Abstract – Research and application of scientific and technical measures to develop appropriate a...

The research specialized on determining a composition of legume trees with ability to grow well and fix nitrogen on two main soil types in bare hill areas as follow:

On Ferralitte soil in bare hill areas make up 87% fallow lands.
- On strongly degraded soil (poor soil), slope $\leq 10^\circ$ : inter – planting Acacia auriculiformis and two peanut crops (12 months) in first stage when forests have not canopy closed.
- On average degraded soil (bad soil), slope $10^\circ$ – $20^\circ$.
- Inter – planting Acacia auriculiformis and pineapple Victoria in 2 first years.
- Inter – planting Acacia auriculiformis and stylo herb in 2 first years.
- Inter – planting Acacia auriculiformis and cốt khí tree bands (trees used as remedies against gout) for green manure to revigorate degraded tea terraced – fields and to extensive cultivates new tea terraced – field.

On less degraded soil
- Inter – planting bamboo and peanut in 2 first years.
- Inter – planting Acacia mangium and peanut in 2 first years.

On strongly degraded ancient alluvial siallitte – ferralitte soil.
- Intensive inter – planting Eucalyptus camaldulensis and peanut in first months when eucalyptus forests have not closed canopy.

Thus planting processes results in:
- Promoting growth of forest to 1,5 – 2 times.
- Against soil fertility since first years.
- Increasing income from food, food stuff, fodder and green manure.
- Decreasing costs in earthwork and tending and maintenance of plantations.