LETTERS TO THE EDITOR

Dear Sir,

Enquiry re the growth of Tagasaste (tree lucerne) in the tropics.

Throughout Australia considerable interest is now being taken in the growth of tagasaste as a fodder crop to provide greenfeed to grazing animals during prolonged dry periods. Data being accumulated in W.A. justify the claim that when pasture land in a Mediterranean climate is planted with tagasaste the stock-carrying capacity can be tripled within three years. A detailed account of the potential of this hardy, frost tolerant leguminous shrub was published in the *Journal of the Aust. Institute of Agric. Science* 48, 209–213 (1982).

Surprisingly I have received more enquiries (37) from livestock producers in Q'land, than from any other State. Unfortunately virtually no information is available concerning the ability of tagasaste to grow in the tropics, or in areas with a dry winter and a wet summer. I would be most grateful, therefore, if you could publish this letter in your Journal in the hope that there may be readers who have personal experience of the growth of this shrub in northern Australia, or in a tropical environment overseas. Information on this matter will be greatly appreciated. I have been told that tagasaste grows well in gardens around Brisbane but would be pleased to receive direct confirmation.

Thanking you for your help in this enquiry,

Yours sincerely, (L. C. Snook) "A-Alla", Box 54, Margaret River, West Aust., 6285. 5-3-1985.

Tagasaste in north Queensland

Dear Sir.

Following Dr Snook's publicity for tagasaste (*Chamaecytisus palmensis*) in Western Australia (Snook 1982, 1984) there has been interest expressed in the plant in north Oueensland.

The alternative common name for tagasaste, "tree lucerne", may cause confusion with other tree legumes such as leucaena (*Leucaena leucocephala*) and the "true" tree lucerne. *Medicago arborea*, so it should not be used for tagasaste.

Furthermore, tagasaste has been known by the botanical name Cytisus proliferus in older publications (for example, Everist 1969), which could cause a bit more confusion. Tagasaste (C. palmensis) was originally considered a botanical variety of the species proliferus, but it was made a species in its own right by Hutchinson (1918). The combination Chamaecytisus palmensis was not formalised until 1977 (Bisby and Nicholls) although it had been used earlier (e.g. Bramwell and Bramwell 1974).

Tagasaste may be distinguished from its relative, escabon, by the shape and hairiness of their respective leaflets:

Tagasaste (*C. palmensis*)—Leaflets hairless or nearly so and broad relative to their length (about 12 mm broad and 45 mm long, i.e. a ratio of about 1:4).

Escabon (C. proliferus)—Leaflets silky-hairy on the lower surface and relatively narrow (about 5 mm broad and 30 mm long, i.e. a ratio of 1:6).

Reports of thickets of tagasaste growing on the Atherton Tableland have, as Mark Twain said of reports of his death, been grossly exaggerated. In fact, after making fairly comprehensive enquiries, the only plants I could trace were at Tolga, a few kilometres north of Atherton.

This small grove had been established from seed provided by Dr Snook in late 1983. The plants had been sown in pots in January 1984 and transferred to the field in mid-1984. The soil at the site is a deep, very well drained, red basaltic clay loam.

I inspected the stand at the end of May 1985. The plants ranged from about 1.2 m to 3 m in height. They were very variable in form, vigour, foliage, and flowering. Many had died from root rot since planting, in spite of below average rainfall. Some were obviously dying at the time I saw them. Although a few plants were flowering well, I

found only four young pods and most of their seeds were not developing.

One may speculate that the apparently erroneous reports of thickets of tagasaste on the Atherton Tableland arose through confusion with the tropical tree legume, leucaena. Leucaena is naturalised on some of the forest margins in this region (for example, it may be seen along the bottom of the Gillies Highway near Gordonvale) and it is obviously well adapted here. It has been wrongly called "tree lucerne" by some people. Producers looking for a tree legume to provide fodder for cattle and goats in the tropics would be better advised to plant leucaena rather than tagasaste.

> Yours faithfully. Ian Staples Dept. of Primary Industries Mareeba 31-5-85

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