





 **Locality:** Santana de Caldas (Caldas-MG)
 **Data:** 14/03/2024
 **Coffee farmer:** ABNER JOSÉ CELSO DE CARVALHO

BAIXÃO DA SERRA PETITE ESTATE

VISIT REPORT

Caldas is a Brazilian municipality located in the interior of the state of Minas Gerais, situated in the Immediate Geographic Region of Poços de Caldas, in the Southern region of Minas. Its total area is 712 km², with an average altitude of 1270 meters. The terrain is predominantly hilly to mountainous, with a mild climate practically throughout the year. Its coffee plantation, spanning 1311 hectares, has significantly evolved over the past 8 years and is mainly known for family-owned producers and the production of specialty coffees.

Mr. Abner's property is located near the locality of Santana de Caldas, covering an area of 4 hectares, with 3 hectares dedicated to coffee production. Abner, who has been working in coffee farming since 2011, sold his house in the city and acquired the estate. While there were already some coffee plants, he planted the majority of the crop himself.




Coffee farmers receive assistance from various professionals. Technical support is provided by Acácio from Cooxupé, management guidance is offered through the AteG project by SENAR MG, sustainability initiatives are supported by Livia from Cooxupé's Gerações Project, and quality and post-harvest management are overseen by Felipe from SMC. The close relationship with Cooxupé is significant, as they reportedly sell 100% of their production to the cooperative, either through the common platform or through SMC (dedicated exclusively to specialty coffees).

In terms of technical aspects, the plantations exhibit excellent health and adequate nutrition. The producer conducts annual foliar and soil analyses, controls weeds entirely through manual mowing, and no longer uses herbicides. Among modern soil conservation practices, the use of a seed mix of non-commercial plants beneficial for nutrient recycling, soil protection, increased green mass, and attraction and protection of natural enemies of pests is recommended between rows.

The producer has been reducing the use of agricultural pesticides on the property, opting for rational use. However, they have not yet adopted biological products, which could contribute to a more sustainable management approach. Biological insecticides are recommended for leaf use, and biological nematicides and fungicides for soil use. The use of biological products in agriculture contributes to the balance of agricultural systems and facilitates, for example, the preservation of insects of interest such as natural enemies of pests and bees - currently threatened in various regions of the planet.

Organic fertilizers include the return of coffee husks to the plantation, and they are also using organomineral fertilizers, which enhance agricultural sustainability by reducing chemical fertilizer usage by up to 30%. Additionally, they contribute to carbon replenishment in the soil, with a cumulative effect



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over the years as the farmer adds carbon to the soil, improving fertility levels and the presence of beneficial microorganisms.

Since implementation and now in the renewal of their plantations, they have opted for more productive and disease-resistant cultivars, optimizing land and resource use. This reduces the need for chemical inputs, increasing profitability on the same area and minimizing the necessity for opening new areas, which can instead be directed towards fauna, flora, water, and soil conservation. They employ zero-crop management and corrective pruning to maximize the crop's potential and optimize labor during harvesting.

There are no permanently protected areas (PPAs) designated due to the property being below 4 fiscal modules, which is the minimum area required for conservation. However, the family is concerned with conserving hilltops and water sources.

In conclusion, among the various attributes required in the sustainability report, we can consider many as satisfactory, with a large part being addressed. However, constant attention and adaptation to the changing technical, environmental, and social aspects of agriculture in our country are always necessary. Below are some images that highlight our visit and the attributes addressed.



Expanded view of the concrete patio for drying coffee



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Totem with multiple informational signs

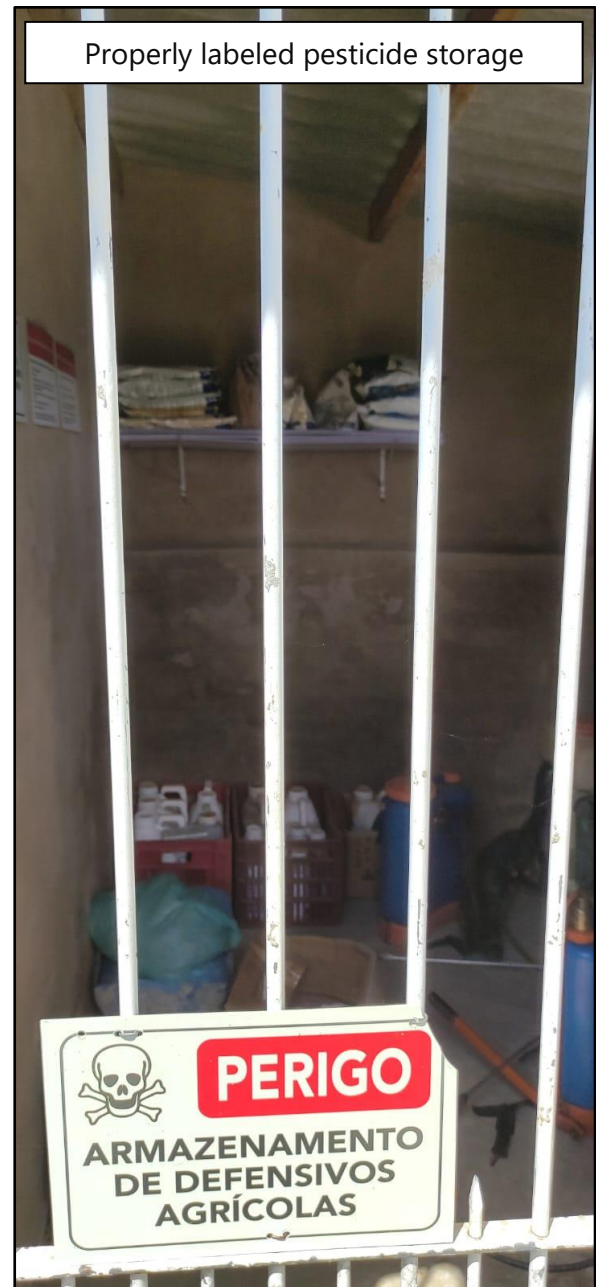


Properly labeled pesticide storage



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Detail of the rain gauge



Coffee washer/seperator.



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Informational sign indicating the coffee cultivar and number of



A soil detail after the weed clearing



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Crop view demonstrating being planted on contour.



Nutritional, productive, and sanitary aspects of the crop.



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Presence of trees near the crop





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Vehicle adapted for use in transporting coffee from the farm to the drying

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