

CONFIDENTIAL

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

- **CREATING A VIABLE FUTURE FOR ROBUSTA PRODUCERS (PAGE 3)**
- **HOW TO AVOID... AND/OR TO SEPARATE DEFECTS IN ROBUSTA PROCESSING (PAGE 4)**

ROBUSTA CUPPING COURSE HELD IN BRAZIL

The first Brazilian cupping course dedicated solely to Conilon coffee was held in Vitória, capital of Espírito Santo. The course, promoted by the Conilon Brasil lab in partnership with the Coffee Quality Institute (CQI), trained cuppers according to the protocol of fine Robusta cupping. Attendees had the opportunity to cup Robusta samples from several countries like Ecuador, Guatemala, Uganda, Tanzania and Indonesia, in addition to Brazilian Conilons. See further information in the Outlook section.

Sources: Conilon Brasil and P&A

WATER STRESS TO IMPROVE CUP QUALITY

Embrapa Cerrado reached the final stage of its eleven-year research project on the use of water stress at irrigated coffee plantations. The technique consists of stopping irrigation for 72 days, between June 24 and September 4, in order to provoke intense water stress and to cause flowering to be more concentrated. The results show that it is possible to increase the percentage of ripe cherries by more than 50% with one single harvesting round per crop season. Energy and water consumption may be reduced by 35%.

Source: Mapa

LACK OF COFFEE MAY AFFECT SUPPLY TO BRAZILIAN INDUSTRY

The 2011 coffee crop may not be enough to supply the domestic market and exports. Cooperatives estimate that production will not surpass 43 million bags this year – 30 million Arabica and 13 million Robusta – due to both the low-year of the biennial cycle and unfavorable climatic conditions. Coffee exports totaled more than 33 million bags in 2010 and the Brazilian local market demands around 20 million bags of coffee every year.

Source: Coffee Break



HAND-HELD HARVE\$TER\$ IMPROVE WORKER\$' INCOME

The hand-held coffee harvester is an efficient tool that is being increasingly used by farmers and workers. The machine vibrates the branches, causing the coffee cherries to fall down on cloth pieces that cover the ground. The system, much more efficient than manual stripping, improves working conditions and the pickers' income that may reach up to US\$ 2,000.00 per month. The machine costs under US\$ 1,000.00 in Brazil.

Source: Jornal Nacional (prime-time news program at Globo network)

LARGE SCALE PRODUCTION OF RESISTANT CLONAL ARABICA SEEDLINGS

The Ministry of Agriculture's Brazilian Enterprise for Agricultural Research (EMBRAPA) and the ProCafé Foundation launched a brand new project for large scale production of cloned Arabica coffee seedlings that are resistant to leaf miner and leaf rust and have good cup quality and high yields. The project was presented at a TV show called "Dia de Campo na TV" (Field Day on TV).

Source: Embrapa

TECHNOLOGICAL PACKAGES TO INCREASE ROBUSTA YIELDS IN RONDONIA

The government of Rondonia, in Northern Brazil, has launched a new campaign to increase yields and the quality of Conilon coffees produced in the state. More than 150 technicians received special training and will help disseminate new technologies and practices, like pruning, fertilization and irrigation, among coffee growers. The technological packages for this program were specially created to address the specific climate and soil conditions of Rondonia.

Sources: Emater/RO and CaféPoint

HARVESTING MACHINES TESTED IN ROBUSTA

Initial tests with mechanical harvesting of Conilon (Robusta) coffee were conducted in the north and northwest areas of the state of Espirito Santo in August. The harvesting machine used was one originally developed for Arabica. Researchers and technicians followed the tests in order to analyze which changes have to be made to adapt the machine to Conilon trees, which have a different structure from Arabica plants. The northern areas of Espirito Santo have been seriously affected by labor shortages during the coffee harvesting season in recent years.

Source: Portal do Agronegócio



EFFICIENT TECHNIQUES TO PRUNE ROBUSTA REDUCE LABOR

Pruning techniques that remove "old" Conilon branches every four years and retain a constant number of branches under production can cut labor by 30% because they control the growth of new shoots that would otherwise have to be removed by trained hands. Not only the number of new shoots is reduced drastically but they can be removed by unskilled labor.

