P&A COFFEE NEWSLETTER
Year 09 - No. 108 - July 06, 2016

COFFIDENTIAL

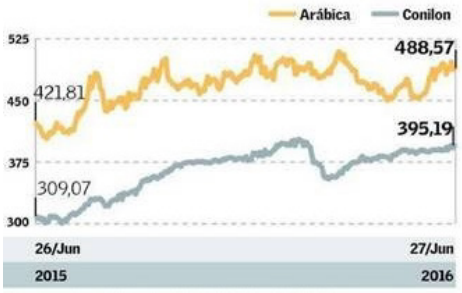
YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS. THIS ISSUE:

COFFEE COMPANIES DISPUTE RAW MATERIALS

Drought and high temperatures have affected the Conilon production in Espírito Santo and rains during Arabica harvesting in Minas Gerais and São Paulo states have led to quality losses in the current season causing uncertainties in the coffee sector. Soluble coffee industries are already having difficulties to find raw material whereas roast and ground companies that also use Conilon to compose blends are looking for lower quality Arabicas to compensate for the scarcity and high prices of Conilons in the local market. The Conilon production in Espírito Santo is expected to be around 6 million bags in 2016, 50% smaller than last year. The Brazilian soluble industry currently demands 4.5 million bags of Conilon per year and the R&G industry another 7 million bags for blends. The dispute for coffee by the industry has led prices of both Arabica and Robusta to go up: the bag of Conilon has increased 28% over the last twelve months and the bag of Arabica has had a 16% rise.

Source: Valor Econômico

COFFEE PRICES GOING UP
Cepea/Esalq Indicator (R$ per bag)



Source: Cepea/Esalq | Prepared by Valor

QUALITY AND QUANTITY IMPLICATIONS OF ADVERSE WEATHER

High rainfall during harvesting in late May and early June in South Minas and Mogiana, Brazil's main Arabica producing regions, has affected coffee quality. It is still early to predict losses in quantity, but heavy rains with strong winds brought to the ground about 30 to 40% of the maturing cherries in some areas. The high Arabica crop expected for 2016 may fail to succeed after all.

Sources: CaféPoint and Revista Cafeicultura

BROWN SPOTS ON COFFEE CHERRIES IMPAIR QUALITY

Small brown spots have been observed on Arabica cherries during maturation stages in South Minas and Zona da Mata growing areas. The cherries initially present small dark dots that later join each other and may cover the whole berry. Those spots are more visible on yellow cherries and only affect those exposed to sunlight. The probable cause of this abnormal phenomenon is physiological: sunlight exposure, temperatures or thermal shock. The main doubt is why it only happened this year. A likely explanation is a 40-day-period with summer-like weather in April and early May with temperatures 2 degrees Celsius above historic averages. The spots can lead to quality losses due to difficulties to pulp the cherries and the development of saprophytic fungus that can use the spots as entry doors.

Source: CaféPoint

BRAZILIAN COFFEE HARVESTING ADVANCES

Coffee harvesting had already reached about 40% of the crop – 23.2 million bags harvested – by June 21, based on the figure of 56.4 million bags expected for the 2016 season. Arabica harvesting totals 30%, slightly higher than the same period last year (27%), whereas Conilon harvesting reached 77%, lower than 2015 (80%) but higher than the historical average of 70% for this time of the year.

Source: Revista Cafeicultura

OUTSTANDING QUALITIES OPEN NEW HORIZONS FOR COFFEE IN ESPIRITO SANTO

Coffee is living through a new cycle in Espirito Santo, the second largest coffee producing state in Brazil, commonly known for its Robusta/Conilon coffees. Roast masters, baristas and other coffee experts are regarding Arabicas grown in the region as some of the best in the world. The increasing production of premium coffees is coming from areas such as Pedra Azul, Brejetuba, Venda Nova do Imigrante and the Caparaó, each one of them with its own characteristics. Small growers are investing in top quality micro-lots, like Fjorland estate that belongs to a Norwegian and is managed by a Brazilian; its shaded coffee grove at the foot of the "Blue Rock" mountain produces only 6 bags per season of a unique coffee, among the best in Brazil.

