

# CONFIDENTIAL

**14th Anniversary Issue!**

**YOUR BEST SOURCE OF INFORMATION ABOUT THE BRAZILIAN COFFEE BUSINESS.**

**THIS ISSUE:**

- FINAL COFFEE HANDLING FOR EXPORTS: A TECHNICAL UPDATE (PAGE 3)
- GREEN COFFEE BLENDING, WEIGHING AND PACKING EQUIPMENT (PAGE 4)

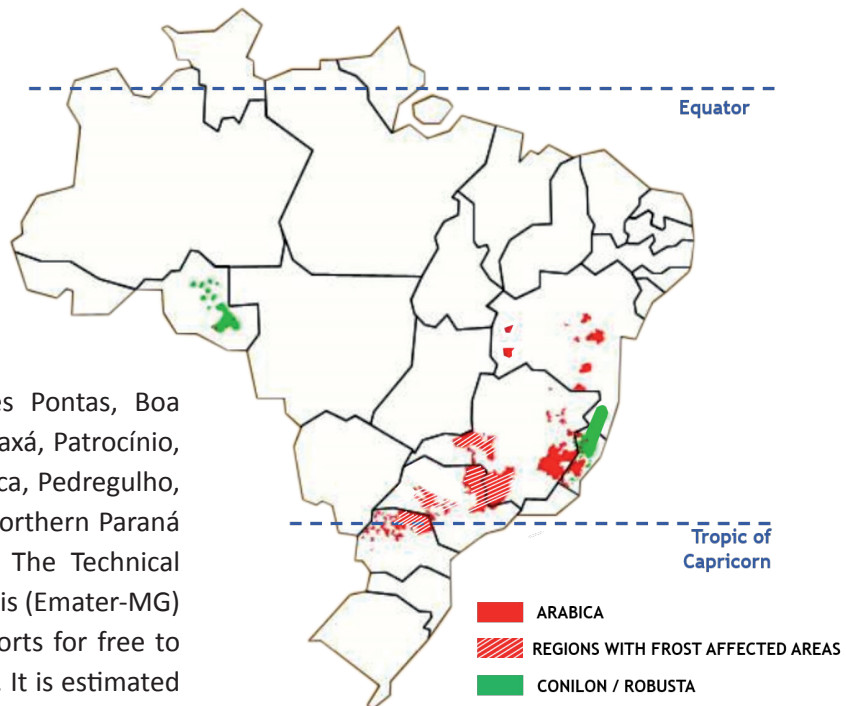
## US\$ 250M CREDIT LINE TO SUPPORT COFFEE GROWERS AFFECTED BY FROSTS

The Brazilian government will release R\$ 1.32 billion from the Brazilian Coffee Fund (Funcafé) for an emergency credit line to be used by coffee growers who suffered losses caused by the frosts that hit Brazil last July. Growers will only be able to access such credit lines upon contracting rural insurance. The Procafé Foundation will carry out an official survey to support the release of funds. According to the National Coffee Growers' Council (CNC), the main focus will be on small growers who account for 78% of the affected area.

Sources: Valor Econômico, Notícias Agrícolas, Reuters and P&A

## FROSTS HIT OVER 300 COFFEE GROWING MUNICIPALITIES IN BRAZIL

Although frost intensity varied from region to region and it is still early to quantify the actual losses, it is estimated that the affected area covers over 300 coffee growing municipalities and 170,000 hectares or 21.2% of the 800,000 hectares of Arabica, according to a survey released by Conab on July 23. The affected regions were: South and Southeast Minas Gerais (Guaxupé, Machado, Lavras, Varginha, Alfenas, Três Pontas, Boa Esperança, Três Corações, etc.); Triângulo Mineiro (Araxá, Patrocínio, Monte Carmelo, Araguari, etc.); São Paulo state (Franca, Pedregulho, Caconde, Espírito Santo do Pinhal, Garça, etc.); and northern Paraná (Rolândia, Jacarezinho, Apucarana, Carlópolis, etc.). The Technical Assistance and Rural Extension Institute of Minas Gerais (Emater-MG) is also engaged in a task force to issue technical reports for free to enable affected growers to seek credit and assistance. It is estimated that this initiative will benefit around 80% of coffee growers in South Minas.



