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

- LOW PRICES, THE FEASIBILITY OF COFFEE GROWING AND THE ROLE OF PROCESSING (PAGE 3)
- WHY TO BUY PINHALENSE EQUIPMENT? REVISITED AND UPDATED (PAGE 4)

#### (II) HIGHEST CONILON VOLUME EXPORTED IN 27 YEARS

The state of Espírito Santo has registered in August its highest monthly exports of Conilon coffee in 27 years: 536,778 bags. The excellent result is due to the large crop in 2018, the depreciation of the Brazilian Real (R\$) and also the higher quality of the Conilon being produced in the state. Coffee exports from Espírito Santo have increased 1,800% in comparison with 2017. The largest importers of Conilon/Robusta from ES are the United Kingdom (21%), Belgium (17%), USA (10%), Turkey (9%) and Argentina (7%).

Source: Centro do Comércio de Café de Vitória (Vitória Coffee Trade Center)

#### (||) RECORD BRAZILIAN CROP

The Brazilian coffee output of the 2018/19 season will be higher than expected, according to CONAB's third crop estimate, released in September. The new estimate indicates 59.9 million bags, while the May forecast, which was already a record, projected 58 million bags (Arabica and Conilon). If the new estimate is confirmed, this season's coffee crop will be 33.2% higher compared to the previous one, affected by climate and the "off-year" Arabica biennial cycle. This record estimate derives from the "on-year" Arabica cycle and the favorable climatic conditions which also allowed for the recovery of Conilon production, especially in Espírito Santo state. Brazil's Arabica production may reach 45.9 million bags and Conilon, 14 million bags in 2018.

Source: Valor Econômico

# (||) YELLOW AND RED RIPE CHERRIES IN THE SAME COFFEE TREE?

The color of ripe coffee cherries, yellow or red, is determined by Xanthocarpa, a gene that expresses itself depending on the genetic composition of the plant, i.e., its genotype. However, somatic mutations can reach the plant tissue directly, changing the bean color when it is ripe. Such mutations do not necessarily reach all beans in the plant and such phenomenon – yellow and red ripe cherries in the same coffee tree – can indeed take place!

Source: Agro DBO





# (||)GLOBAL COFFEE SUSTAINABILITY CONFERENCE TO BE HELD IN BRAZIL IN NOVEMBER

The 2018 Global Coffee Sustainability Conference (GCSC) will take place in Belo Horizonte, Minas Gerais, on November 8 and 9, gathering 250 participants and coffee sustainability experts from around the world to discuss pressing issues such as: the future of sustainability, the role of producing countries and consumers and impact investiments to promote sustainability, among others. The event, organized annually by the Global Coffee Plataform (GCP) will combine plenary presentations and discussion panels as well as social events and networking opportunities. Representatives from 9 producing countries – Vietnam, Indonesia, Uganda, Colombia, Honduras, Peru, Kenya, Tanzania and Brazil - will be present, as well as technicians, traders, exporters, sustainability experts and other specialists. The 2018 GCSC is free for GCP members; other participants can acquire tickets at the event's website: http://www.gcsc.coffee/ All Brazilians have a 50% discount.

Source: ADS



## (I) FUNCAFÉ RELEASES R\$ 3 BILLION

Funcafé, the Brazilian Coffee Fund, has already released over R\$ 3 billion (US\$ 763.4 mi) in 2018 representing 67% of the contracted R\$ 4.5 billion (US\$ 1.1 bi). Coffee storage received the highest allocation of R\$ 1.26 billion (US\$ 320.6 mi); R\$ 638.6 million (US\$ 162.5 mi) was reserved for financing of coffee acquisition. Cultivation received R\$ 577.5 million (US\$ 146.9 mi), working capital lines R\$ 544.9 million (US\$ 138.6 mi) and cooperatives R\$ 250.6 million (US\$ 63.8 mi).

Source: CaféPoint

# (||) BEES GENERATE INCOME FOR BRAZILIAN COFFEE GROWERS



The importance of bees for coffee production is still little known despite the benefits noted in research studies conducted in São Paulo's Alta Mogiana, Espírito Santo state and Brazil's northeastern region. If active during the coffee flowering season, bees help coffee productivity increase from 5 to 15%. Larger bean sizes, better quality and lower production costs are other benefits.