Source: ABIC (Brazilian Coffee Roasters Association)

AMAZING RESULTS WITH ROBUSTA-CONILON HYBRIDS IN RONDÔNIA

Embrapa Rondônia, in the Amazon region, developed hybrid clonal coffees – the result of crossings between Coffee Canephora from the Robusta group and plants from the Conilon group – that are presenting amazing results. Whereas the average productivity in Rondônia lies around 19 bags/hectare, the hybrid clonal coffees are generating yields of more than 100 bags/ha in their second crop. The experimental research project started 12 years ago and aims at selecting highly productive clones to compose the next coffee cultivar to be released by Embrapa for Rondônia state in 2018. The research project is also testing clones that are resistant to leaf rust, the main disease affecting coffee in this area.

Source: Embrapa Rondônia

SALES OF US$ 10 AND 35 MILLION AT SCAE-DUBLIN

Brazil was present at the SCAE World of Coffee in Dublin, Ireland, on June 23-25. Twenty companies made US$ 10 million worth of business during the event and plan to sell an additional US$ 35 million over the next 12 months. The Brazilian participation, led by BSCA (Brazil Specialty Coffee Association) in partnership with Apex (Brazilian Agency for the Promotion of Exports and Investments), focused on presenting specialty coffees from several producing regions of Brazil, held cupping sessions and shared information about the sustainable and advanced production techniques used in the country.

Source: BSCA

COFFEE DEPARTMENT TO BE RECREATED AT MINISTRY OF AGRICULTURE

In response to demands from representatives of the coffee production sector, the Ministry of Agriculture has confirmed the establishment of the Department of Coffee, Planted Forests, Sugarcane and Agroenergy. The new structure will allow the coffee sector to regain a configuration similar to the former Coffee Department, allowing for better coordination of coffee policy and financing at the federal level. The name of the director of the new department will be decided by the production sector.

Source: CNC (National Coffee Council)

ESTIMATES OF COFFEE INVENTORIES IN PRIVATE HANDS LACKING

The lack of data on private coffee stocks in Brazil has been a concern for growers and traders alike. Climatic problems in years of record exports could have nearly zeroed these stocks and many experts claim they may be at their lowest of several years. Nonetheless Conab (the Ministry of Agriculture agency in charge of warehousing and crop estimates) has not yet released its survey of private coffee stocks usually available by March 31. Conab claims that the data collection period went until May 6 this year and that the company is still compiling data with no expected date to present the report.

Source: CaféPoint

COFFEE TO HELP PROMOTE RONDÔNIA AS TOURIST DESTINATION

The Tourism Department (Setur) of the state of Rondônia, in the Northern part of Brazil, intends to use coffee as a "brand" to promote the image of the state that produces around 1.8 million bags of Robusta/Conilon coffee per year, mostly grown by small holders. Highlighted at the International Coffee Week in Belo Horizonte in 2015, coffees from Rondônia attracted the attention of coffee experts. Setur now plans with local entrepreneurs how to associate the product with tourism. The first initiative will be to support the 1st Coffee Quality Contest in Rondônia in September 2016.

Source: www.rondoniadinamica.com

HOW UNTIMELY RAINS AND COLD WEATHER AFFECTED QUALITY IN BRAZIL'S MAIN ARABICA GROWING AREA*

Abnormally high rainfall occurred in Brazil's main Arabica coffee growing area – South Minas and Mogiana – in late May and early June. The Varginha, MG, weather station registered about 90mm (35.5 inches) of rainfall in 11 consecutive days. The cold front that caused the rains raised moisture levels and, together, low temperatures and wet weather led to what is described below.

1. Early drying – Cherries went from ripe to over-ripe and partially dry faster than usual and restrained production of pulped natural (CD) coffee. This was probably caused by saprophytic fungus that developed in the coffee pulp as a result of higher than usual moisture levels. Even before the rains, the cherries already had brown spots that probably resulted from physiological reasons. These spots may have acted as entry doors for the fungus that caused pulp tissue to die and rotten with the subsequent development of ethylene.

2. Cherry fermentation – Other types of fungus – *Penicillium, Fusarium* and *Aspergillus* – attacked the cherries as they went from ripe to over-ripe and partially dry in a high moisture environment and caused cup quality to fall. The negative impacts on quality were worse in lower altitude areas.