Sources: Canal Rural and Emater-MG

## FROSTS AND THEIR SIDE-EFFECTS CONTRIBUTE TO INCREASE USE OF RURAL INSURANCE

Losses caused by frost registered in coffee, sugarcane and corn growing regions of Brazil will further enhance the perception of the importance of rural insurance. The number of contracts issued increased 41% between January and April 2021 compared to the first four months of 2020, according to the National Federation of General Insurance (FenSeg). Coffee growers are still not very used to insurance and those who contract it usually prioritize hailstorm coverage. The recent low temperatures and their effects can contribute to an increase of coverage in the next crop.

Traditionally, the contracts are aimed at guaranteeing the coffee plant. The current proposal is to indemnify according to production, i.e., the coffee grower is compensated for losses in the insured crop, considering the inputs used and the price of bags lost. In addition, it will be possible to include current and future crops in the same policy.

Source: Globo Rural

## ☉ COFFEE CRYPTOCURRENCY BOOSTED BY FROSTS

Coffee coin, the world's first cryptocurrency backed by coffee stocks, created by the Minasul cooperative, registered gains of more than 35% in its first month of negotiation, with a boost in prices due to the frosts and investor demand. The coffee coin value is adjusted by the variation of coffee prices in the physical market and influenced by the demand of investors in the so-called secondary market. The cryptocurrency enables the negotiation of agricultural inputs with better prices when they have a better exchange ratio than coffee in the physical market and allows for better coffee inventory management.

Source: Reuters



## ☉ PRICES, FAVORABLE MARKET AND NOW FROSTS TO PUSH CONILON PRODUCTION UP

Influenced by the appreciation in the London stock exchange due to difficulties in exports that the main Robusta supplier, Vietnam, is experiencing due to lack of containers, prices of Brazilian Conilons went up and reached the range of R\$ 450 (US\$ 86) to R\$ 510 (US\$ 98) per bag. This favorable price and lower production costs increase growers' interest in cultivating Conilon. The Brazilian R&G industry is encouraged to increase the share of Conilon in its blends due to a more competitive price, greater availability, improving quality and, more recently, the frost.

Sources: Globo Rural and P&A

## ☉ DOMESTIC CONSUMPTION OF BRAZILIAN INSTANT COFFEE INCREASES

The consumption of instant coffee in Brazil has been growing in recent years and the first half of 2021 is no exception. Consumption grew 2.2% between January and June 2021 compared to the same period in 2020 according to the Brazilian Instant Coffee Industry Association (ABICS). The reduction of 45% in the consumption of imported instant coffee indicates that this increase in the domestic market is due to more consumption of the Brazilian product. ABICS is currently intensifying work to complete a White Paper with an innovative sensory evaluation methodology that proposes quality standards for instant coffee.

Source: Canal Rural

## Brazilian Prices

Main Producing Regions / Farm Gate

July 30, 2021

Arabica Naturals (R\$/ 60 kg bag)		Conilon / Robusta (R\$/ 60 kg bag)	
Cerrado MG	1005,00 ↑	Colatina-ES fair average price	632,00 ↑
Mogiana	1000,00 ↑		
South Minas	1000,00 ↑		
Arabica Pulped Naturals (R\$/ 60 kg bag)		BM&F (US\$/60kg Arabica bag)	
Cerrado MG	1055,00 ↑	Sep 2021	217,90 ↑
South Minas	1050,00 ↑	Dec 2021	224,95 ↑
		Mar 2022	227,62 ↑
		Real R\$ / Dolar US\$	
		Jul 30, 2021	5,21 ↓

+ 5.5%

Source:  
www.qualicafex.com.br

## FINAL COFFEE HANDLING FOR EXPORTS: A TECHNICAL UPDATE

Almost all coffee exported today is shipped in containers but in different ways: bags, big bags or bulk. Coffee is weighed in different types of scales depending on how it is placed into the containers. Finally, most coffee is either blended or bulked before weighing. Let's review how these operations have changed and evolved over the years.

