

# CONFIDENTIAL

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

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## ☉ COFFEE PRODUCTION IN SOUTH MINAS INCREASES 1,300% IN 50 YEARS

Coffee production in South Minas, the largest producing region in Brazil, grew from 1.2 million bags in the 70s to over 16 million bags in 2016. There was a strong expansion during the beginning of the 1970s based on credit and technical assistance and a National Coffee Renovation Plan that included new plantings, new varieties and more adequate spacing to fight coffee leaf rust, a menace at the time. In just over a decade, production in South Minas grew from 1.2 to 10 million bags; later mechanization and the opening of new areas for coffee contributed to another leap in production. Today South Minas comprises 642,000 hectares of coffee land and represents 30% of national coffee production.

Source: G1 Sul de Minas

## ☉ MINIMUM COFFEE PRICES RAISED FOR 2017/18 CROP

The Ministry of Agriculture has increased the minimum coffee prices for the period April 2017 to March 2018: Arabica type 6 coffee (up to 86 defects; screen 13 and above) had the price adjusted to R\$ 333 (US\$ 106) per bag while Robusta/Conilon type 7 (up to 150 defects; screen 13 and above) now has the minimum price of R\$ 223,60 (US\$ 71) per bag. Minimum prices defined by government serve as a reference for programs to support coffee growers at times of strong falls in market prices.

Source: Reuters

## ☉ PINHALENSE HIGHLIGHTS NEW TECHNOLOGIES DURING AGRISHOW

Pinhalense showcased two new products during the 24th Agrishow, the largest agribusiness trade fair in Brazil. Terrena is a self-propelled machine that gathers coffee from the ground and adapts easily to the slope of the terrain. It can be used by small, mid-size and large growers alike. The static coffee drier is another new product: it has a modular and expandable structure and an indirect heat exchanger, requires less power, reduces drying time in relation to patios and saves labor. The Agrishow took place from May 1 to 5, in Ribeirão Preto. Pinhalense is the world's leading coffee processing equipment provider, with machines operating in over 90 countries in the coffee, cocoa, nuts, beans and spices segments.

Source: Peabirus



## ☉ A "GOOD FUNGUS" THAT ENHANCES COFFEE QUALITY

Bio Protector, an innovative and totally ecological product for coffee, will soon be available in Brazil. The product, developed by scientists at the Federal University of Lavras (UFLA) and produced in partnership with the Agriculture Research Institute of Minas Gerais (Epamig), is based on the *Cladospodium cladospoides* fungus, known as the "good fungus" because of its beneficial impact on coffee quality. The Bio Protector, currently waiting for registration to be released, is already being used by coffee growers in Minas who receive specialized consultancy and free samples. The product, a concentrated suspension of the fungus with no chemical additives, will be offered both in liquid and powder versions. The *Cladospodium cladospoides* has been studied for over 20 years by Dr. Sara Chalfoun who found out that it inhibits the development of other fungi popularly known as moulds that are harmful to coffee quality. The presence of *Cladospodium* improves coffee flavor and aroma.

Source: Uai - Estado de Minas

**NEW COFFEE VARIETY RESISTANT TO DROUGHT**

The new Acauãma cultivar is highly productive and resistant to coffee leaf rust and water deficit. Acauãma, that means Yellow Acauã, is a natural crossover probably between Yellow Catuaí and Acauã in a trial field in the municipality of Domingos Martins, Espírito Santo state. Selected plants of this new material have been planted in Varginha and Elói Mendes, in Minas Gerais, without irrigation. Acauãma distinguishes itself from other varieties for its high vigor, productivity and resistance to dry conditions.

Source: Procafé

**AMAZON "RAINFOREST COFFEE" PROTECTS ENVIRONMENT AND GRANTS INCOME TO SMALL GROWERS**

Small coffee growers in the municipality of Apuí have been investing in Conilon coffee 100% produced in the state of Amazon using an agroforestry system based on sustainable standards. The system converts traditional and damaged crops into shaded ones with intercropping with hard wood and other Amazonian species such as guaraná and açaí. In the project, called Coffee in Agroforestry, growers receive funds and technical support and learn about good agricultural practices, biofertilizers and ways to control pests such as berry borer. The project aims to recover parts of the original forest while granting higher income to growers from sales of coffee and other products. The average income of the families participating in the project has grown more than 200% from 2012 to 2015. Expectations for 2017 are to increase coffee productivity and to have the project's coffee certified as organic.

