

* NOTES ON *STYLOSANTHES GRACILIS* (BRAZILIAN LUCERNE) AS A GROUND COVER FOR TEA

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Stylosanthes gracilis is a perennial legume, rich in protein, hitherto grown as a valuable fodder crop. It is quite prostrate and this combined with its spreading habit makes it an ideal ground cover for tea. It is a magnificent soil and humus builder and greatly increases the earthworm population of the soil. It has a deep taproot but the runners only develop hairlike feeding roots, profusely nodulated, which enables the cover to be rolled back like a blanket. It will not wind into the tea and runners which grow up through the bushes can be easily pulled out from the base and laid in any required direction. When a thick cover is established weeds are completely suppressed and there is no wash or erosion. Control is cheap and simple.

Stylo can be grown from seed or cuttings and supplied to the tea either as seed, cuttings or nursery or basket plants. The methods of propagation and supply found to be the most satisfactory are as follows:—

Nurseries

Seed: One tablespoonful of seed to two or three double-handfuls of sand or fine earth gives a suitable concentration. The bed should be raked and the seed mixture spread on the surface and gently pressed down. We have found that if the seed is soaked for 12 hours or so before being put out, germination is quicker and if the beds are given a light sprinkling with "Gammexane" (or similar insecticide) about 10 days before use, loss of seedlings is minimised. The plants should be later thinned to 12" to 18" apart. These will form a thick cover in a few months and can be used as a permanent seed and cutting supply.

Cuttings: We have found the most successful way of propagating from cuttings is to take only the soft 4 or 5 inches at the terminal of the stems, just above a leaf. The stem of the cutting is inserted into a pencil sized hole to a depth of about 2 inches and firmed all round in the same way as a V.P. cutting or carnation slip. Cuttings must be kept moist until they have rooted.

Basket Plants. Seedlings should not be transferred to baskets until they are at least 2" high. Small baskets 3" x 5" are sufficient. Basket plants should not be put out to the tea until they are at least 6" high. (This also applies to basket cuttings.)

Planting in Tea

Seed: Two or three seeds put out on loosened earth between bushes and pegged give fairly satisfactory results in good soil. The chief difficulty is to prevent loss or damage during weeding operations until the plants become established.

Cuttings: One cutting should be planted between every two bushes or between alternate pairs of bushes. Damp, dull weather for a few days after putting out is important to success. Pegs as protection from weeders are essential.

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Basket Plants. As already stated these should be at least 6' high. This method of planting gives by far the best results, 100% success being usual. One plant to every second bush planted in a diamond pattern is quite adequate.

General Notes

The following general agricultural notes may be of interest and assistance.

Stylo is supplied in the tea rows and not between them. This prevents the tap root being damaged by or interfering with forking.

Fertilizer is applied by rolling back the stylo, broadcasting the fertilizer and replacing the stylo. The soil surface is thereby under perpetual cover. (The fertilizer can be raked in before replacing the cover if desired). A hooked stick or $\frac{3}{4}$ " iron rod (similar to a walking stick) 15" long is used to remove runners from the base of the bushes. Where the cover is too thick or high it is slashed with a piece of hoop iron, in the same way as P. W. D. labourers slash grass by the roadside. One to two labourers per acre per month is sufficient for control. There is no weeding, as such, when once a thick cover is established. If the straight end of the control rod is flattened and pointed it is useful for rooting out any deep rooted weed or grass tuft which may show up before a complete cover is established. The absence of wash reduces draining costs considerably.