Blending is the mixing of different coffee sizes, cup qualities and/or origins to obtain a homogeneous lot with the characteristics and sizes required. Bulking is the mixing of coffees of the same quality produced by different growers or coming from different regions to obtain a homogeneous lot with the size required by the client. Blending or bulking are critical operations to deliver coffee with the characteristics required in the contracts with clients. These operations may be a major source of claims if not properly done.

Blending and bulking are carried out in the same way. Coffee must be brought together in given proportions and mixed to obtain homogeneous lots. This is usually done with the help of a round silo fed by a special high capacity elevator that receives coffee in pre-determined proportions and ensures uniform mixing without damaging it. High capacity processing lines use a different technique. Different coffees are fed into a battery of silos that unload onto a belt conveyor through an adjustable volume feeding system, e.g., variable speed devices, installed at the outlet of each silo. The rate of feeding from individual silos is adjusted according to the proportions required in the final lot.

The traditional equipment to weigh coffee to be placed into jute/hessian or other types of bags at the end of processing lines is a mechanical platform scale. This changed as labor became scarce, coffee lots increased in size and other shipment alternatives developed, specially big-bags and loading of containers in bulk. Automatic mechanical batch scales were used first and are still used but electronic versions are preferred now. Big-bags can be fed from automatic scales in continuous-flow mode or they may be weighed in specific big-bag floor-level platform scales with load cells. Finally, coffee to be stuffed in bulk into 20' containers is weighed in automatic scales in continuous-flow mode or in continuous-flow scales themselves.

Automatic batch scales have a weighing bucket under an overhead silo. In the mechanical version, the bucket is connected by a lever to a counterweight with the desired weight. The main flow into the scale is interrupted shortly before this weight is reached and a much smaller restricted flow continues for a very short time estimated to reach the target weight. Electronic batch and continuous-flow scales use load cells to weigh coffee and interrupt the flow when the required weight is reached. Electronic scales are much easier to connect to digital systems that may control the full processing operation or parts of it.

Big-bags with capacities of 600 to 1,200kg of coffee are usually weighed at floor-level platforms equipped with load cells. The empty big-bag placed on the platform is fed up to the point the desired weight is reached, as indicated by the load cell. Alternatively, coffee may be fed into a big-bag from a mechanical or electronic batch scale working as a flow scale.

Bulk container loaders receive pre-weighed coffee from overhead silos or elevators and use a high capacity fan to blow coffee beans into a 20' container with a liner. Mechanical or electronic batch scales used as flow scales or flow-scales themselves in the case of large capacity operations are used to allow a pre-set weight of coffee equivalent to a given number of bags to be fed in bulk into containers. The bulk loaders may have a dust extraction system or leave the dust inside the container.

The majority of coffee is exported in containers in bulk today. Containers with bags inside come next. Big-bags are the least used export option although they are much used in raw material, in-process and pre-shipment storage.

## GREEN COFFEE BLENDING, WEIGHING AND PACKING EQUIPMENT

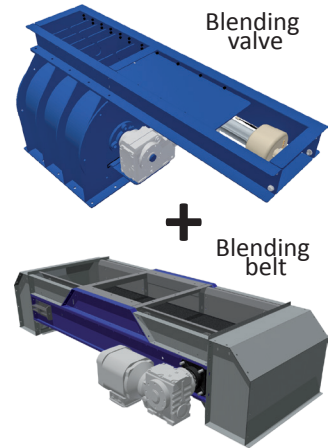
To blend, weigh and pack coffee efficiently is important to both deliver the qualities that clients require and protect margins. Bearing this in mind, Pinhalense offers machines that provide customized and automated solutions to blend, weigh and pack green coffee with high performance and precision:

- VEDP valve-and-belt blending system,
- SMARTSAC electronic bag scale,
- SMARTBAG electronic big-bag scale,
- SMART-FLUX flow scale, and
- CPC and ICC bulk container loaders