Source: Globo Rural

**HIGHER INCIDENCE OF COFFEE RUST AND LEAF MINER AT ALTA MOGIANA**

A higher incidence of coffee leaf rust and leaf miner was detected in crops in Alta Mogiana, a region known for its high quality coffees. In March, rains were below average and temperatures close to average. The incidence of leaf miner increased much and rust figures jumped from 36% to 44% of infected leaves in the control crops. Coffee berry borer was also noted, with an average 2.5% of beans affected in the region.

Source: Notícias Agrícolas

**SPECIAL EDITION OF THE BEST BRAZILIAN COFFEES LAUNCHED**

The Brazilian Coffee Roasters' Association (ABIC) has recently launched its 13th Special Edition of the Best Brazilian Coffees. This exclusive selection is made with beans from the finalist lots of the 13th National Coffee Quality Contest that were bought by roasters and coffee shops in the auction held in January. The special edition coffees will be available in supermarkets and gourmet stores as well as online in distinctive and numbered packages designed by GSB2, P&A's partner in advertising.

Sources: ABIC and P&A

**INCREASED INTEREST IN BRAZILIAN SPECIALTY COFFEES IN CHINA**

The Brazil Specialty Coffee Association (BSCA) and the Brazilian Trade and Investment Promotion Agency (Apex-Brasil) have elected the Asian country as a target market in the sectoral project called "Brazil. The Coffee Nation". Fourteen Brazilian coffee companies participated in the Hotelex Shanghai Expo last March and sold US\$ 2 million worth of coffee. From 2009, when the project started, to 2016, Chinese purchases of specialty coffees from Brazil have grown 1,400%. China already consumes over 2 million coffee bags with a 16% increase per year over the last decade according to the International Coffee Organization (ICO).

Source: BSCA

**Brazilian Prices**

Main Producing Regions / Farm Gate

April 28, 2017

Arabica Naturals (R\$/60 kg bag)		Conilon / Robusta (R\$/60 kg bag)	
Cerrado MG	475,00 =	Colatina-ES fair average price	395,00 ↓
Mogiana	470,00 =		
South Minas	470,00 =		
Arabica Pulped Naturals (R\$/60 kg bag)			
Cerrado MG	495,00 ↓		
South Minas	490,00 ↓		

  

[B] <sup>3</sup> ex-BM&F (US\$/60kg Arabica)		Real R\$ / Dolar US\$	
Mar 2017	155,40 ↓	Apr 28, 2017	3,19 ↑
Sep 2017	162,20 ↓		
Dec 2017	166,45 ↓		

+ 5,3%

Source: www.qualicafex.com.br

## A BRAVE NEW PROCESSING WORLD: PULPING UNRIPE CHERRIES, FERMENTING RIPE CHERRIES AND MORE\*

Coffee processing may change coffee quality, flavor and taste, but only a few processing steps can do it, namely: pulping, mucilage removal and drying. Pulping or not; removing the mucilage, how much and how; and how one dries coffee do affect quality in the cup. All other processing stages eliminate impurities or defects and/or preserve the existing quality but do not change it.

The definition of the types of coffee below focus on these very same processing steps:

- *natural* coffees are dried with pulp and mucilage;
- *pulped natural, honey or semi-washed* coffees are dried without pulp and with some or all mucilage attached to parchment; and
- *washed* coffees are dried without pulp and without mucilage attached to parchment.

For over 150 years the world only knew about washed coffees and unwashed coffees that only recently, about two decades ago, started to be called naturals, fortunately. In a general not to say crude way, washed coffees are associated with more acidity and flavor whereas natural coffees have more body and sweetness in the cup.

Mechanical mucilage removers, created in the first-half of last century, brought up the debate over the cup features of washed coffees that are either fermented or mechanically desmucilaged. Are they different or the same? Does it depend on the altitude where coffee is grown? What about coffee that is partially fermented and then mechanically washed?

It was only in the late 1970s, in Brazil of all places because Brazil is known for naturals, that Pinhalense used the suggestions and trial results of a few coffee growers in South Minas Gerais to create the machine that facilitated processing of pulped natural coffees, first with all mucilage attached to parchment and then with some mucilage removed to render drying easier. This broke a 150-year-old paradigm that said that it was impossible to dry parchment with mucilage attached to it.

As a result a new type of coffee started to be offered by Brazil, with some or most of the cup features of natural coffees but without the unwanted taste of the unripe cherries that were not pulped by the new machine. A few decades later the process was adopted in Central America where pulped naturals, called CDs in Brazil, became known as honey coffees.

