

CONFIDENTIAL

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

- PREDICTING THE SIZE OF THE BRAZILIAN CROP: BEYOND FLOWERING (PAGE 3)
- DECIDING WHICH MACHINE TO BUY: PRICES AND WHAT ONE DOES NOT SEE AT FIRST SIGHT (PAGE 4)

☉ FIRST FLOWERING IN BRAZIL

Widespread rains that hit Southeast Brazil in early September caused the first flowerings in coffee plantations and excited growers and the world market. Whether these flowerings will develop into actual production will depend on the weather in coming weeks. Coffee trees were exposed to high temperatures and reduced availability of water in the beginning of the reproductive phase due to the El Niño phenomenon and this can affect production. Growers are aware of the current weather conditions that may not only prevent flowers from developing into beans but also favor the spread of pests and diseases.

Sources: Embrapa, Valor Econômico, CaféPoint and Notícias Agrícolas

☉ INDUCED WATER STRESS BENEFITS ARABICA COFFEE PRODUCTION

Originally grown in areas with average annual temperatures in the range of 19 to 22 °C, Arabica moved to warmer regions (23 °C to 24.5 °C), with the support of irrigation. A research project to induce water stress in order to improve flowering is under way in the Pirapora region of Minas Gerais. Coffee trees that produced little in 2014/15 as a result of poor flowering in spite of irrigation are expected to have a good crop in 2015/16 because irrigation was suspended to stress the plants and then resumed 30 to 40 days later. The result of water stress was abundant and concentrated flowering in early September.

Source: CaféPoint



Coffee tree that underwent water stress (3 and 10 days after irrigation)

☉ RECORD HIGH CONILON PRICES... BUT VERY COMPETITIVE ABROAD

Conilon prices ended September at record highs according to the Center for Advanced Studies in Applied Economics (CEPEA). However, coffee growers are not willing to sell and are waiting for further price increases because the 2015/16 crop was small and high temperatures may affect production in the next coffee season. Ironically, the devaluation of the Brazilian Real has made Brazil one of the most competitive Robusta origins with 3.4 million bags exported so far this year and on the way to surpass last year's record.

Sources: Cepea via Notícias Agrícolas and P&A

☉ STATE EXTENSION SERVICES SIGN LETTERS OF COOPERATION WITH IDH'S SUSTAINABLE COFFEE PROGRAM

Technical Assistance and Rural Extension Services in the states of Minas Gerais, Espírito Santo, São Paulo, Paraná and Rondonia and IDH's Sustainable Coffee Program signed Letters of Cooperation to formalize existing partnerships and to promote the sustainability of small and medium sized coffee growers. These states are responsible for the production of 42 million bags or 93% of the country's coffee.

The Sustainable Coffee Program, powered by the Dutch agency IDH and coordinated in Brazil by P&A, is supported by European governments and sponsored by roasters JDE, Nestlé and Tchibo. The program's goal is to increase sustainable practices in coffee production with activities that help growers increase productivity and improve income and quality of life.



Source: P&A

☉ SPECIALTY COFFEES TO HELP SUSTAIN INCOME

Coffee growers are counting on higher value added to sustain their income that decreased significantly due to the reduction of the size of coffee beans caused by two consecutive droughts. According to the Brazilian Specialty Coffee Association (BSCA), specialty coffees account today for 10% of all coffee produced in Brazil. These coffees are sold at a higher price and do not depend on coffee stock exchange fluctuations. According to the Brazilian Coffee Exporters' Association (CeCafé), the average export price for commercial coffee was US\$ 176.58 to be compared with US\$ 229.37 for specialty coffees exported in the period of January to July of 2015.

Source: Hoje em dia

☉ FAIRTRADE COFFEE EXPORTS TO GROW FASTER

Small Brazilian growers with Fairtrade certification are expected to export about 260,000 bags in 2015, 68% more than in 2014 whose numbers already showed a 21% increase when compared to 2013's figures. The main Fairtrade principles are good environmental and social practices and a guaranteed premium over the international price of products. Fairtrade certification is granted to groups of growers that belong to cooperatives and associations.