3. Fall of cherries to the ground – High moisture combined with winds made cherries heavier and their stems weaker causing them to fall in large quantities. This impact was stronger in varieties whose cherries ripen earlier.

4. "Activation" of unripe (green) cherries – Rainfall after a 40-day dry period may have activated the growth of the unripe cherries whose pulp thickened. On the other hand, the lesions and ethylene production in dry cherries accelerated maturation. This, added to a timely *Colletotrichum* attack, specially in cherries with lesions, caused many of them to go straight from unripe to over-ripe without the ripe stage.

5. Phoma attack and bacteriosis – High moisture and low temperatures favored the spread of the diseases above that affected leaves and early flower gems.

6. Severe fall of leaves – This occurred even in well-nourished bushes as a result of some or all problems above

7. Secondary growth in productive branches – Young leaves at the end of branches were either "burnt" or stopped growing as a result of low temperatures causing plenty of secondary growth as flower gems changed into leaves.

8. Early Flowering – Limited out-of-season flowering took place at branch ends in warmer areas due to water stress followed by rainfall.

Altogether, the phenomena above caused quality losses of different intensity and characteristics. Losses in volume or weight will depend on further developments in harvesting and on how fast coffee that has fallen will be raised from the ground. Impacts on the next crop will depend on both the remaining leaf coverage and, very critical, flowering that is still some time away.

** The text above is a translation with minor simplifications of an article written by Procafé Foundation Agronomists J.B. Matiello, J.E. P. Paiva, S.R. Almeida, Rodrigo N. Paiva, Iran B. Ferreira e Marcelo Jordão Filho.*

Dry and light unripe cherries that resulted from lesions caused by cochineal combined with *Colletotrichum* attack independently from rains. Carmo do Parnaíba, MG, June 2016

SEE MORE PICTURES IN THE NEXT PAGE

Unripe and ripe cherries with before-the-rains brown spots that may have facilitated micro-organism attack and speeded up maturation and drying after the rains. Varginha, mid May - early June, 2016

"Reactivated" unripe cherries that have "swollen" next to dry cherries. Varginha, mid May - early June, 2016

Fungus-caused fermentation in dry cherries resulting from excess moisture, white or rose color, *Penicillium, Aspergillus* and *Fusarium.* Areado, MG, June 2016

Left: rain and low temperature caused early flowering and leaves developed in places of flower gems and, right: initial Phoma attack in flower buds. Areado, MG, June 2016

Brazilian Prices

Main Producing Regions / Farm Gate — **Jun 30, 2016**

Arabica Naturals (R$/ 60 kg bag)		
Cerrado MG	515,00	=
Mogiana	510,00	=
South Minas	510,00	=
Arabica Pulped Naturals (R$/ 60 kg bag)		
Cerrado MG	575,00	↑
South Minas	570,00	↑

+ 12.7%

Conilon / Robusta (R$/ 60 kg bag)		
Colatina-ES fair average price	400,00	↑

BM&F (US$/60kg Arabica bag)		
Jul 2016	165,45	↑
Sep 2016	173,15	↑
Dez 2016	177,00	↑

Real R$ / Dolar US$		
Jun 30, 2016	3,21	↓

Source: www.qualicafex.com.br

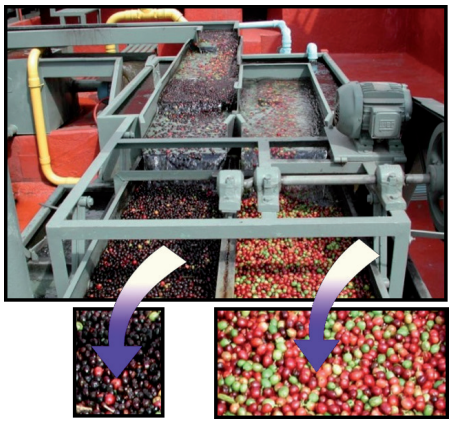
MECHANICAL SIPHONS ARE ESSENTIAL TO PRODUCE HIGH QUALITY NATURALS… AND WASHED COFFEES TOO

