some of the main items to be checked frequently in addition to overall maintenance that should include the driving systems – pulleys and belts, pillow blocks, bearings, gear boxes and motors– and the power supply system itself.

The spare parts above should be available in the mills not only for periodic routine replacement but also in case of accidental damage. In most cases they account for a small percentage of the price of the machines and the cost of having them available is much lower than the capacity and efficiency losses that the lack of their replacement may cause.

Please contact the P&A/Pinhalense agent nearest to you or P&A directly if you want to learn more about the frequency of replacement and prices of these parts.