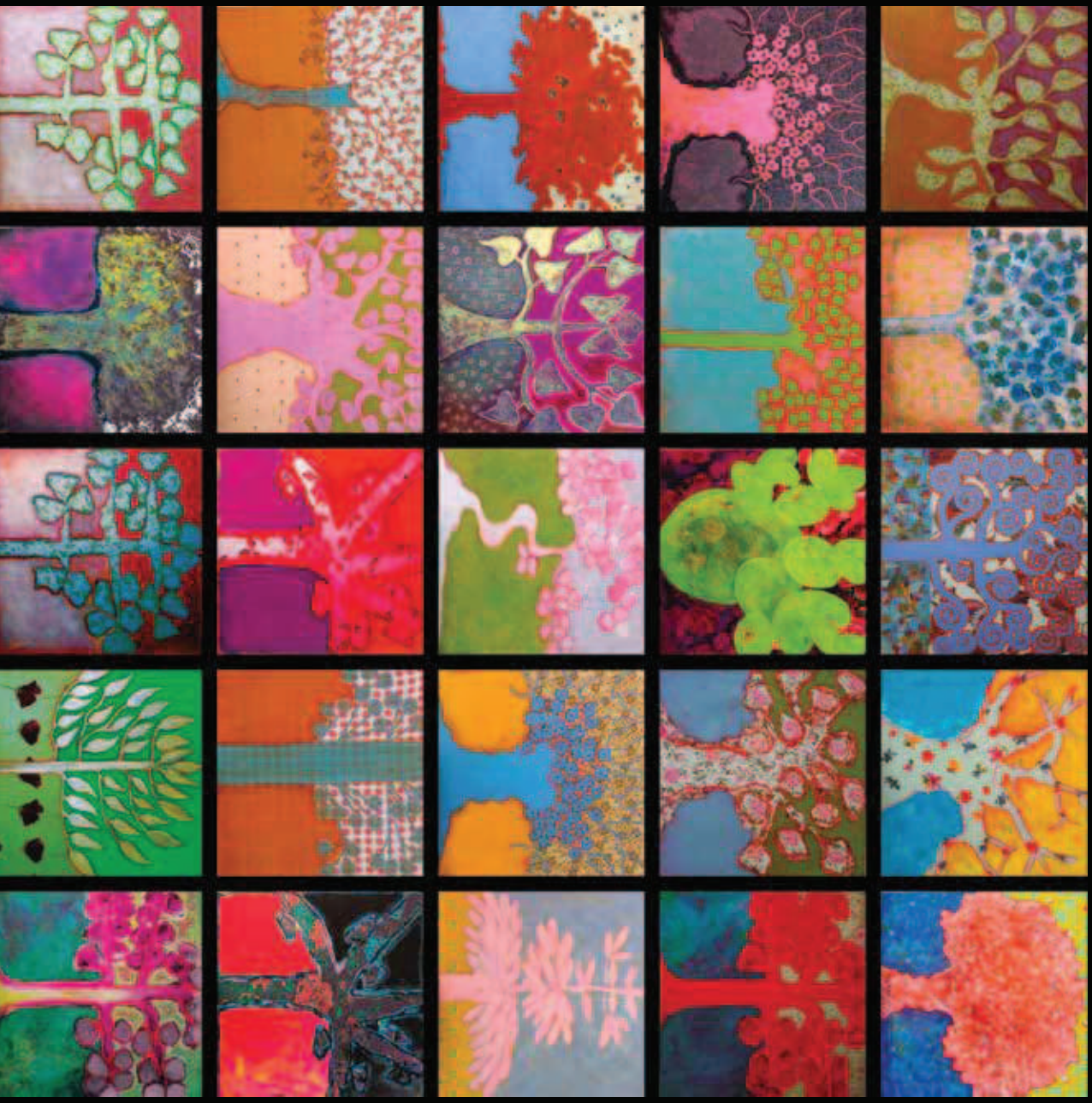




Book of Abstracts

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Landscape approaches to tackle climate change, and achieve sustainable development and food security

Aerial view of the landscape around Halimun Salak National Park, West Java, Indonesia. Photo by Kate Evans/CIFOR

What is FTA?