Source: Globo Rural via Canal do Produtor

☉ APPROVAL OF NEW AGRICHEMICALS TO BE WITHDRAWN FROM ANVISA

The National Agricultural Confederation (CNA) is in favor of moving the registration of new agricultural products away from the Brazilian Sanitary Surveillance Agency (ANVISA) in order to speed up the approval and release processes. The plan is to create a new agency devoted to agribusiness related products and to alleviate the work of ANVISA that has accumulated a list of up to 600 products to be analyzed since 2007 which greatly reduces the competitiveness of Brazilian products. The proposition requires Congress approval.

Source: CNA

☉ EXPERTS AND CONSUMERS CHOOSE MATAS DE MINAS COFFEE BEST FOR SECOND TIME

Ninho da Águia Coffee Farm, in Alto do Caparaó, state of Minas Gerais, won for the second time in a row the Coffee of the Year Contest that took place last month during the International Coffee Week. Out of 122 coffee samples from all over the country that entered the contest, 81 scored over 80 points. Twenty-five made it into the semifinal round after being cupped by national and international coffee cuppers and ten were chosen, tasted and voted for best coffee of the year by over thirteen thousand visitors.

Source: Editora Café

☉ COOXUPÉ PARTNERSHIP TO INCREASE MARKET FOR GREEN COFFEE OIL

Cooxupé entered into a partnership for the development of a new line of cosmetics and nutritional products made with green coffee oil. The partnership will invest close to US\$ 2 million in research and the assembly of a new factory in Guaxupé to start the oil extraction process for the cosmetic industry. Coffee oil is an antioxidant that helps skin regeneration and provides UV protection and cellular regeneration stimulation.



Source: Folha Rural

☉ CRAFT BEER WITH REMARKABLE COFFEE AROMA AND FLAVOR

The Brazilian consumption of craft beer has increased 36% between 2010 and 2013. In order to take advantage of this scenario an entrepreneur in Guaxupé, southern Minas Gerais, started to use coffee to flavor the drink. One of the 11 types of beer produced in his microbrewery is made with the extract of roasted and ground coffee, the main agricultural product of the region. The result is a beer with remarkable coffee aroma and flavor.

Source: Globo

PREDICTING THE SIZE OF THE BRAZILIAN CROP: BEYOND FLOWERING

Flowering has been good in most Arabica producing areas of Brazil and the same held for Conilons earlier. Is this an indication of a bumper crop? What happened after flowering in the last two years – droughts at cherry development time – indicates that it may be too early to arrive at such conclusion. But before we go into that, let’s review what happened from 2013 to now.

Brazil had a normal or typical flowering season in 2013 but production was frustrated by the drought in January to March of 2014 that prevented many cherries from growing into viable beans and caused most of them to lose weight altogether. Flowering in 2014 was smaller than usual because the coffee trees faced water deficit and had carried a full load of cherries. The fewer ensuing cherries were expected to produce fewer beans of normal size but we now know that a short drought in January of 2015 affected screen size to a greater extent than expected. What happened in the 2014 and 2015 crops leads to the conclusion that more than ever any crop prediction in Brazil has to take into account rainfall at cherry formation and development time and that the usual amount of rain expected may be falling down as a result of climate change. In other words, the practice of directly associating good flowerings with large crops may be turning into an oversimplification.

All of us involved in the coffee business have read and heard a lot about climate change since the 2014 drought hit Brazilian coffee growing areas. I am tempted to summarize here three competing views of the 2014 drought: (1) it was an isolated phenomenon not likely to be repeated, (2) it was part of a recurring pattern of droughts every so many decades, or (3) it was the beginning of a new pattern to occur rather frequently. No matter which theory prevails – and only time will show this – it is a fact that a smaller drought occurred in 2015 and that temperatures were above historical averages. This brings up a third new crop prediction factor into the picture: temperatures.

We have hard evidence that even irrigated areas lost production due to abnormally high temperatures in the cherry development period in 2014. Extremely high temperatures may cause flowers not to turn into cherries and photosynthesis to slow down with obvious impacts on production figures. Temperatures are indeed above average now, at flowering and past-flowering time in Brazil, but not yet at the extreme level.

It is hard time that we assume that climate change is here to stay and that one must take flowering indeed as the first critical factor in crop prediction. But for flowering to develop into actual crop, favorable rainfall is required to support the turning of flowering into cherries and the development of coffee beans and temperatures must be in a range that does not endanger either flowering or cherry development. Bearing this in mind, market attention should now focus on two “control periods”: the September-November flowering season and the January-March cherry development period, with rainfall and temperatures monitored all along and beyond. Crop prediction may have been an easier task before...

