

‘Bola de Oro’ a promising grafting method that creates a new Arabica tree architecture

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Rationale:

There are several uses for grafting in fruit tree crop, including plant propagation. In addition to propagation, grafting can avoid a juvenile state, as an adult scion grafted onto a juvenile rootstock will maintain its adult state and ability to bear fruit.

Here we present a new grafting technique that deeply modifies the architecture of the plant, its precocity and its yield. we call it ‘Bola de oro’ for the shape in half-sphere that it confers to the plant.

Methods:

the grafting method ‘Bola de oro’ consists in grafting early a plagiotropic axis on a rootstock from seedling.

Results:

The architecture of the plant is deeply modified. The general form which is established from the 3rd year resembles a half-sphere of a diameter of 2 m and a height ranging between 1 m to 1.4 m. The precocity is remarkable since we observed a first bloom from the first year. The yield at 2-3-4 yrs seems superior to normal plants.

Conclusions & Perspectives:

We believe that Bola de Oro is a promising innovation that could increase the profitability of coffee growing. We now propose to study it in several edapho-climatic contexts.



Bola de oro grafting method. Right: 8 months after grafting; Left: 3 yrs old plant (flowering and producing).