Caribbean Agricultural Research and Development Institute

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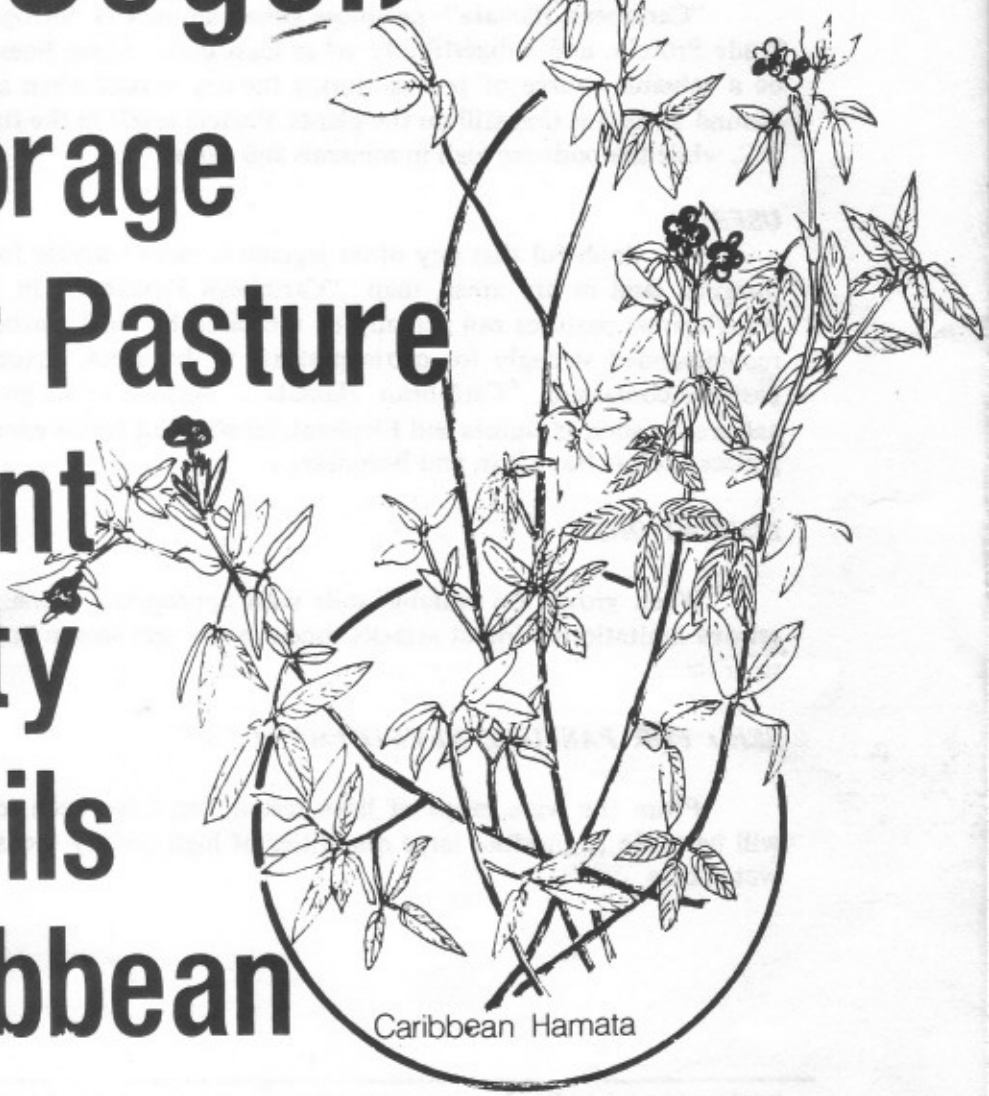
Factsheet

Caribbean Hamata (Mother Segel)

The Key Forage Legume for Pasture Development on Droughty Shallow Soils in the Caribbean



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This region is the centre of origin for this highly persistent forage legume. no other legume can match "Caribbean Hamata" *(Stylosanthes hamata)* for production combined with persistence on shallow droughty, calcareous *(marl, limestone)* soils. Being able to cope with such conditions is a remarkable example of adaption. Most other legumes turn yellow *(chlorotic)* with deficiences of Iron, Boron, and Zinc.

CHARACTERISTICS:

(a) Growth Form: A deep-rooted, non-climbing forage legume with small leaves and attractive yellow flowers. It often forms road-side strip communities in drier parts of the Caribbean. Seed production is profuse *(pods are small and characteristically hooked)* and new seedlings are constantly being produced to replace older plants which seldom last more than 9 months.

(b) Agronomic: Few tropical forage legumes can match the persistence of "Caribbean Hamata" when hard-grazed. In fact, under lenient management *(e.g. infrequent grazing)*, especially under favourable growth conditions, it can be swamped by associated grasses which grow up and shade it. It is less well adapted to heavy clay soils than "Winer" *(Teramnus labialis)*, but is superior on shallow, droughty calcareous soils such as those in the Northern area of Antigua, and on drought volcanic soils. In trials conducted by the Forage Legume Project over the past 3 1/2 years, more than 100 different lines have been evaluated for forage production under cutting and grazing, and for disease, insect and drought tolerance. These lines have been collected in Antigua, Barbuda, St. Lucia, Anguilla, Montserrat, Nevis, St. Kitts, Guadeloupe, Curacao and Cuba.Others under test, originated in South America and Florida.

"Caribbean Hamata" produces large amounts of Nitrogen and high quality forage - 12 - 18% Crude Protein, and a digestibility of at least 60%. Some lines produce seed profusely. This seed can be a valuable source of protein during the dry season when animals can lick up shed seed from the ground as well as that still on the plants. Protein levels in the tiny, highly digestible seeds are as high as 48% while the pods are high in minerals and fibre.

USES:

It is doubtful that any other legume is more suitable for intensive sheep and goat pastures on marginal land in dry areas, than "Caribbean Hamata". In fact, the proportion of this legume in grass/legume pastures can actually be increased by hard grazing with sheep and goats. It can also be recommended strongly for cattle pastures in dry areas. Excellent hay and silage can be made from pastures containing "Caribbean Hamata". Because of its growth habit, it should not be grown with tall grasses such as Guinea and Elephant. However, it forms excellent combinations with lower growing grasses such as Hay, Star, and Bermuda.

LIMITATIONS:

When grown on suitable soils with appropriate management, "Caribbean Hamata" has few serious limitations. Insect attacks occur every wet season but do not prevent plants from continuing to grow.

SEED FOR PASTURE DEVELOPMENT:

From the wide range of lines tested, ten have been selected for seed multiplication. Efforts will be made to produce large quantities of high quality seeds which will be available after the 1985 wet season.

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