Early Adoption of *Arachis pintoi* as a Forage Legume in Huetar Norte, Costa Rica

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Abstract

The legume *Arachis pintoi* has a number of characteristics which can contribute to the development of sustainable and productive pastures in the tropics. For this reason it was introduced to Costa Rica in 1987. The objective of this study was to raise information about the adoption process of *A. pintoi* as a forage legume in Huetar Norte, in the north of Costa Rica.

To raise the data 115 randomly selected livestock holders out of a frame population of 7.131 as well as an additional 34 farmers known to have planted *A. pintoi*, were interviewed.

The descriptive analysis revealed that *A. pintoi* was well known among farmers in the sample (90.4%). However, the adoption rate was low (3.48% of farmers or 0.0006% of pasture land). Adopters and non-adopters faced the same problems in forage and cattle production such as excess of rainfall, low pasture quality and weeds. The introduction of more suitable forage plants was seen to be the most important tool to increase forage and cattle production. Adopters and non-adopters showed clear differences in socio-economical factors (e.g. age, educational level). An econometric analysis revealed that some of these factors had a significant influence on adoption (e.g. information acquirement). The majority of adopters saw the legume’s advantage in its good quality as a feed and thus in increased cattle production. Adopters found the legume’s establishment to be difficult, slow and expensive, and its maintenance complicated when mixed with taller grasses. Nevertheless, on nearly all farms where farmers were interviewed the maintenance of a pasture with *A. pintoi* was less cost intensive than that of other improved pastures.

There is a need for suitable forage plants in the region. Farmers are well aware of the advantages of *A. pintoi* and acknowledge its advantages. However, difficulties in establishment and maintenance as well as lacking acquirement of information hinder major adoption.

In order to support the adoption process it is recommended to more actively provide suitable information, especially about less costly and success ensuring establishment as well as maintenance techniques.

Keywords: Adoption, *Arachis pintoi*, Costa Rica, forage, Huetar Norte, legume, pasture, pasture degradation, soil conservation