SMARTSAC

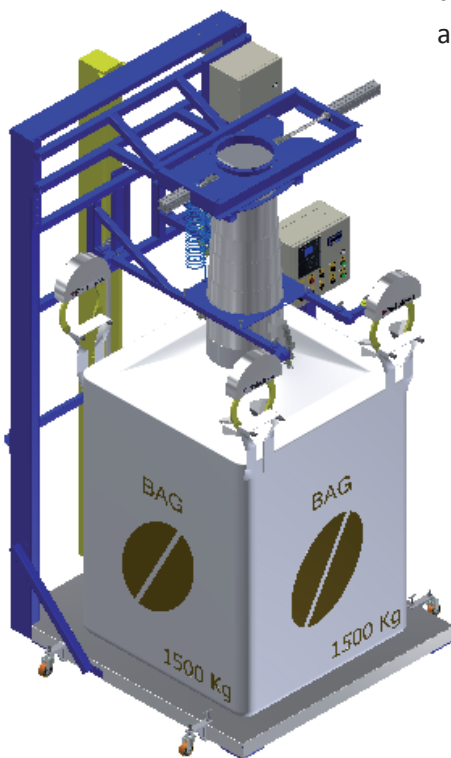
The **VEDP valve-and-belt blending** system prepares any recipe or blend desired with high precision and replicates them with 100% fidelity. It is easy to operate with the help of and interfaces for touch screens, has short set up time and provides a high pattern of blending homogeneity.



VEDP

The **SMARTSAC electronic bag scale** has higher precision and efficiency than the competition and the highest performance in the market. It can be programmed for bags from 25 to 60kg, has interfaces for printers and automation, and is equipped with a CAP pneumatic sampler.

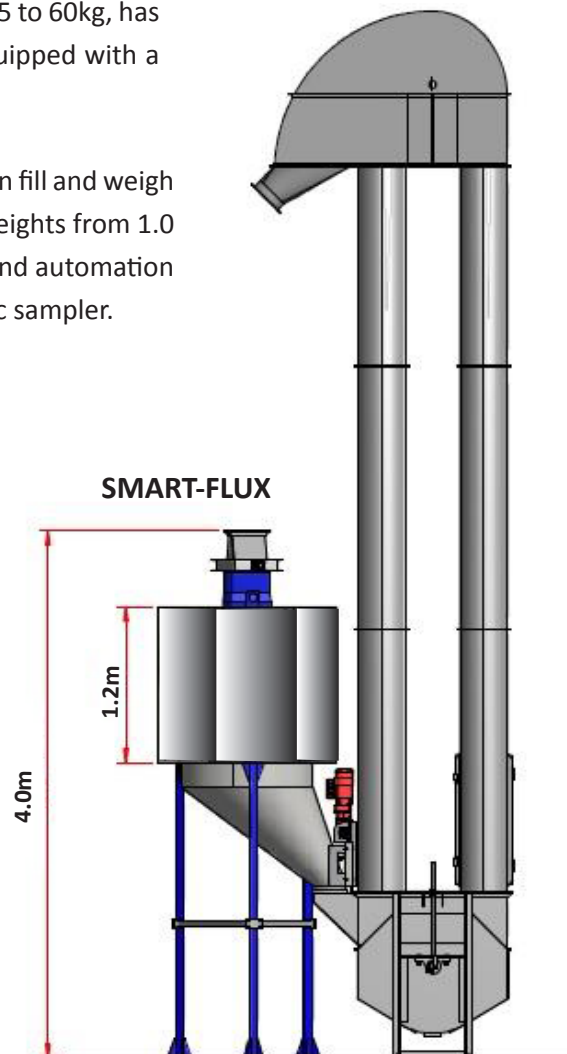
The **SMARTBAG electronic big-bag scale** can fill and weigh big-bags with sides from 1.0 to 1.5m and heights from 1.0 to 2.0m. It also has interfaces for printers and automation and can be equipped with a CAP pneumatic sampler.



SMARTBAG

The **SMART-FLUX flow scale** is possibly the most competitive, space saving and efficient flow scale offered in the market today. Its compact size and reduced height combined with direct connection to the feet of elevators allow its insertion into existing installations with minimum changes.

The **CPC and ICC bulk container loaders** are described in the previous Machine of the Month, that can be accessed here: <https://bit.ly/3AEIh6P>.



SMART-FLUX