

Forage Legume Tedera Preferred by Sheep

Dr Daniel Real, Senior Plant Breeder, Department of Agriculture and Food, Western Australia and Nadine Hollamby, Project Coordinator, Liebe Group

Key messages

- Sheep do graze Tedera, even preferring it to grass weeds once they get a taste for the new plant.
- This legume could have a place filling the autumn feed gap.



Aim

To evaluate the potential of Tedera (*Bituminaria bituminosa* var. *albomarginata*) as a prospective new perennial legume for the cereal / livestock zone of southern Australia.

Background

Tedera is a perennial forage legume native to Lanzarote, Canary Islands Spain. Lanzarote Island has a Mediterranean climate with an annual rainfall that varies from 150mm to 300mm, and 3 to 5 months with almost no rainfall. This species was sown at the Liebe Group Long Term Research Site in 2006, 2007, 2008 and 2009.

A range of plants (called accessions) were collected from the Canary Islands, and from these plants, those that grew well and were palatable to sheep were used as elite parent lines to develop a paddock ready Tedera variety.

Buntine was one of three sites where plants were initially grown for breeding, others were set up at Newdegate and Mount Barker.

Results

The Tedera at Buntine remains green over summer; in the dryer years it does become stressed but still survives and recovers when rains arrive. Grazing trials were conducted in 2011 and 2012. The sheep grazed the plants without any problem. It took the sheep between 1 to 3 days to begin grazing Tedera when introduced to it for the first time. Once the taste was developed the sheep grazed the tedera together with the surrounding species, namely ryegrass, subclover, capeweed, radish and others. The individual plant accessions which animals preferred to graze were used as elite parents in the breeding program.

Unlike Lucerne, tedera has minimal leaf dropping when stressed and therefore can be grazed in autumn.



Figure 1: A Tedera plant in October 2010 at Buntine.

Comments

The breeding program is now complete (choosing which type of plant is most suited to WA) and a small quantity (grams) of seed will begin multiplication in June 2014. The seed will be bulked up by seed company Seednet for the next 4-5 years with the aim of being commercially available to farmers in about 2019.

More research is still needed on how Tедера fits into the farming system. The Liebe Group has begun this process by setting up a new trial at the Martin's property, north of Watheroo which compares methods of establishing the plants (seed vs seedlings) and biomass production.

Acknowledgements

The authors would like to thank the Future Farm Industries Cooperative Research Centre, Rural Industries Research and Development Corporation, and the Department of Agriculture and Food Western Australia, for funding this breeding program. We would also like to thank the field assistance of Daniel Kidd, Meir Altman, Mengistu Yadete and Eric Dobbe. We would also like to thank Stuart McAlpine and Nadine Hollamby from the Liebe Group and Ross Ramm and Neville Chittleborough from Mount Barker RSU of DAFWA for their valuable contributions.

Paper reviewed by: Simon Crane, Seednet

Contact

Clare Johnston, Liebe Group
clare@liebegroup.org.au
(08) 9661 0570