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

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COFFEE GROWERS' OPINION

Brazilian Coffee growers are increasingly concerned about climate change. Much higher than usual temperatures coupled with strong rains and wind in key producing regions have caused coffee cherries in different development stages to fall, specially those from the first flowering. There is also concern that high temperatures may also restrict cherry development and lower their density. Growers are becoming even more concerned about the actual size of what may not really become an on-year in the coffee production cycle.

INTENSE HEAT THREATENS NEXT COFFEE CROP

Intense heat in the main coffee producing regions in Brazil may harm the 2024/25 crop that many producers believe will be lower. In Minas Gerais, flowering happened earlier, which caused greater than usual lack of uniformity in maturation of coffee cherries. These climate changes are also likely to impact Conilon production. In Espírito Santo, flowering happened as expected but high temperatures may affect negatively the density and quality of the beans. In spite of the uncertainty around the size of the next crop, coffee industry predicts stability in the market and believes there will be enough coffee because the 2024/25 crop is the on-year in the biennial crop cycle.

Source: Globo Rural

IRRIGATION TO MITIGATE THE IMPACTS OF CLIMATE CHANGE

Water deficit is one of the factors with the greatest impact on coffee production. The use of irrigation in coffee has become a very interesting alternative in response to climate uncertainty. By maintaining an ideal water supply, the plant increases the efficiency of its photosynthesis process. In addition, the use of irrigation can induce more homogeneous flowering, generating greater productivity, beans with a larger size, more uniform maturation and, therefore, higher quality in the cup. There are two types of irrigation management. One is part-time/focused irrigation, carried out during the most critical period, when the plant cannot lack water, especially during the flowering period. The other is year-round irrigation that enables significant productivity gains and the plant to remain in a state of excellence, without water stress. In the latter case, the plants grow and produce more. Research shows that year-round irrigation brings an increase of up to 37% in productivity.

Source: DATAGRO

ENVIRONMENTALLY INTELLIGENT COFFEE GROWING WITH BRACHIARIA GRASS

Intelligent methods of environmental cultivation help much when it comes to climate change and protecting soil and water. The Brazilian Agricultural Research Corporation (Embrapa) is developing projects of integrated coffee production systems with the use of Brachiaria grass to protect the soil from the sun, wind and erosion. This technology brings regenerative impacts, storing and recycling nutrients, and also reduces the use of herbicides in 30 to 40%. It also reduces the average temperature of the soil, which avoids water evaporation and increases its availability for the plant by 20%. Embrapa has also developed coffee cultivars that are appropriate for different Brazilian ecosystems, like Rondônia's forests, the mountain regions of Espírito Santo and Minas Gerais states, and Paraná's savannas.

Source: Estadão

IAC LAUNCHES ROOTSTOCK MULTI-RESISTANT TO NEMATODES

A new rootstock multi-resistant to coffee nematodes was launched by the Campinas Agronomy Institute (IAC) as a result of a 35-year-long research project. IAC Herculândia results from a recombination of five compatible clones of *Coffea Canephora*. The new rootstock presents simultaneous resistance to the nematodes *Meloidogyne exigua*, *M. incognita* and

M. paranaensis. The aim of the research project was to gather in a single rootstock a high frequency of plants resistant to these parasites that generally occur simultaneously. Losses in coffee production in Brazilian plantations due to them are estimated at around 20%. In order to honor the professionals involved, the name of each clonal cultivar uses the initials of the Institute and the acronym of the first letter of each professional's name: Wallace Gonçalves (IAC WG), Francisco Eduardo Bernal Simões (IAC FEBS), Paulo Makimoto (IAC PM), Luiz Carlos Camargo Barbosa Ferraz (IAC LCCBF) and Ailton Rocha Monteiro (IAC ARM).

Source: Peabirus

MINISTRY OF AGRICULTURE LAUNCHES CONNECTIVITY AND SUSTAINABILITY PROJECTS

The Ministry of Agriculture, and Livestock and Food Supply (Mapa) launched the Inova Cacau 2030, the Floresta+Sustentável, and the Rural+Conectado/Bahia projects in Ilhéus, state of Bahia, last month. The launch of these projects in a combined and complementary manner marks the beginning of activities that contribute to technological innovation, development and sustainability of Brazilian agricultural activity. Developed in partnership with CocoaAction, the Inova Cacau 2030 Plan promotes sustainable use of natural resources in cocoa producing regions using efficient low-environmental-impact technology in order to improve producers' living conditions and to increase cocoa productivity and quality. The initiative aims to make Brazil a world reference in sustainable cocoa production in the next seven years. The project Rural+Conectado aims to expand the access to the Internet in small villages where this kind of service has not arrived. The Floresta+Sustentável was created to boost the development of planted forests, stimulating sustainable production, reforestation and empowerment of supply chains.

