

Arachis pintoï

A living vegetal covering orchards

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In orchards, especially on sloping land, growing weed pressure and erosion are two major problems. *Arachis pintoï*, a legume (thus nitrogen fixing) with a strong root system in competition with weeds, but not climbing on trees proved to be particularly well adapted to conditions found in mountainous areas of northern Vietnam. It is excellent forage, rich in proteins, and can be used as cattle feed.

Arachis pintoï establishment

- ▶ Traditional shallow hoeing or herbicide spraying to kill the natural vegetation (A mix of Glyphosate and 2,4-D. Quantity to be adjusted to the most aggressive species)
- ▶ Weeds are not burned nor removed, but kept in the field for mulching



Young Arachis pintoï on mulch



Dipping cuttings in a mixture of clay, water and cattle dung



Arachis pintoï : Re-growth one month after planting the cuttings

- ▶ *Arachis pintoï* can be established from seeds (expensive), or simply by root cuttings with a 40 cm x 40 cm spacing.
- ▶ Cuttings can be dipped in a mixture of 1/3 clay, 1/3 cattle dung, and 1/3 water before planting, to ease re-growth.
- ▶ Two or three cuttings are planted in each hole
- ▶ Two eyes from the cuttings are pushed into the ground after opening the soil with a hoe.
- ▶ One or two eyes are kept above the soil surface.

Advantages

- ▶ Soil protected against erosion.
- ▶ Improvement of soil structure.
- ▶ Increased biological activity (earth worms, etc.).
- ▶ Nitrogen fixation .
- ▶ Weed control.
- ▶ Production of high quality forage.
- ▶ Withstands heavy cutting or grazing.
- ▶ Creeping (no competition with trees).
- ▶ Great recycling of Ca, Mg and some oligoelements like Zn, Mn and B



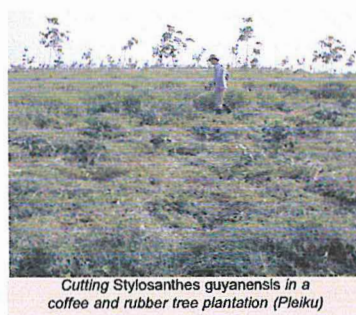
Arachis pintoï cover in a young orchard (1 year)



Arachis pintoï cover in an orchard on sloping land

Other possible legume covers for plantations

Other legumes, especially *Stylosanthes guyanensis*, can be used as cover crops in tree plantations. It can be controlled by simple trimming.



Cutting *Stylosanthes guyanensis* in a coffee and rubber tree plantation (Pleiku)