Source: Attalea Agronegócios magazine

### (I) COMBINATION OF COFFEE VARIETIES HELPS GROWERS SAVE ON COSTS

Harvesting represents 15 to 30% of the total production costs and coffee quality depends largely on how it is executed. A combination of coffee varieties whose cherries ripen at different times – early, intermediate and late – on the same farm can facilitate coffee harvesting, save costs with labor and machinery, increase the possibility of harvesting more ripe cherries and improve coffee quality and price.

Source: Attalea Agronegócios magazine

# NEW LINEAGES OF ARARA CULTIVAR

The Arara coffee cultivar, recently registered by Procafé Foundation at the Ministry of Agriculture (MAPA), is presenting desirable characteristics. Arara's new lineages have different features, as observed at multiplication trials in South Minas Gerais and Espírito Santo. Arara FV has smaller trees and red beans while Arara PA presents taller trees and yellow beans. Both Arara lines are in the final trial stages and should soon become new cultivars for registration and distribution.

Source: CaféPoint

# ( DRESS MADE WITH BRAZILIAN COFFEE BAG WINS AWARD

A dress made with a coffee bag from Brazil received the Green Carpet Fashion Award at a sustainable fashion competition during the Milan Fashion Week, in Italy. The jute bag was bought at the Navigli channel market and was decorated with Swarovski cristals by designer Gilberto Calzolari who worked for global luxury labels before starting his own line in 2015.

Source: Época Negócios



#### **Brazilian Prices**

**Main Producing Regions / Farm Gate** Sept 28, 2018 Arabica Naturals (R\$/ 60 kg bag) Conilon / Robusta (R\$/ 60 kg bag) Cerrado MG 415,00 | Colatina-ES fair average price 324,00 410,00 | Mogiana 410,00 ↓ South Minas BM&F (US\$/60kg Arabica bag) Real R\$ / Dolar US\$ Arabica Pulped Naturals (R\$/ 60 kg bag) 118,15 Sept 28, 2018 Sep 2018 4,04 435,00 Dec 2018 121,45 Cerrado MG Source: South Minas 430,00 Mar 2019 128,85 www.qualicafex.com.br



#### LOW PRICES, THE FEASIBILITY OF COFFEE GROWING AND THE ROLE OF PROCESSING

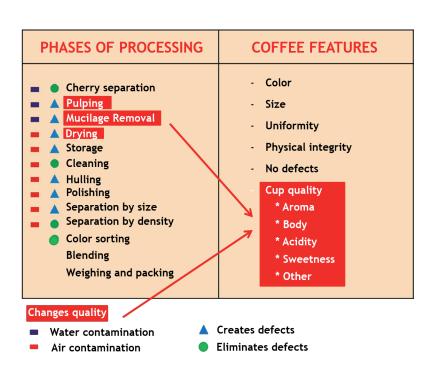
Discussions about the feasibility of coffee growing are going at full force as coffee prices remain low. The ICO has recently issued its Council Resolution No. 465 on Coffee Price Levels (https://bit.ly/2y7FQLF) and the World Coffee Producers' Forum is sending an e-mail to the CEOs of the main coffee roasters warning about the risks to the sustainability of coffee growing and future supply posed by current low prices. What is added in this article is the role that coffee processing, especially on-farm, can play on improving or worsening the feasibility of the business.

Coffee takes 2 to 4 years after planting to start producing and bears fruit only once a year. However poor processing may jeopardize a year's work in a matter of hours! Drying is probably the processing phase where most losses are incurred if not properly performed followed perhaps by pulping, if used, and hulling.

Sun drying may be negatively affected by adverse weather, lack of or poorly trained labor, inadequate tools, etc. If excessive rain may prevent drying and cause unwanted fermentation, excessive heat can have several negative impacts on coffee quality from bleaching to turning unripe cherries into black beans. Overheating is not a risk restricted to mechanical drying, as many think, but happens just as often or even more frequently with sun drying if coffee is not revolved frequently.

Mechanical drying requires good control of temperature, specially in the coffee mass, and good stirring/mixing to ensure uniform drying. The use of elevators to recycle coffee in vertical driers may damage coffee, specially parchment approaching the ideal moisture content. Quick drying may be welcome but only to the point it does not damage quality; this can be achieved with the use of right technology and operation. Mechanical drying may be more reliable and lead to the same quality as sun drying. An efficient drying facility is a good insurance policy against climate change!