The CGIAR Research Program on Forests, Trees and Agroforestry (FTA) is the world's largest research for development program to enhance the role of forests, trees and agroforestry in sustainable development and food security and to address climate change. CIFOR leads FTA in partnership with Bioversity International, CATIE, CIRAD, INBAR, Tropenbos International and the World Agroforestry Centre. FTA's research contributes to 14 of the SDGs.

What do we work on?

- Tree genetic resources
- Forests, trees and agroforestry for smallholder livelihoods
- Sustainable value chains and investments
- Landscape dynamics, productivity and resilience
- Climate change adaptation and mitigation
- Gender, evaluation and impact assessment



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Soil Carbon fractioning in Chestnut tree forests

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Soil Carbon fractioning in Chestnut tree forests

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Nowadays, the lack of profitability of some chestnut stands linked to the high amount of man power needed to harvest the chestnut fruits in high step mountain areas. A good option to increase profitability of these areas is to rare animals to use fruit as feeds. Most of the mountain chestnut stands are associated to less favored areas where autochthonous breeds are able to survive and even procreate due to the adaptation they have to these difficult environments. An INIA National Project was funded by the Spanish Ministry of Agriculture to evaluate two stocking rates in four different scenarios located in the Galicia, Asturias and Vasque Country. An initial sampling was done to evaluate the soil capacity of storing Carbon in the different conditions. Carbon fractioning was conducted in order to evaluate the persistence of carbon in the soil linked to macro and micro (lime plus silt) fractions. A good relationship between the C stored in soil and the C in each fraction was highly correlated with the exception to that linked to microagregates, which can indicate the difficulty of C to be stored in long term stock particles (Figure 1).

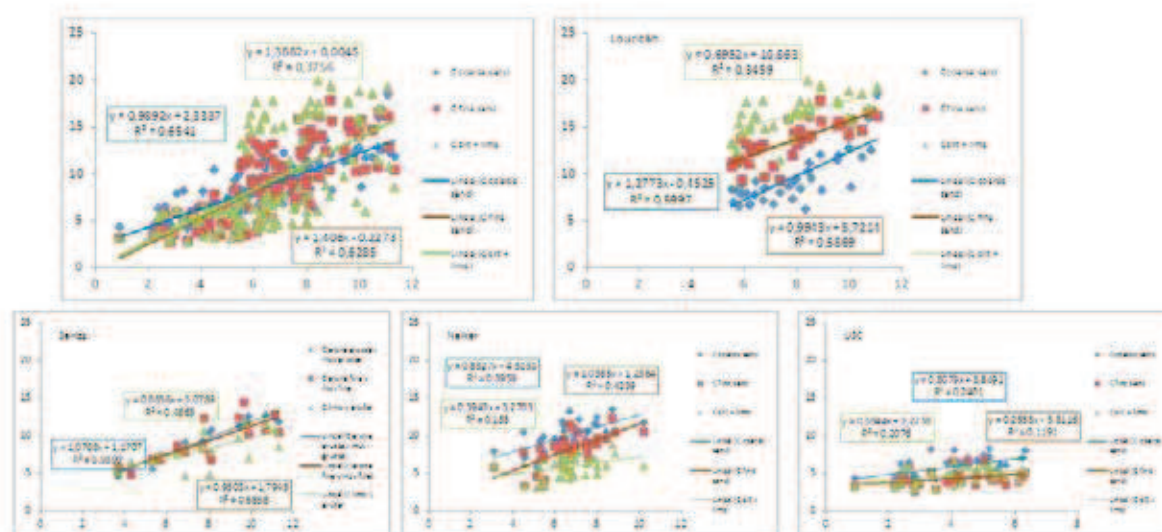


Figure 1. Total and Fraction C relationship in four chestnut stands of North Spain.

Keywords: C fractioning, macroagregates, microagregates.