Source: Portal Dia de Campo

MOVING FROM VOLUME TO WEIGHT IN HARVESTING MEASUREMENTS

A new system to measure coffee after it is harvested was introduced by a grower in the municipality of Cabo Verde, Minas Gerais. Instead of the traditional "60-liter-volume system", the coffee is now weighed in kilos by an electronic scale with a computerized system. The system was approved by coffee pickers and their Union. The only problem faced by the grower was to develop a system to support and move the scales across the coffee plantation.

Source: Folha Rural – Cooxupé

COFFEE RESEARCH SYMPOSIUM TOOK PLACE IN AUGUST

The Coffee Research Consortium's 7th Cafés do Brasil Research Symposium that took place in Araxá, state of Minas Gerais, on August 22 to 25, addressed important research challenges regarding networks and innovation. Subjects like biotechnology, husbandry coffee processing, management, quality and certification were discussed by more than 800 Brazilian coffee researchers.

Source: Embrapa

MCDONALD'S TO GIVE AWAY COFFEE DURING BREAKFAST

McDonald's restaurants in Brazil are offering free cups of their Premium black coffee, coffee with milk, and cappuccinos to clients during breakfast time as part of a promotional campaign. The idea is to increase sales of other products on the morning menu such as sandwiches, croissants and the Brazilian "pão de queijo" (cheese bread).

Sources: Portal da Propaganda and ABIC

UTZ BOARD MEETS IN BRAZIL

Utz Certified chose Brazil for its mid-year board meeting held in Espírito Santo do Pinhal on August 26th and 27th. The members' pre-meeting agenda included visits to several coffee outlets in São Paulo to learn more about the dynamic domestic market, meetings with the roasters' and exporters' associations (ABIC and CeCafé), and also visits to coffee farms in São Paulo and Minas Gerais. The board decided to expand the support system for Brazilian growers of both Arabica and Robusta (Conilon) and to promote the label more intensely in the country's retail market. Brazil is currently the world's largest supplier of Utz certified coffees, with approximately 1 million bags exported in 2010.

Source: P&A Marketing Internacional

Pictures of the Month: see machine of the month...



SIZE GRADER PFA-2-2X



SIZE GRADER PII-4X



GRAVITY SEPARATOR WITH DUST HOOD MVF-2X

CREATING A VIABLE FUTURE FOR ROBUSTA PRODUCERS

During the past three years there has been a growing price disparity between Arabica and Robusta coffees. In November of 2007, the average ICO indicator price for Other Mild Arabica coffees was \$1.31, while the same indicator price for Robusta coffees stood at \$0.92, a differential of \$0.39. In November of 2010, the average ICO indicator price for Other Mild Arabica coffee had risen to \$2.33, a gain of \$1.01, but the same indicator price of Robusta coffees remained at \$0.92, showing no gain at all and increasing the differential to \$1.41, three and a half times higher. Why?

This increase in price differentials between Arabica and Robusta coffees during the past three years strongly suggests that programs aimed at establishing benchmarks for top Arabica qualities have given the Arabica growers a tremendous push toward sustainable economic viability. This has led to improved qualities across the entire Arabica production chain, pulled by the success of the Central American coffee producers. The unintended consequence of the success of this effort had left the Robusta producers "in the lurch," a vulnerable and unsupported position as indicated by the disparity in price levels between Arabica and Robusta coffees. A similar quality improvement program was desperately needed for Robusta producers.

The first Robusta Workshop was held in Kampala in 2009. Over the course of the next two years sixty-three (63) coffee professionals representing eighteen (18) different countries, including Brazil, Colombia, India, Indonesia, and Mexico participated in one or all of the six Robusta Workshops conducted over the 24 month long program, totaling over 3,500 man-hours of effort. Samples from all of the major Robusta producing countries were cupped, graded and evaluated. And seven different testing methodologies for evaluating Robusta cuppers were studied, evaluated, and perfected.

There were a number of significant lessons learned during this process. The first and most important was that Fine Robusta coffees can in fact be differentiated by their country of origin, just like Arabica coffees. The second and most surprising was that Fine Robusta coffees can have appealing cup characteristics that yield cupping scores above 80+ points on a 100 point scale. The third and most appealing was that Fine Robusta coffees have a complexity in their taste profiles that far surpasses Arabica coffees due to their "Bitter/Sweet" and "Salt/Acid" taste attributes. And the fourth and most interesting was that Fine Robusta coffees are more difficult to roast properly due to the need to develop a wider color spread between the whole bean and ground color measurements in order to bring out the full potential of their flavors.

