

CONFIDENTIAL

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

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CHANGING PARADIGMS ABOUT PRICE DIFFERENTIALS FOR BRAZILIAN ARABICAS

According to Brazilian brokers, growers are still resistant to sell their coffees in the domestic market; it is virtually impossible to find good quality Arabica coffee under R\$ 500 (US\$ 277.80) per bag of 60kg. The result is that Brazilian coffee differentials against the ICE New York exchange are still rising and have surpassed those of traditional Central American competitors. A market reorganization in price differentials for high quality Arabica coffees may be underway. The great quality improvements achieved in recent years together with the well known logistic capability and reliability of Brazilian coffee exporters may be repositioning Brazilian Arabicas in the world market. See the Outlook section of Confidential No. 41 for additional information relevant to this clipping.

Sources: Escritório Carvalhaes, Diário do Comércio and P&A

COOXUPÉ TO RECEIVE LESS COFFEE IN 2012 BECAUSE OF ADVERSE WEATHER

Cooxupé, the world's largest coffee cooperative, expects its output to be 15% smaller in the 2012/13 season (compared to 2010/11, the previous "big crop" in the Brazilian production cycle) due to dry weather registered in the main coffee growing areas of Brazil this year, specially in May to October. Cooxupé, with 12,000 members, was Brazil's biggest exporter in 2010, shipping 1.8 million bags of coffee.

Source: Bloomberg

TIGHT STOCKS, RECORD-HIGH EXPORTS AND HIGH DEMAND FOR CONILONS

Average Conilon coffee prices in Brazil went from R\$ 225,00 (US\$ 125.00) in October to R\$ 280,00 (US\$ 155.55) in November, a 24% increase. The soaring demand comes from Brazil's domestic coffee market and its soluble coffee industry. Exports have also grown, with Espírito Santo reaching a new record of an estimated 2.5 million bags exported in 2011 against 1.8 million bags in 2010.

Sources: G1 Economia / Agronegócios and Agnocafe

COFFEE SUNSCREEN?

The Campinas Agronomy Institute (IAC) found that a substance extracted from the coffee bean oil known as kahweol has the power to block ultraviolet rays. Interesting possibilities are associated with this discovery like the development of a new formula for sunscreen products and the protection of equipment and items that are exposed to solar radiation, such as asphalt roads. The research results, considered unparalleled, are already the subject of a patent application.

Source: Globo Rural On-line



EFFORTS TO INCREASE YIELDS IN PARANÁ

The need to increase yields was discussed at Ficafé, the International Fair of Specialty Coffees of Norte Pioneiro do Paraná, one of the largest coffee events in Brazil, held in November. The state governor mentioned the goal of increasing average yields from 22 to 40 bags/ha, a process that has already begun in selected areas of Paraná. The Projeto Café ("Coffee Project"), being implemented by the state's extension services with the support of researchers and private companies, will serve as a base for the creation of public policies to benefit the state's coffee growers.

Source: Emater (Technical Assistance and Rural Extension Institute of Paraná)

NEW PRACTICES TO COPE WITH NEMATODES



The Paraná Agronomy Institute (IAPAR) is testing two different ways to cope with nematodes in established coffee areas. The first way is crop rotation with nematode-resistant crops such as corn, oats and guandu (a type of bean) in order to reduce infestation. One year and a half later, coffee is planted again with peanuts between the lines. Another technique is the use of a mix of nematophagous fungi, that when applied to the soil can capture the nematode worms and prevent their reproduction. Researchers were able to reduce nematodes by 98% in the laboratory and greenhouse. Field experiments are not over yet, but the results are promising.

Sources: Globo Rural and IAPAR.

COFFEE FROM SÃO SEBASTIÃO DA GRAMA WINS 2011 CUP OF EXCELLENCE

A coffee lot from Rainha Estate in the São Sebastião da Gramma municipality of the Mogiana region of the state of São Paulo was the big winner of the 2011 Cup of Excellence in Brazil with a score of 91.41 points. The lot was selected by an international jury composed of coffee roasters, importers, baristas and coffee shop owners. The competition's 25 winning lots will be disputed by coffee buyers from all over the world at the Cup of Excellence online auction scheduled for January 18, 2012.

Source: CNC

SALES POTENTIAL FOR DOMESTIC COFFEE MACHINES

According to a market survey by GfK Retail and Technology, electric coffee makers have a high sales potential for next year in Brazil, especially among middle class consumers. Although the country is the world's second largest coffee consumer, the majority of homes use traditional paper or cloth filters to brew coffee. Amidst seven categories of portable electric devices studied by GfK, the coffee makers responded for only 7% of the total units sold from January to August 2011 in Brazil.

