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

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- DRIERS FOR WASHED AND NATURAL COFFEES, PULPED NATURALS/HONEYS, AND WASHED OVER-RIPE AND **UNRIPE CHERRIES (PAGE 4)**

### (II) GCP APP TO MONITOR AND EVALUATE SUSTAINABILITY IN BRAZIL

The Brazil Program of the Global Coffee Platform (GCP) has recently launched a mobile application to help collect information about the sustainability of coffee growing in the country. This new tool will increase knowledge of what is actually happening inside farm gate. Extensionists of participating institutions and partners will feed the app with information about production, sustainability indicators, farm management, etc. Coffee growers can also download the app and feed data. GCP will check the information collected through visits to both a sample of farms and "outliers" (those cases that catch attention for being far from average in either direction). This is a long-term project that will focus on small growers that respond for over 50% of total Brazilian coffee production.



Sources: Estadão and P&A

### (||) BRAZIL INCREASES PRODUCTIVITY AND PRODUCTION IN SUSTAINABLE WAY

CNC, the Brazilian Coffee Growers Council, was one of the participants at ICO's 7th Consultative Forum on Coffee Sector Finance where it presented the reasons behind Brazil's marked increase in productivity and production in the last two decades. Over a longer period, Brazil doubled its production in a sustainable way using less than half of the area originally planted with coffee. CNC closed its presentation showing the video Sustainable Coffee Supply Chain found in the link https://we.tl/6wfiOOmMzR that acknowledges the role of the Global Coffee Platform's Brazil Program in making Brazilian coffees more sustainable.

#### Sources: CNC and P&A

# CONAB REDUCES ESTIMATE FOR CROP JUST HARVESTED

Irregular rains and coffee borer infestation in several coffee regions of Minas Gerais and São Paulo led the Ministry of Agriculture agency in charge of warehousing and crop estimates (Conab) to reduce its estimates for Brazilian production in 2017/18, from the 45.6 million released in May to 44.7 million bags, 12.8% lower than last year's crop. Conab estimates a production of 34.1 million bags of Arabica, 21.5% lower when compared with the 2016/17 crop. Conilon production estimates increased 34% from the previous crop, reaching 10.7 million bags. Total area planted with coffee in Brazil is estimated at 2.2 million hectares of which 1.86 million are under production. Average coffee productivity in the 2017/18 crop is estimated at 24 bags per hectare, 5.5% lower than in Conab's May estimate of 25.4 bags per hectare.

#### Source: Valor Econômico (||) CLIMATE CREATES UNCERTAINTY FOR NEXT BRAZILIAN CROP

Coffee growers and the coffee market are keeping a watchful eye on climate conditions after early flowering that has been mostly lost in the southeast region last August. Lack of rain and high temperatures in the main Arabica coffee producing regions may revert expectations of a "super crop". Timely rains are fundamental to induce good flowering that in turn determines production potential. In addition to climate uncertainty, rust infestation is stronger than usual in south Minas Gerais.

#### Source: Valor Econômico

# COFFEE IRRIGATION PROHIBITED IN ESPÍRITO SANTO STATE

Coffee growers in Espírito Santo can no longer irrigate their crops from 5:00am to 6:00pm due to lack of water resulting from reduced rains. The state is the largest Conilon producer in Brazil, accounting for about 70% of the national production and 20% of global production. This prohibition is part of a resolution by the State Agency for Water Resources (Agerh) that bans water usage for purposes other than direct human needs during daytime hours. Irrigation or industrial production can only use water during the night. There is no deadline for the duration of the prohibition.

Source: CaféPoint



### ( CERRADO MINEIRO LAUNCHES CAMPAIGN TO COMBAT BERRY BORER

The Cerrado Coffee Growers Federation has launched a program to help growers combat and reduce coffee berry borer infestation in the next season. With the slogan "Do not let berry borer affect your profits", the initiative responds to demands by growers and their cooperatives and associations. The pest infestation was one of growers' major concerns during this crop. The campaign is focused on the removal of cherries remaining in the coffee tree after harvesting is over. The campaign is supported by the Technical Assistance and Rural Extension Institute of Minas Gerais (Emater-MG), the Agricultural and Livestock Research Institute of Minas Gerais (Epamig), Basf, Bayer, Dupont and Syngenta.