Last but not least, we are now witnessing a growing interest for naturals in countries that are traditional washed coffee producers besides new technologies pioneered by Pinhalense that enable the pulping of unripe and over-ripe cherries that are harvested in increasing proportions due to the lack and high cost of labor that hinder the ability to pick 100% ripe cherries. If on the one hand new forms of fermentation and the fermentation of naturals themselves enhance quality and create new flavors and tastes, on the other hand the cup features of washed unripe and over-ripe cherries are better than those of natural unripe and over ripe coffees. It is indeed a brave new processing world!

All this should be music to a coffee growers' ears. Why? Because even a large grower is usually restricted to a given terroir, perhaps a few terroirs if altitude or soil variation is available within the property. Now, with this multitude of processing options available, a single grower, even a small one, can offer a multitude of qualities, of flavors and tastes, by using different processes. Some of these processes can also be used to enhance the quality of cherries that are not picked ripe.

This multitude of processes also opens up new opportunities for roasters that can now count on new supply options. This has been the case of a small specialty coffee roaster in São Paulo that used to rely on several suppliers in different areas of the South Minas and Mogiana regions to make its blend and now manages to offer the same blend, the same quality, using coffees from one single farm and different processes. In fact, it now offers two different blends coming from the same farm.

\*The text above was based on the author's presentation at the panel "Emerging Trends in Coffee Quality" at SCA's Expo 2017. Most if not all processing options presented above will be addressed at the CQI Intermediate Processing Certificate Course to be held on Santana Farm, in Espírito Santo do Pinhal, Mogiana Region of Brazil, on May 22nd to 27th.

## PINHALENSE AWARDED PRIZE FOR BEST NEW PRODUCT AT SCA'S GLOBAL EXPO 2017

The ECO SUPER, the ecological pulper with unripe cherry separator that consumes no water launched by Pinhalense, was selected as the new product of the year at the recent Global Specialty Coffee Expo 2017 in Seattle, USA, last month.

Competing with many other products, the selection of the ECO SUPER resulted from a process of evaluation with criteria like innovation, technology, sustainability and benefits. Each of the five jurors – American and foreign roasters, cuppers, consultants and growers – visited the Pinhalense booth and not only checked the specifications and technical material available but also interviewed the Pinhalense/P&A team about the actual use of the product in the field.

Pinhalense has participated and had booths at the Expo, formerly the SCAA Conference and Trade Fair, for the last 20 years. The company pioneered the idea of presenting green coffee processing equipment in events that bring together coffee shops, retailers, industry, trade and growers and was followed by competitors much later.

The Pinhalense booth at Expo 2017 focused on two products or lines: the new ecological zero water consumption pulper with unripe cherry separator ECO SUPER, that became a top attraction at the trade fair, supported by other wet milling equipment, and machines to process micro lots – C2DPRC and CON – in response to this growing coffee market trend.

The ECO SUPER offers twice the capacity of the Pinhalense machine that preceded it with a much smaller power requirement per unit of coffee processed. In addition, it retains the recently upgraded unripe cherry separator in a zero-water-consumption version. Altogether the new machine retained its unique features – the least physical damage to parchment and the least pulp mixed with parchment in the market and no parchment lost with the pulp – and it does not consume water anymore.

If the previous line of pulpers was already the choice of cost-benefit, quality-conscious wet millers in spite of its reduced water requirement, the ECO SUPER will now also appeal to users who have limited access to water. The ECO SUPER stands a good chance of becoming a new industry standard or reference at a time when the quality of harvesting is falling and the picking of unripe cherries is becoming the norm rather than the exception. Last but not least, the unripe cherry separator is placed *before* (not after) the pulper,

that is only used to separate pulp and for reprocessing. This sequence equips the machine with the unique ability to separate cherries according to their degree of ripening, i.e., unripe, partially ripe, and ripe and to have a built-in repasser. Unripe and partially ripe cherries that are separated may and should be processed separately to obtain the highest quality available in each cherry fraction.

Pinhalense wet milling and micro-lot-processing equipment was also presented at the Expo 2017 educational program by independent speakers and panelists. The Expo 2017 panel “*El procesamiento como una herramienta innovadora para obtener perfiles de taza*” (*Processing as a tool to obtain different cup profiles*) showed the Pinhalense wet milling equipment used for processing and training at Tecnicafé’s Technological Park, that trains Colombian growers and labor, and the panel “*Emerging Trends in Coffee Quality*” presented Pinhalense wet milling equipment in operation in Colombia and Central America.