Last but not least, climate change mitigation tools exist – irrigation, shade, mulching, deeper planting, new varieties, etc. – and others will be created, but it seems that the most competitive producing countries, i.e., the most advanced technologically and with the best organized supply chains inside and outside farm gate, are the ones that will adapt best and fastest to climate change and comparatively become even more competitive than they are now. This should be no surprise since these countries concentrate the bulk of coffee research and have the most advanced extension services and financing systems, to mention only a few factors. The tendency for the largest coffee producing countries to increase their market share is likely to be intensified by climate change.



Brazilian Prices

Main Producing Regions / Farm Gate

September 30, 2015

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	505,00 ↑	Colatina-ES fair average price	350,00 ↑
Mogiana	500,00 ↑		
South Minas	500,00 ↑		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	555,00 ↑	Dec 2015	147,25 ↓
South Minas	550,00 ↑	Mar 2016	147,20 ↓
		Sep 2016	144,55 ↓
		Real R\$ / Dolar US\$	
		Sep 30, 2015	3,97 ↑

Source: www.qualicafex.com.br

DECIDING WHICH MACHINE TO BUY: PRICES AND WHAT ONE DOES NOT SEE AT FIRST SIGHT

It is not uncommon for managers of coffee trading and processing companies to place too much weight on price alone at the time of deciding which brand of machine to buy. The risk is that the flow of future benefits may not offset the price difference. In order to control this risk one should consider carefully the factors below.

1. Efficiency

Small benefits or minor mistakes that may seem marginal in fact count a lot because margins are also small and volumes large in the coffee business. A gain of 1 or 2% in hulling yields, energy savings due to smaller motors or higher accuracy in grading may represent the difference between profit and loss.

Processing mistakes or faults, e.g., stones, impurities or a bolt mixed with coffee, unhulled parchment, poorly polished coffee or a small bean found in a lot of large beans, not only affect profitability but can also cast a bad image on the miller or supplier not to mention the costs of reprocessing. This becomes even more critical when lots are larger, specifications stricter or quality a higher concern.

A gain of 1% in processing during the useful life of a piece of equipment can easily offset a difference of 30% in its price. ROI (return on investment) must always be a decisive factor in the decision of which equipment and brand to buy. The stream of advantages or benefits brought about by the factors below contribute further to ROI and the best choice of equipment.

2. Quality and durability

Coffee quality and efficiency of equipment have already been addressed above but quality of the machines itself is also important: durability and length of useful life are positively correlated with ROI. Many equipment buyers focus on the quality of finishing and other details that are more visible and neglect the factors that have a direct impact on ROI, e.g., the sturdiness of the machine, the thickness of the metal sheet, the strength of the structure and key parts, the quality of components, like bearings and motors, the balancing of shafts, the precision of grading screens, etc.

3. Service

Pinhalense has a network of representatives in the main coffee producing countries and most of these sales agents have a trained team of expert technicians to assemble and especially maintain the machines that Pinhalense supplies. The interruption of operation, that can cause losses in any coffee mill, becomes critical when shipments are scheduled and contracts have to be fulfilled. The availability of local service and spare parts ensures smooth operation and minimizes the risk of stoppages.

4. Responding to local conditions and needs

Machines to process coffee seem to be the same in all countries but there are details in design and construction that Pinhalense learned that had to be changed to gain processing efficiency in different countries and regions. Pinhalense became the leader in the supply of coffee processing equipment in many countries besides Brazil as a result of its long and diversified field experience and the learning curve it went through over the years as it entered and consolidated its position in most coffee producing countries in the world.

The saying “the devil is in the detail” is very right and applicable to the need that coffee milling equipment suppliers have to adapt their machines to products and markets in a process that impacts efficiency and durability not to mention ease of adjustment and operation, all of which affect the costs of operation and ROI.

The decision of which brand of coffee processing equipment to buy is often difficult and it may seem easier for managers to seek a better ROI by buying low price equipment. However this oversimplifies the process because with equipment that lasts over 20 years, as it is the case with Pinhalense machines, the flow of future benefits and savings is extremely important not to say critical to maximize ROI.