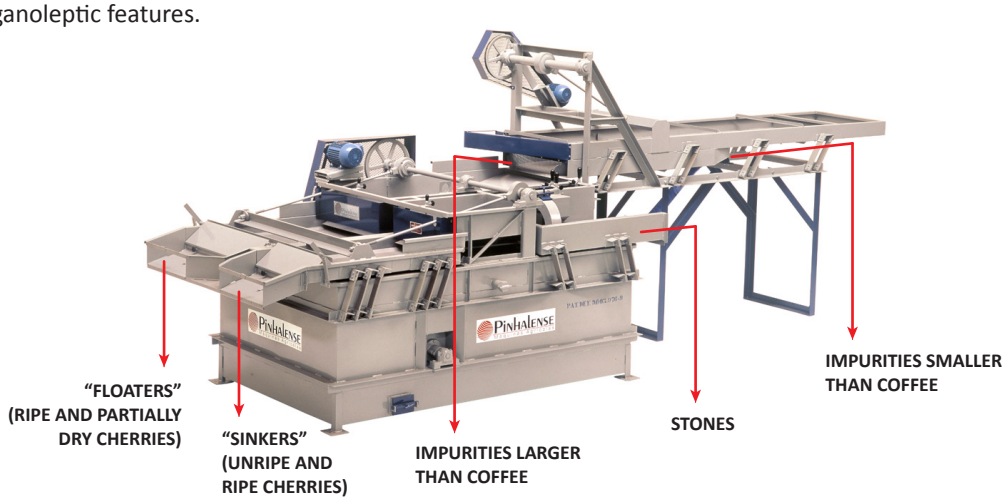
Invented and patented by Pinhalense, the LSC mechanical siphons have proven to be essential to produce high quality natural coffees, alone or combined with other Pinhalense machines depending on the type of natural to be produced and the raw material(s) available.

Traditionally used in Brazil, where naturals play a key role in coffee supply for local consumption and exports, the Pinhalense mechanical siphons have found their place in many other producing countries as the first machine in wet mills, preceding pulpers. However, their role in the production of naturals in typical washed coffee origins has been largely ignored until recently.

Different qualities of natural coffees can be obtained from ripe, over-ripe and partially dry cherries harvested from the coffee bush. The LSC mechanical siphon is essential to separate the over-ripe and partially dry cherries that are not many at the beginning of the harvesting season but tend to increase as coffee picking progresses and the end of the season approaches. Also, the washed coffee producer interested to increase its supply of some natural qualities may deliberately delay harvesting.

The role of the Pinhalense mechanical siphon LSC is to separate the “floaters” from the “sinkers”, i.e., the over-ripe and partially dry cherries from those that are either immature (green) or ripe, respectively. As a result of this separation, the mechanical siphon makes over-ripe and partially dry cherries available for immediate drying under the sun, in mechanical driers or in a combination of these two drying systems. More quality conscious natural producers may wish to separate over-ripe and partially dry cherries from each other and to further process them in different ways. With Pinhalense technology, it is possible to separate these two types of cherries that are at different drying stages and have different organoleptic features.





Super-naturals is the name that the specialty coffee exporter QualicafeX gave to washed floaters that dry with mucilage and some pulp in order to acquire the body and sweetness that make them a unique ingredient for top quality espresso blends. A combination of Pinhalense machines is required to obtain these super-naturals: mechanical siphon, sieve and pulper.

The LSC mechanical siphons, that recycle all the little water that they use, offer other benefits besides cherry separation. They remove impurities smaller and larger than coffee cherries as well as stones all of which are discharged continuously and without the need for labor. The separation of extraneous materials is critical to avoid damage to pulpers and mucilage removers that may be used in further processing and to extend their useful life. Pinhalense mechanical siphons have many advantages over conventional siphon tanks that consume a lot of water, require frequent manual discharge of stones (and floaters too, in some cases) and do not separate extraneous materials.

Pinhalense mechanical siphons LSC, available in several sizes and capacities, can be used independently from other machines, added easily to existing milling lines made by any supplier to replace conventional siphon tanks, and used as the initial machine in Pinhalense wet milling lines.

Please contact the P&A / Pinhalense agent nearest to you or us directly at peamarketing@peamarketing.com.br to request more information about Pinhalense mechanical siphons and how they can help you prepare naturals and washed coffee alike.