#### Source: CaféPoint

# (I) COFFEE TREES RESISTANT TO DROUGHT ARE MORE SENSITIVE TO COLD WEATHER

Studies and field observations in the last two years have shown that some coffee cultivars that have better tolerance to water stress are more affected by cold weather and frosts. This happened to Arabica coffee cultivars such as Acauã and Catuaí that presented greater tolerance to drought or water stress and healthier leaves. On the other hand, cultivars that are more sensitive to droughts, such as Mundo Novo and Icatu, have resisted better to lower temperatures. The explanation for the susceptibility to cold weather observed in different coffee cultivars is related to the concentration of salts in their tissues. Plants with greater tolerance to drought have more turgid and aqueous leaves whereas plants more sensitive to drought present a greater concentration of salts in their leaves.

Source: CaféPoint









# (I) BRAZILIAN COFFEE CONSUMPTION MAY INCREASE UP TO 3.5%

Coffee consumption in Brazil may grow between 3% and 3.5% this year and reach 22 million bags. Three factors are making a major contribution to this growth: increased coffee consumption by youngsters, coffee being considered a healthy beverage and expansion of coffee shops.

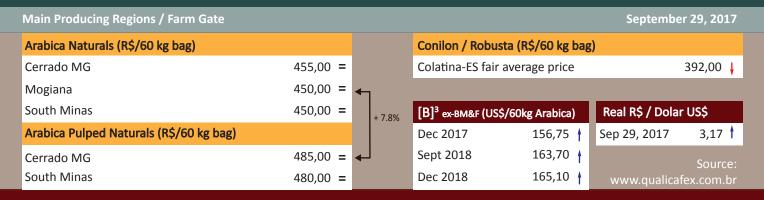
Source: CaféPoint

# (I) ABIC SELECTS BEST COFFEES IN ITS PQC PROGRAM

The Best of Quality 2017 competition held by the Brazilian Coffee Roasters' Association (ABIC) honored companies that stood out in the three categories – Traditional, Superior and Gourmet – of its Coffee Quality Program (PQC). Created to educate consumers about different coffee quality levels, the program has three quality labels that participating coffees are allowed to use on their packages and whose compliance is audited by independent companies. Nine products manufactured by seven companies were distinguished with the Best of Quality awards in the three categories.

Source: CaféPoint

### **Brazilian Prices**





#### REVISITING CLIMATE CHANGE IN BRAZIL

This session addressed climate change in July 2016 but it is worth to return to the subject given fresh evidence of its impact on the past and new crops.

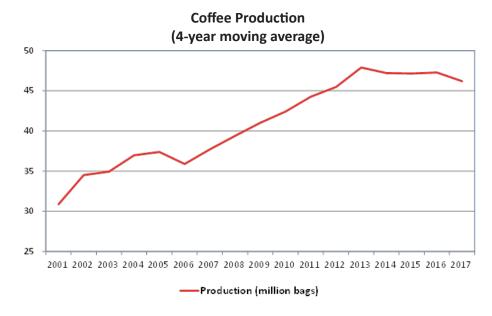
The earlier Outlook article addressed how higher than usual temperatures in Arabica growing areas during the harvesting season affected the availability of ripe cherries and the ability to produce pulped naturals (also known as CDs or honeys) and washed coffees. This happened again in the crop just harvested with hot weather causing cherries to go from unripe to over-ripe very quickly which caused the percentage of ripe cherries harvested to fall in several producing areas. Coming years will show whether this is a new pattern replacing the mild temperatures of the typical harvesting season winters of Brazilian coffee producing areas.

A different climate-related phenomenon marked this past crop in several regions. Small hulling out-turns and lower than usual bean sizes indicated that the lack of rainfall during the cherry development period early in the year had larger impacts than expected. As a result, Brazilian supply has been negatively affected in two ways: less coffee available and beans of smaller size.

Climate failed Mogiana and South Minas growers again this past September when a few days of rain showers prompted intense flowering that will only partially develop into cherries for lack of rainfall in the weeks thereafter. It may be too early to say whether new flowerings will make up for this loss but experts claim that the production potential has already been reduced also because coffee trees now have fewer leaves due to the heat.

