



Locality: Santana de Caldas (Caldas-MG)

Data: 12/03/2024

Coffee farmers: Josiel Betti e Jefferson Betti

MARANHÃO PETITE ESTATE

VISIT REPORT

Caldas is a Brazilian municipality in the interior of the state of Minas Gerais, located in the Immediate Geographic Region of Poços de Caldas, in the southern part of Minas. It covers a total area of 712 km², with an average altitude of 1270 meters. The terrain is predominantly undulating to mountainous, with a mild climate practically all year round. Its coffee plantation, spanning 1311 hectares, has evolved considerably in the last 8 years and stands out mainly for its family culture producers and the production of specialty coffees.

The property of Mr. Josiel and Mr. Jefferson, located in the locality of Santana de Caldas, has about 10 hectares in production, with an average annual production of 400 processed bags, about 40 bags per hectare, which we can consider excellent productivity, well above the municipality's average of 27 bags/ha. The brothers are responsible for practically all operations in the plantation, from cultural practices to harvesting. During the harvest period, they rely on the support of their



wives, Cleicimara, Josiel's wife, and Jéssica, Jefferson's wife, both of whom assist and manage post-harvest operations carried out on the property's concrete patio, as well as other machinery present there, such as the washer/separators and dryer.

The coffee growers receive technical assistance from several professionals, with Acácio from Cooxupé providing technical support, Livia from the Generations Project of Cooxupé providing sustainability assistance, and Felipe from SMC providing quality and post-harvest support. The proximity and presence of Cooxupé on the property are significant, to the extent that they mentioned that they market 100% of their production with the cooperative, either through the common platform or through SMC (the branch dedicated exclusively to specialty coffees).

In technical aspects, the plantations exhibit good health and adequate nutrition. The producer regularly conducts leaf and soil analysis on the plantation. Weed control is carried out using chemical herbicides and self-shading, due to the plantations having denser spacing. As part of modern soil conservation practices between rows, a mix of seeds from non-commercial plants is



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used, which are beneficial for nutrient recycling, soil protection, increased green mass, and attraction and protection of natural enemies of pests.

Other recommendations that would contribute to a more sustainable management include the inclusion of biological products, such as biological insecticides on leaves, and biological nematicides and fungicides in the soil. The use of biological products in agriculture contributes to the balance of agricultural systems and promotes, for example, the preservation of insects of interest such as natural enemies of pests and bees – currently threatened in various regions of the planet.

Another point is to start replacing chemical fertilizers with organomineral fertilizers. The use of organomineral fertilizers provides greater sustainability to agricultural production by reducing the use of chemical fertilizers by up to 30%. Additionally, they contribute to carbon replenishment in the soil, with cumulative effects over the years, improving fertility levels and the presence of beneficial microorganisms.

The producer also reported that as they renew their plantations, they opt for more productive and disease-resistant cultivars, optimizing the use of area and resources, reducing the use of chemical inputs, and bringing greater profitability to the same area, minimizing the need to open new areas that could be directed towards the conservation of fauna, flora, water, and soil.

There is no legally demarcated permanent preservation area (APPs) due to the property having an area below 4 fiscal modules, which is the minimum area required for conservation, and moreover, these are consolidated areas, acquired and exploited many years ago, long before the change in Brazilian legislation. However, there is concern for the conservation of hilltops and springs, although there is still room for improvement, such as planting more trees and fencing off these areas.

In conclusion, among the various attributes required in the sustainability report, we can consider it satisfactory, with a large part being met, always requiring attention and adaptation to the constant changes in the technical, environmental, and social aspects of agriculture in our country.

Below are some images that illustrate our visit and the attributes addressed.



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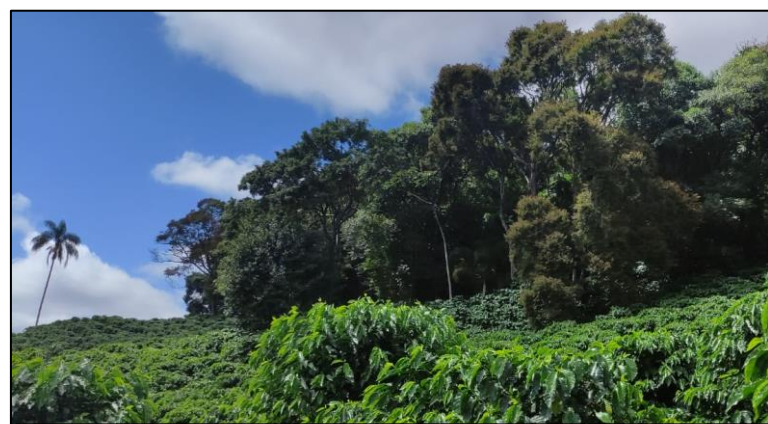
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No hunting allowed on the property



Visão geral da lavoura com plantio em curva de nível



Árvores presentes no topo do morro.

Caixa seca (cacimba) responsável por coletar água da chuva evitando erosão.





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Um dos terreiros acimentado presente na propriedade.



Terreiro suspenso, utilizado para secagem de grãos de café



Propriedade do sr. Josiel, onde reside com a esposa Cleicimara.



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Máquina de beneficiar café



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Lavador-separador de café



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