A herbaceous drought tolerant perennial pasture legume for Mediterranean environments

Lanza™ tedera has been developed for graziers to fill the summer-autumn feed gap. It is drought and heat tolerant with minimal leaf shedding during summer and autumn. It has high nutritional value (73% DOMD; 17% CP and 11.8 ME (MJ/Kg DM)). And it has the ability to recruit seedlings in autumn, contributing to the perenniality of the sward.

Climatic and soil requirements

Tedera (Bituminaria bituminosa var. albomarginata and var. crassiuscula C.H. Stirton) is a traditional forage native to the Canary Islands, Spain. Lanza was bred by the Department of Primary Industries and Regional Development (WA) and is well adapted to Mediterranean-like climates with a dry summer and autumn.

Lanza tedera is most productive in medium to high rainfall environments (> 350 mm of annual rainfall) and is best suited to well drained soils, but tolerates short periods of transient waterlogging. Lanza tedera performs best with soil pH (CaCl$_2$) $\geq$ 4.8 and is suited to a range of soil textures from sands to clays.

Lanza tedera is better suited to landscapes/regions with minor frost risks. Temperatures of $<-2$ °C will burn foliage, but perennial plants will re-grow. Regions with continuous cold temperatures during winter will reduce Lanza growth rates. Regions with multiple severe frosts can kill plants and significantly reduce plant populations.
Establishment and grazing
The weed seed bank should be reduced in seasons prior to establishment and the paddock should be weed free prior to sowing. High weed burden can significantly reduce plant populations.

Lanza tedera will be grown on soils unlikely to contain any suitable rhizobia and must be inoculated with the special strain of *Rhizobium* (WSM 4083).

Lanza tedera can be used in continuous pasture or in phase pastures of 3-5 years as part of a cropping rotation. Animals normally take a few days to start grazing tedera when introduced for the first time but then it is completely grazed and no palatability/acceptability issues have been observed.

Summer and autumn grazing
- During summer and autumn continuous grazing can be applied over periods of three to four months with good liveweight gains.
- During summer and autumn rotational grazing can provide two grazing periods for each paddock. For example, if a paddock is grazed in December for 15 days, it can be grazed again in March.

Winter and spring grazing
- If Lanza is a pure stand with no weeds or companion forage species, rotational grazing is recommended.
- If Lanza is within a mixture of annual winter species (sown or volunteer) that are well adapted to grow quickly during winter, continuous grazing is recommended so Lanza and companion species are all equally heavily grazed.

Lanza tedera grazing experiment at Dandaragan WA during winter.