If not properly performed with modern high-tech machines, pulping brings profits down due to physical damage to parchment and beans and the loss of coffee with the pulp that is discarded. These unwanted effects can and should be avoided in machines that also refrain from pulping unripe cherries that should be separated. Fermentation after pulping, said to enhance quality and gaining increasing support from experts, can cause weight losses that are avoided by mechanical removal of mucilage that in turn may cause physical damage to parchment and beans. Can the quality gains from fermentation outweigh the weight losses?



The way coffee is pulped or not, fermented or not, and dried affects cup quality and price as explained in the Outlook section of Coffidential No. 118. How these three processing steps are performed may be key to ensure the feasibility of coffee growing.

Without having the potential beneficial impact of the previous three processing steps, hulling may cause physical damage to coffee beans. Even modern efficient hullers will do so if coffee is over dried under 10% moisture level. Most other processing steps are designed to enhance coffee value by removing impurities and defects but without altering intrinsic bean quality.

The chart on the left is a good primer on how coffee processing may affect the feasibility of coffee farming.

# MACHINE OF THE MONTH



#### WHY TO BUY PINHALENSE EQUIPMENT? REVISITED AND UPDATED

The most obvious way to reply to this question is to run a survey with Pinhalense's clients in 94 countries on the 5 continents and who together enable Pinhalense to believe and claim that about two-thirds of the coffee drunk in the world passes through at least one Pinhalense machine. Since the difficulties to carry out such survey are also obvious, even in our digital age, let's summarize here he impressions we get from both our commercial agents, that cover over 40 coffee producing countries, and a sample of clients to which we add our own opinions.

Pinhalense's history of 68 years and its involvement with literally all coffee processing steps from harvesting to exports or roasting in all relevant markets give it unique insights that are reflected in the know-how built into its products – machines – and customized flows and projects it designs for clients. No competitor comes even close to Pinhalense's figure of over 22,000 projects for wet milling, drying and dry milling developed for clients. Wrong as it is, machines can be copied and Pinhalense machines have been copied, but it is nearly impossible to copy the specific customized coffee processing solutions that Pinhalense provides to clients before it sells the machinery.

But, flows and projects apart, why to buy individual machines from Pinhalense instead of full or partial copies? Because in coffee processing "the devil is in the detail". If copies have been made for decades and Pinhalense has been growing, developing and expanding its markets it is because there is obviously something missing in the copies be it details themselves, quality, efficiency, durability or all of them together. The same thing holds for competitors who have their own technology. Most Pinhalense clients who have tried competing equipment have returned to Pinhalense. Maybe the switch of suppliers was based on price alone and the cost-benefit equation eventually led to a different conclusion and the return to Pinhalense.

Local service and prompt supply of spare parts may be another reason to favor Pinhalense equipment. Most commercial agents mentioned above have their own Pinhalense-trained technical personnel, who service Pinhalense machines, trouble-shoot and respond to other clients' needs. Pinhalense is not perfect and it does commit mistakes – as renowned car manufacturers and cell phone companies do – but it has a unique track-record of making its machines work to clients' satisfaction no matter where they operate. This is absolutely critical in the coffee business where timely delivery is crucial and small percentages matter a lot.

In markets where it is almost impossible to avoid copies, the best strategy is permanent research and development with the frequent launching of new products and improvement of existing ones. The launching of the minimum water consumption ECO SUPER pulper with green separator crowned a process that included divided and single drums driers with reduced drying time, a new combined huller for micro lots, a system to recover coffee rejected by color sorters, electronic flow and big-bag scales and more efficient dust suction systems. There is more in the pipeline...

Last but not least, instead of investing on new warehouses or a new factory, that is part of its mid-term plans, Pinhalense has strategically decided to concentrate its investments on manufacturing equipment and processes that have direct impact on the quality and efficiency of its products. In recent years Pinhalense has invested several million euros in automated-high-precision equipment to punch screens – a critical component of many machines –, to cut metal using laser and, lately, to produce machine parts using robotics. Even though the outside of the three Pinhalense factories have remained basically the same for 5 or 10 years, they have undergone a technological revolution inside. Clients – existing or prospective – are welcome to visit Pinhalense to see all this first hand.

There is a lot behind the Pinhalense brand and there is more to come...