Last but not least, news from leading Conilon producing state Espírito Santo indicate that a new drought may be brewing after a period of rains. A drought alert should be in the radar screens of experts who estimate the Brazilian crop.

The graph below indicates how production in the last three crops reacted to climate change. Higher temperatures and changes in rainfall patterns have become much more important indicators of actual crop size than before to the point of interrupting the long pattern of growth of the four-year-average production figures. Climate change has become a much greater threat and challenge to Brazilian production than frosts whose impact fell down because of both the migration of coffee to warmer areas and global warming.



Brazilian research institutes have been working on varieties that are compatible with drought and higher temperatures but a wider integrated approach to the problem may be required including irrigation and ways to bring down temperatures in current coffee areas for example with shade trees. This comprehensive response to climate change may also include harvesting and post-harvesting technology. If recent history is a guide, the Brazilian coffee business will react positively to yet another major challenge. But the figures in the graph indicate that this has to happen soon!

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# MACHINE OF THE MONTH



### DRIERS FOR WASHED AND NATURAL COFFEES, PULPED NATURALS/HONEYS, AND WASHED OVER-RIPE AND UNRIPE CHERRIES

The "Brave New Processing World" in the Outlook session of the May 2017 Coffidential described how coffee growers are using coffee processing technology to diversify the list of products that they offer that may include all or some of the types mentioned in the title above. As a result, drying of smaller coffee lots becomes a requirement.

By offering the single- and divided-drum rotary driers SRE Pinhalense is able to cover this wide range of coffee drying needs, with lots from 1 to 12 tons of wet coffee, as shown in the two tables on the right-hand side.

Divided-drum rotary driers, added a few years ago to the traditional line of Pinhalense single-drum rotary driers, are ideal for processing small lots of the types of coffee mentioned at the outset. In addition, they are useful for:

- small growers at the beginning and the end of the harvesting season, when coffee	7
volumes picked fall;	

- mid-size and large growers active with small lots in the specialty coffee market;
- micro-lots, and
- quality and variety trials.

In a word, the new line of divided-drum rotary driers was designed to complement the single-drum line and to increase drying flexibility for growers of all sizes and types from

SING	SINGLE DRUM			
MODEL	CAPACITY (m³)			
SRE-025X	2.5			
SRE-050X	5.0			
SRE-075X	7.5			
SRE-090X	9.0			
SRE-150X	15.0			

DIVIDED DRUM				
MODEL	CAPACITY (m³)			
IVIODEL	PER DRUM	TOTAL		
SRE-050/100X	5.0	10.0		
SRE-075/150X	7.5	15.0		
SRE-090/180X	9.0	18.0		

small to large, specialty to commercial, including sustainable and fair trade coffee suppliers interested in the traceability of small lots.

The divided driers have two separate heat exchangers, one for each drying chamber of equal volume. This allows for the full flexibility of using the two half-drums in a completely independent manner, for different coffees at different drying stages and with different hot air and temperature requirements. Of course, the two half-drums can also be used with the same type of coffee if the need arises.

Besides increased flexibility, the new line of divided-drum rotary driers incorporates all the advantages of the SRE line of Pinhalense driers, namely:

- uniform drying,

- fuel savings,

- overhead loading silo (optional).

- short drying time,
- quick loading and unloading,
- ability to burn coffee husk,
- long useful life and

The tables above indicate that with the introduction of the divided-drum rotary driers Pinhalense now also offers a machine larger than its best-selling SRE-150X. The SRE-090/180X has a capacity to hold up to 18 cubic meters of coffee to be dried, 20% more than the previous largest model. All Pinhalense rotary driers can be used to dry washed and natural coffees as well as all other types mentioned in the title. They can also be used to correct the moisture of green coffee received in dry mills with moisture levels above 12%.

For some specific products, Pinhalense also offers the new flat bed driers SE (see the May 2017 Coffidential) that can be used alone or in combination with rotary driers, divided or not.



Rotary drier SRE-075/150X



Flat bed drier SE-090X