

## Tree Lucerne

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ECHO promotes many animal fodder crops

**Figure 9.** Tree lucerne flowers and leaves. *Source: ECHO Staff*

(<https://www.echocommunity.org/plants/category/Pasture%20and%20Forage%20Legumes>) for use in the tropics and subtropics, for arid and humid areas, but few of them are frost tolerant, drought tolerant, and thrive at high elevations. Tree lucerne (*Chamaecytisus palmensis*), also known as tagasaste, is a long-lived, leguminous shrub that can survive temperatures as low as -9°C (16°F), produce forage during extended dry seasons, and thrive at elevations up to 3000 meters. It is suited to poor, sandy soils and sends roots down as deep as 10 m.

Tree lucerne is native to the Canary Islands but is widely adapted to Mediterranean climates, semi-desert conditions (such as those found in Western Australia), and dry tropical highlands. It contains high levels of protein (21.5% CP; Assefa *et al.* 2008), making it an excellent fodder for ruminants, in both free range systems and cut-and-carry systems. Tree lucerne is a popular forage for dairy farmers in the highlands of both Kenya and Ethiopia.

Tree lucerne offers multiple benefits in addition to fodder. It can be used as a windbreak, as a firebreak, for erosion control, and for soil improvement through symbioses with nitrogen-fixing bacteria. It is a valued bee forage for honey production and produces an excellent fuelwood.

Seed is now available from ECHO's seed bank (<https://echocommunity.site-ym.com/store/ViewProduct.aspx?id=889527>) in packets of 25 to 30 seeds. Scarify or boil seeds in water for one minute before planting. Seedlings grow quickly but must be protected from grazing (by livestock and wildlife) until well-established.

## Reference

Assefa, Getnet, C. Kijora, A. Kehaliew, S. Bediye, and K.j. Peters. "Evaluation of tagasaste (*Chamaecytisus palmensis*) forage as a substitute for concentrate in diets of sheep." *Livestock Science* 114, no. 2-3 (2008): 296-304.  
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