Source: Jornal Comarca de Garça

NEW DOLCE GUSTO PRODUCTS LAUNCHED AFTER R\$ 20 MILLION INVESTMENT

Dolce Gusto, Nestlé's line of single-serve coffee machines and pods that arrived in Brazil in 2009, already represents 15% of the company's coffee division revenues in the country. As of September 2011 Brazilian sales of Dolce Gusto surpassed those in Mexico and the United States, the largest markets in the American continent. Since the Christmas season account for 35% of the brand's sales, the company invested R\$ 20 million (US\$ 11 million) to launch five new products for the holidays, like the Piccolo machine, two new coffee flavors and accessories. Dolce Gusto machines are currently imported from Germany and Asia; the capsules, made with Brazilian and other coffees, are brought from Spain and England. Import duties and taxes make these products more expensive in Brazil than abroad but Nestlé does not have immediate plans to manufacture them in the country.

Sources: Agencia Estado and Revista Cafeicultura

EXHIBITION FEATURES LARGEST COFFEE HARBOR IN LATIN AMERICA

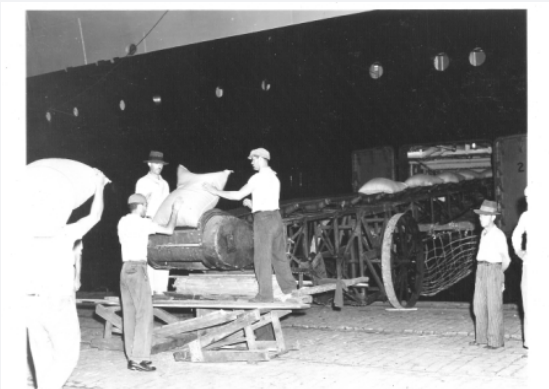
Santos harbor, the largest coffee export port in Brazil, is now the subject of an art exhibition at the Coffee Museum. The collection features photographs and objects from the Coffee Museum itself, the Harbor Museum and the Santos Archive and Memory Foundation (FAMS) that show how the railroad, harbor and coffee "tripod" were important for the development of the municipality of Santos. The city still has several preserved buildings that recall the heyday of coffee.

Source: A Tribuna



Pictures of the Month

COFFEE IN SANTOS, CIRCA 1941



Source: Bruce Mullins - Coffee Bean International

CLIMATE CHANGE AND COFFEE PROCESSING

Some readers have asked whether climate change could force countries and growers in some areas of the world to change their current on-farm processing system – natural, pulped natural (semi-dry / semi washed) or washed – or to rely on a combination of them as done by the coffee producer featured in the Outlook section of Confidential No. 52. This is an interesting question and to answer it is an interesting challenge.

Naïve as the paragraphs below may be, they represent a first attempt or speculation about how climate change may affect coffee processing, on-farm and dry milling. It is better to act now and be prepared than to risk losses in the future.

If global warming does happen and Brazilian plantations do not migrate southward, as indeed they may not, there may be a shortage of naturals as a result of higher temperatures. Why? First, Brazilian plantations are not likely to move southwards because current mitigation strategies involve shading and tolerant varieties which are cheaper and much more practical options than to open new coffee areas in southern areas currently occupied by other crops. Second, it must be recalled that coffee pulping (washing) did not start to change coffee quality and/or to develop acidity but, instead, because when coffee first moved from its natural habitat to warmer areas it was very difficult if not impossible to avoid the unwanted fermentation of the recently harvested cherries. The way then devised to avoid unwanted fermentations was to remove the sugar rich pulp and mucilage from ripe cherries that were the most likely to ferment thus giving birth to the washed process. Third, Brazil today supplies the vast majority of natural coffees and if its plantations stay put in spite of temperature rises, the washed system will have to be used more intensely to avoid fermented cups.

If warming may be a mid-to-long term possibility, climate variability and less reliable rain patterns are a reality now. The change in rainfall intensity and frequency is affecting the occurrence and uniformity of flowering in unpredictable ways, as it happened last crop season. At one end there was uneven and reduced flowering in some areas of Colombia that curtailed production. At the other end there was abnormal uniformity of flowering and maturation in Brazil that caused the washing of coffee to be reduced for lack of enough infrastructure to cope with the harvesting peak. The lessons for coffee processing to be learned from the climate changes above and other changes that lie between these two extremes are that washed mills will have to be designed in a much more flexible way than before in order to cope with both cherries at different stages of maturation and high harvesting peaks that may favor mechanical removal of mucilage over fermentation.

The situations addressed above are real cases that convey the message that the safest thing to do is to be prepared for whatever happens in the future. From a processing standpoint, a sure way to do so is to have on-farm processing facilities that can produce natural, pulped natural (semi dry / semi washed) and washed coffee, as some of our readers have correctly thought. Since it will take many years, even decades, to confirm that the world is really warming up but greater climate variability is already a reality, the coffee producer featured in our past Confidential may not necessarily be ahead of his time as some of us may have thought...

Climate change may also affect coffee drying and processing. Uneven cherry maturation that is not addressed by the flexible wet mills mentioned above will require slow drying, which is mostly achieved at rotary driers, besides more intense gravity and color separation. A dry spell during the cherry development period increases the percentage of peaberries and affects size grading. A drought increases the percentage of light beans and requires more sophisticated gravity separation. Since more elaborate processing does not increase investment and operating costs proportionally to its benefits, it may be wise to be prepared for climate change in new coffee milling projects. If traders routinely hedge against future price variations, why not hedge against climate change?