The success of the Fine Robusta Coffee Workshops cannot be overstated. It clearly identified the potential for huge growth in the market place for this category of coffee; growth based on quality not price. The success also clearly identified the roadblock to improved Robusta prices: DEFECTS. All of the coffees cupped during the Workshops had been cleaned and graded so that the defect counts were comparable to those for specialty Arabica grades, and consequently the flavor improvements in the Robusta coffees were striking. As a by-product of these Workshops, the coffee industry now has a set of training materials to use in a systematic approach for quality improvement in the Robusta coffee supply chain.

The first Robusta Workshop in Brazil took place at Conilon Brazil in Vitoria in August 2011. During this workshop some exceptionally good quality Brazilian Robusta coffees were encountered, coffees that scored far higher than their counter parts from around the world. The preliminary data suggests that Brazil may have natural advantages in producing high quality Robusta coffees due to soil types, cooler temperatures, a drier climate, and superior technology. The only problem may be convincing the Brazilian Robusta farmer that he should be producing high value Robusta coffees for the ever expanding world gourmet market rather than continue producing low value Robusta coffees for the internal market. One thing is for certain, growing high value Robusta coffees in Brazil, with their significantly greater yields and lower costs of production, will make this one of the most profitable coffee farm sectors in the world.

** Ted Lingle is the Executive Director of the Coffee Quality Institute, a non-profit foundation whose mission is "to improve the quality of coffee and the lives of the people who produce it."*

Brazilian Prices

August 31, 2011

Main Producing Regions / Farm Gate

| Arabica Naturals (R\$/ 60 kg bag) | | Conilon/ Robusta (R\$/ 60 kg bag) | | |
|---|----------|-----------------------------------|-----------|--------|
| Cerrado-MG fair average quality T.6 | 515,00 ↑ | Colatina-ES fair average quality | 220,00 ↑ | |
| 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) | | BM&F (US\$/ 60 kg) | | |
| Cerrado-MG | 555,00 ↑ | Sep 2011 | 375.10 ↑ | |
| South Minas | 550,00 ↑ | Dec 2011 | 375.00 ↑ | |
| | | Mar 2012 | 368.45 ↑ | |
| | | Real R\$/ Dolar US\$ | | |
| | | | August 31 | 1,59 ↑ |

+ 8.8%

Source: www.qualicafex.com.br

HOW TO AVOID... AND/OR TO SEPARATE DEFECTS IN ROBUSTA PROCESSING

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 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.



Fast drying, usually in vertical machines that often use hot air mixed with combustion fumes (smoke) contributes further to the creation of defects. On the one hand, fast drying and the use of vertical machines that do not distribute heat well in the coffee mass cause the final moisture to be uneven, with overdried and underdried beans. The former – overdried beans – are likely to be broken at hulling while the latter – underdried (“wet”) beans – may ferment in storage. On the other hand, the use of hot air that is not clean and free from smoke transfers unwanted odors to coffee beans.

A simple way to avoid broken and fermented beans is to use 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 heat exchangers avoids the risk of unwanted odors in coffee beans.



**MECHANICAL SIPHON
LSC-5PX**



**ROTARY DRIER
SRE-033X**

If defects cannot be avoided and Robusta coffee with defects arrives at mills, defects must be then separated. The old approach to separate Robusta defects was catadors, today replaced by gravity separators, in addition to color sorters. Pinhalense MVF gravity separators, with a perforated and indented metallic deck and air directioning under the deck, are today the state-of-the-art machines to separate density-related defects from Robusta coffee (and Arabicas too).

What is less understood is the role of size grading in the separation of Robusta defects. Pinhalense size graders have the ability to enhance in different ways the separation of density and color defects from Robusta coffee. Contact the Pinhalense representative nearest to you or P&A directly to learn how our size graders coupled with the unique process flows designed by Pinhalense experts can address all your needs to 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.

Defects apart, another area of interest for Robusta growers is Robusta washed and pulped natural coffees. The wet milling of Robustas with Pinhalense equipment is a sure way to access the markets and the price premiums for high quality coffees that are no longer restricted to Arabicas. To this we will return in another Machine of the Month.