



POLITECNICO
DI TORINO

Honors thesis

COURSE OF MASTER DEGREE IN ECODESIGN

Abstract

LAS MARGARITAS

Systemic approach to agricultural activities

Tutor

Luigi Bistagnino

by

Sara Gómez Gómez

February 2015

Las Margaritas is a “finca”, 21 hectares of land used for agriculture, passed from one generation to another. It is located in the municipality La Tebaida, near the capital city of the Department, Armenia. This region is well known for its soil. It is rich in minerals, perfect for agriculture.

Of the 21 hectares that comprise the Finca Las Margaritas, 19 are cultivable and are completely sown in five different species of avocado. Las Margaritas is cultivated in a traditional way, however, they have been evolving in the implementation of new technologies of sowing, harvesting, irrigation, among others. From the traditional agriculture remains the respect for the species and the utilization of organic matter as a part of their fertilizers. Therefore, they are not yet 100% industrialized but neither 100% traditional, although some of that knowledge remains and is applied.

The aim of this project is to transform the linear method in which the finca cultivated and replace it with a systemic model. After the analysis of the territory, the agricultural techniques and the quality of the products to be planted in the territory, a systemic solution has been created. The biggest development made in the production system of the finca las Margaritas is how it passed to be a monocultural model into an intercropping model.

The value of the system approach is found in the interaction of species in the territory. The first step towards giving the land the respect it deserves is understanding the properties of each one of the species and how its interaction between them can help them grow bigger and healthier, and how these eliminate the need for chemical products such as fertilizers and pesticides.

Even though is important to clarify that the main objective of the project is not to increase profits drastically and that in reality the great benefits of applying the systemic method to agricultural practices can not be measured with economic measures but with a qualitative analysis of the territory and the product per se. However, by increasing the quality of all the elements that are part of the process, it is possible to generate an increase in the profits of the finca.

Finally, there can be seen that by listening to nature and understanding how does it work, what can it give to us and to everything that surrounds it, and heeding it, benefits can be countless.

For further information please contact:
Sara Gómez Gómez
gomezsaragomez@gmail.com