Source: Mapa

AGREEMENT TO PROMOTE 13 BRAZILIAN COFFEE ORIGINS

Promoting specialty coffees in Brazilian producing regions with Geographical Indications (GIs), strengthening coffee associations, and integrating these origins with technological solutions and strategies to enhance the marketing of local products are the goals of the Cooperation Agreement signed last month by the Brazilian Specialty Coffee Association (BSCA) and 13 entities representing the origins with GIs. A committee of producing regions with GI's will be implemented to create regional governance and disseminate standards of origin, quality and good agricultural practices; to outline policies and planning for the cultivation of specialty coffees; and to hold branding discussions. There will also be the inclusion of these regions in BSCA's marketing strategy at international coffee trade fairs and the Association will help representative entities in planning and carrying out "origin trips" bringing groups of global buyers to the country's coffee producing areas with GIs.

Source: Peabirus

ABIC ADDS SPECIALTY CATEGORY TO ITS CERTIFICATION PROGRAM

The Brazilian Coffee Roasters' Association (ABIC) decided to add a Specialty Coffee Label – "Selo Especial" – for roasted coffees to its Coffee Quality Program that is known for its role to help increase Brazilian consumers' demand based on sensory experiences. The launch happened during the Brazilian Coffee Roasters Conference known as ENCAFÉ for its initials in Portuguese. This new category derives from a partnership with the Brazilian Specialty Coffee Association (BSCA) to evaluate the raw material used. To be labeled as Specialty ("Especial"), the coffee will be evaluated on its sensory attributes as well as criteria like sustainability and traceability from farm to cup.



Source: Estadão

Brazilian Prices

Main Producing Regions / Farm Gate

November 30, 2023

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	925.00 ↑	Colatina-ES fair average price	718.00 ↑
Mogiana	920.00 ↑		
South Minas	920.00 ↑		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	985.00 ↑	Dec 2023	233.00 ↑
South Minas	980.00 ↑	Mar 2024	219.10 ↑
		May 2024	223.55 ↑
		Real R\$ / Dollar US\$	
		Nov. 30, 2023	4.91 ↓

+ 6.48%

Source:

www.qualicafex.com.br

REPOSITIONING OF ROBUSTAS CONTINUES...

A series of independent or related activities contributed to the continuation of the process of repositioning Robusta coffees in 2023. Carried out by growers themselves, their associations or cooperatives, the Coffee Quality Institute (CQI), the Brazilian Soluble Coffee Industry Association (ABICS) and others, these actions are increasingly helping the market to consider Robusta coffee as a product on its own instead of comparing it with Arabica.

The World of Coffee event in Athens had well attended and much appreciated Robusta cupping sessions. CQI held one-week long Robusta Processing Courses in the Philippines and India, two important Robusta producing countries. Attended by different coffee supply chain participants, both courses met with their objectives. The CQI Robusta cupping sessions at Sintercafé in Costa Rica this past November were fully packed with the coffees cupped coming from a wide variety of countries in Central and South America, Africa and Asia. Coabriel, the largest Conilon cooperative in Brazil, has seen increased attention for its Conilon of Excellence Competitions and its winning coffees. On a different front, the launching by ABICS of a methodology to evaluate the quality of instant coffees indirectly addresses the quality of Robusta coffees, that are the main component of instant coffee.

This repositioning goes beyond the top quality end of this market, where specialty coffees are, and also includes good quality Robustas. These post-pandemic, war-affected, high-inflation and lower-income times make Robusta coffee an important component to lower the cost of popular best-selling brands. This of course requires clean Robustas without major defects that can contribute body and other characteristics to the blends without introducing unwanted cup features.

What happened with Arabica-Robusta blends during the pandemics, with substantial price-driven increases of the share of the latter in important markets, demonstrated that there is room for good quality Robustas to stay and to probably enlarge their world market share again after their share remained rather stable following a period of growth. One may speculate that one of the reasons for the stabilization of the growth of Robustas' world share in the past was the lack of interest in their quality that was often damaged in processing, for example with the use of smoke and fumes from burning fuel to dry the beans. A post-pandemics durable increase of Robustas' share of world production, after a price-driven share peak during the pandemics, may result from quality improvement in specialty *and* commercial Robustas as well as market and supply chain education, as mentioned at the beginning of this article.

As better quality is sought-after for Robustas, the preservation of the intrinsic quality of the coffee that is harvested becomes a key objective. Post-harvesting-processing attention must focus on cherry separation, adequate drying of the different cherry types – clean air, proper duration and moisture homogenization – gentle hulling, size and defect separation and blending. Post-harvesting Robusta processing, from cherry separation to finished green coffee and including drying, is moving from a simplified approach to a processing flow, procedures and techniques that are quite similar to what is done for Arabica coffee, with substantial gains in Robusta quality.

There is growing interest to plant Robusta in areas that never did. For example, in Latin America outside Brazil, Robustas were mostly found in Mexico and Ecuador. Now they are present in interesting volumes in Nicaragua and other countries are starting to plant it, including Colombia. In addition, Southern Bahia and Rondônia in Brazil are consolidating themselves as major country-size Robusta sources.