Brazilian Prices

November 30, 2011

Main Producing Regions / Farm Gate

Arabica Naturals (R\$/ 60 kg bag)	
Cerrado-MG fair average quality T.6	515,00 ↑
Mogiana-SP fair average quality T.6	510,00 ↑
South Minas fair average quality T.6	510,00 ↑
Arabica Pulped Naturals (R\$/ 60 kg bag)	
Cerrado-MG	545,00 ↑
South Minas	540,00 ↑

+ 6.9%

Conilon/ Robusta (R\$/ 60 kg bag)	
Colatina-ES fair average quality	320,00 ↓
BM&F (US\$/ 60 kg)	
Dec 2011	316,00 ↓
Mar 2012	316,20 ↓
Set 2012	300,05 ↓
Real R\$/ Dolar US\$	
November 30	1,80 ↑

Source: www.qualicafex.com.br

PINHALENSE LINE OF COFFEE PROCESSING EQUIPMENT

After they read the Outlook and Machine of the Month sections at last month's Confidential No. 52, some readers asked us to indicate the processing steps required by the three systems – natural, pulped natural (semi-washed/semi-dry) and washed – and to provide a full perspective of the complete line of coffee processing equipment made by Pinhalense.

The tables below, organized according to the processing flow from cherry to finished green coffee, cover the three systems, indicate the processing steps required by each system, and list all coffee machines made by Pinhalense. The numbers after the codes of the machines indicate different capacities for the same type of equipment. Different machine codes in the same line indicate that there are different types of equipment to perform the same processing task. Some machines cover more than one processing step in what is called a combined or compact unit.

The machines in the charts below can be seen – photographs and specifications – at Pinhalense's site www.pinhalense.com.br.

WET MILLING

PROCESSING OPERATION	SYSTEM			EQUIPMENT RECOMMENDED		
	WASHED	SEMI-DRY	NATURAL			
SEPARATION OF FLOATERS	YES	YES	YES	ecoflex 1e ecoflex 1 ecoflex 1/R	LSC-5 / LSC-10 / LSC-20	
SEPARATION OF GREENS	YES	YES	NO		ecoflex 2 - 2/R	—
PULPING	YES	YES	NO		ecoflex 4 - 4/R	DC-DPVE-6S D-2 / D-4 / D-6
DEMUCILAGING	YES	NO OR PARTIAL	NO		ecoflex 8 - 8/R	DMPE-1 / DMPE-3 / DMPE-5 / DFA

DRYING AND HULLING

PROCESSING OPERATION	SYSTEM			EQUIPMENT RECOMMENDED	
	WASHED	SEMI-DRY	NATURAL		
DRYING	YES	YES	YES	SRE-025 / SRE-050 / SRE-075 / SRE-100 / SRE-150	
CLEANING AND DESTONING	YES	YES	YES	PRELI-1 / PRELI-2 / PRELI-3 / CPF-1 / CPF-2 / CPF-3 CPFBNR-1 / CPFBNR-2 / CPFBNR-3	CDVR-2 / C2DPRC CON-4* / CON-6*
HULLING	YES	YES	YES	DBD-05 / DBD-15 DEPOS-2 / DEPOS-4 / DEPOS-6	CON-8* / CON-12* / CONAN
POLISHING	YES	OPTIONAL	NO **	—	

** Except for wet polishing of robusta coffee

*All CONs have a "B" version with a precleaner

EXPORT PROCESSING

PROCESSING OPERATION	SYSTEM			EQUIPMENT RECOMMENDED	
	WASHED	SEMI-DRY	NATURAL		
SIZE GRADING	YES	YES	YES	PI-2 / PI-4 / PII-2 / PII-4 / PFA-1-2 / PFA-1-3 / PFA-2-2 / PFA-2-3 / PFA-4 / PFAII-04 / PFAII-06	
DENSITY SEPARATION	YES	YES	YES	MVF-0 / MVF-1 / MVF-2 / MVF-3	
COLOR SEPARATION	YES	YES	YES	—	
WEIGHING AND PACKING	YES	YES	YES	BALANCA / MCT / BIG-BAG / CPC-A / CPC-B / CPC-M	

The charts do not include the ancillary equipment made by Pinhalense – silos, elevators, conveyors, pollution control systems, etc. – that are required to link and bring together the machines to create complete coffee processing lines and mills.

As part of its “supply package”, Pinhalense provides full engineering support to its clients. This includes the conception of product flows that meet each and every client requirement, detailed drawings of the processing lines, and basic foundations, architecture, electric and hydraulic drawings to be further developed by the respective contractors.

At the time this newsletter was released, Pinhalense was developing its project No. 16,982, meaning that Pinhalense has already designed this same number of coffee mills. This is roughly equivalent to designing one coffee mill per working day since the company was founded 61 years ago!