

# THE LEUCAENA NETWORK

*"Promotes the responsible establishment and management of combined leucaena grass pastures"*

## A Brief Documented History of Leucaena in Australia The Key Facts

**The Leucaena Network** recognised 10 years ago that farmed leucaena needed management to ensure it could be grown in an environmentally friendly manner. It produced its first CODE of PRACTICE a decade ago. This has been regularly reviewed and the recent updated version has been signed off (2010) by the Network and relevant Government and Industry Organisations.

### ***Where did Australia's Leucaena come from?***

1. Leucaena is a native of Mexico and Central America. Its spread from Mexico is believed to have commenced via Spanish trading ships over 270 years ago. It was present in the Philippines in 1825 and later found its way throughout South-east Asia and the Pacific Islands including Hawaii, PNG, northern Australia and India, Africa and the Caribbean.

***[Ref: Leucaena, promising forage and tree crop for the Tropics (p 1-3) in: Innovations in Tropical Reforestation 2<sup>nd</sup> Edit, National Academy Press, Washington DC. 1984]***

2. Its earliest arrival in Australia is not known for certain. However documented evidence shows it was widely naturalized along the Queensland coast before 1921 and most likely in the late 1800's. A North Queensland Agricultural Instructor (NAR. Pollock) wrote to the Government Botanist of the day on **1<sup>st</sup> Sep 1936**. In this letter he quotes the results of a chemical analysis of *Leucaena glauca* [the original name for *L. leucocephala* prior to about 1960]. This specimen was collected from Bowen and the analysis date of the sample was **29<sup>th</sup> October 1921**. NAR Pollock further stated '**As you know the shrub is quite naturalized in north Queensland. A thicker growth was noted at Macknade on the Herbert River and again at Bowen**'.

***[Ref: Annual Report of the Department of Agriculture and Stock, 1936-1937 p 111] this all occurred almost 9 decades ago.***

3. Where and when did our first commercial cultivars originate?  
Queensland's first interest in leucaena for forage purposes originates from USDA work by JL Brewbaker in Hawaii in the late 1940's where it had become naturalized since the late 1800's. CSIRO in Queensland took interest and in 1953/54 introduced a range of material from Mexico, Central America and Hawaii. In addition, Dr Mark Hutton and Stan Gray of CSIRO (Brisbane Laboratory) also

collected and used seed from naturalized occurrences of leucaena at Bald Hills and Darwin for use in their grazing evaluations. In their first research paper (Hutton and Gray 1959) they noted that they had made collections from naturalized leucaena, *L. glauca* (*syn L. leucocephala*) from Brisbane, Gympie, Gayndah, Rockhampton, Innisfail and Darwin. Their research showed this to be similar to the Hawaiian material now recognized as the weedy or 'common' type i.e. *ssp leucocephala*.

The first commercial varieties (Peru and El Salvador) were released for use in the grazing industry in Queensland in 1962. Subsequent releases were Cunningham (1976) and Tarramba (1994).

**[Ref: Hutton, EM. and Gray SG. (1959): Problems in Adapting *Leucaena glauca* as a Forage for the Australian Tropics. Empire Journal of Experimental Agriculture. 27(107):187-96]**

### Key Points:

1921..... *Leucaena leucocephala* (common leucaena) first recorded in Queensland literature (Ag & Stock Dept). This recording was four decades before the release of commercial cultivars. In fact common leucaena was likely here 60 or more years before Peru and/or El Salvador were released;

1936..... Recorded as being naturalized at Macknade (Herbert River) and Bowen

1953-54...First introduction of leucaena seed from Mexico and Hawaii by CSIRO, Brisbane;

1953-54...CSIRO collected leucaena seed '*from naturalized stands at Brisbane, Bald Hills, Gympie, Gayndah, Rockhampton, Innisfail and Darwin;*

1962..... The first varieties were released for commercial use in Queensland (Peru and El Salvador);

1976..... Cunningham variety released;

1994..... Tarramba variety released;

2000..... The Leucaena Network formed and a Code of Practice adopted by the Network;

2009..... The Code of Practice updated and adopted by the Livestock Industry;

2010..... Wondergraze variety released; and

2010..... The Code of Practice is supported by the Department of Employment, Economic Development and Innovation.

### Estimated Area of Farmed Leucaena in Queensland

Up to 1970... less than 3,000ha

1985 8,000ha

1995 50,000ha

2006 150,000ha

2010 200,000ha +/-