The work of repositioning Robustas will be fully realized only if the volumes required are available with the right qualities that in turn require improved post-harvesting-processing, specially at the cherry separation, drying and hulling stages.

ROBUSTA PROCESSING REVISITED

Natural Robustas: retain quality and increase price

Most Robusta coffee cherries – immature, ripe and over-ripe – are dried together after harvesting. A great opportunity to avoid defects is missed when this is done. Coffee cherries with moisture contents from 40 to 60% are dried together, often faster than it is technically recommended, with the obvious result that the final product is not evenly dried. Worse yet, the unripe and partially ripe cherries tend to become black beans in the process. A simple way to avoid unevenly dried and black beans is to use a mechanical siphon, a machine invented and patented by Pinhalense that separates over-ripe and partially dry cherries from unripe and ripe cherries. Each of these two groups of cherries has very different moisture contents and can then be dried separately, under the sun or mechanically, with savings in labor and fuel and the avoidance of black beans.



Mechanical Siphon LSC

Honey and Washed Robustas: different qualities, greater participation in blends and price premiums

The long experience with washed Robustas in India, more recently in Uganda, and now in Brazil, with pulped natural Conillons, show that a price premium of up to 30% or even more can be obtained by washing Robustas. Pinhalense’s wet milling line – mechanical washer LSC, pulper ECO SUPER and mucilage remover DMPE – can get the best qualities out of Robustas no matter how they are harvested.



Mechanical Siphon LSC



ECO SUPER Pulper



DMPE Mucilage Remover



Drying: better and uniform quality, fewer defects and better prices

Fast drying and/or the use of vertical or static machines that do not distribute heat well in the coffee mass also cause the final moisture to be uneven, with overdried and underdried beans. The overdried beans are likely to be broken at hulling while the underdried (“wet”) beans may ferment in storage. In addition, the use of hot air that is not clean and free from smoke transfers unwanted odors to coffee beans. A simple way to avoid black, broken and fermented beans is to use Pinhalense’s SRE rotary driers with heat exchangers. The speed of drying can be fully controlled at Pinhalense rotary driers, that supply the same amount of heat to all beans in a process that ensures that the final product is evenly dried. The use of Pinhalense fuel-efficient FTD heat exchangers avoids the risk of unwanted odors in coffee beans.



FTD heat exchange SRE



Last but not least, when drying green/hulled Robusta coffee that is received partially dried, which is the case in dry mills of many Robusta producing countries, there is a further benefit from using Pinhalense SRE rotary driers: green beans are polished to some extent, their appearance is improved and, some claim, astringency in the cup is reduced.

Robusta cherry and parchment hulling on farms and in dry mills

Hulling of Robustas is usually done where or close to where it is produced, on larger farms themselves or in small to mid-size hulling units located in coffee gathering points and belonging to middlemen, cooperatives, traders or exporters. Hulling can be the source of important inefficiencies and major losses if it is not performed properly. Losses are associated with physical damage to beans, overheating and low moisture levels, discharge of coffee beans with husk, etc. Pinhalense cold cross-beater hullers have been specially designed to avoid the problems

above that affect product yields, coffee aspect and, most importantly, cup taste. Pinhalense hullers are known to increase coffee yields by 1 to 2%, which is enough to pay for the costs of the machine in one or two years, depending on the intensity of use, quality gains notwithstanding. The CON family of combined hulling sets offers a pre-cleaner (optional), a fluid-bed destoner, Pinhalense high-efficiency hullers and a multiple-channel catador all assembled in one single structure. The younger member of the family is the COMPACTA that, as the name says, is smaller and easier to install. More information about the COMPACTA is found at

Coffidential No 173 https://www.peaconsult.com.br/imgs/pa_coffidential__173__december2021.pdf . At a time when consumption in producing countries may become a strong driver of world consumption and Robustas are likely to gain market share, the line of combined hullers comes to the forefront for its ability to process efficiently all types of coffees, from specialty to commercial, with major gains in yields, quality and price.

Dry milling: separation to improve quality and price and to access different markets

If defects cannot be avoided and Robusta coffee with defects arrives at the dry mills, as it is the case most of the time, defects must be then separated. The first step is to remove all impurities, including stones, from incoming green coffee using Pinhalense pre-cleaners PRELI and destoners CPFBNR with their respective dust aspiration systems. The next step is the separation first by size, using Pinhalense graders PI, PII and PFA to respond to clients' needs and to access different markets, and then by density ("weight"), using Pinhalense gravity separators MVF to remove defects (e.g.: light, hollow and malformed beans). The role of size grading in the separation of Robusta defects is often not well understood. Pinhalense size graders have the ability to enhance in different ways the separation of density and color defects from Robusta coffee. The different sizes can be blended back, if necessary, to be shipped to different markets.

Conclusion

P&A/Pinhalense experts can address all your needs to avoid and remove defects and to refine the quality of your Robusta coffees. The Pinhalense machines above are offered in different models and available in different sizes to meet the needs of micro, small, medium and large growers as well as millers and traders of all sizes.



CON



COMPACTA