



Photo GM Lessa de Assis

## Importance of *Arachis pintoï* for animal production in the tropics

### Great potential and current limitations in Brazil

*Arachis pintoï* is the most suitable forage legume for use in mixed pastures in the humid tropics and subtropics. It sounds perfect, since we have: biological nitrogen fixation, good acceptability, productivity increase, tolerance to shadowing and trampling, pasture longevity increase, stable association with several grasses. Thus, it answers very well the current demands for sustainability and intensification of livestock based on pastures.

### But why did forage peanut not yet take off?

A machine that can harvest its seeds efficiently is missing to attract the private sector to invest in seed production. Efforts in this direction are being carried out by Embrapa.

There is a consistent and relevant set of information from forage peanut research accumulated over the past 30 years. We have germplasm banks (Embrapa, CIAT, USDA) and an active breeding program in Brazil. We have examples of success, which validates its excellence as a forage resource for the humid tropical and subtropical regions of the world.

A challenge: we need to make seed prices affordable to meat and milk producers. Interested in widespread use of *Arachis pintoï*? You can join us!

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The wild *Arachis* germplasm collection at Brasilia (Embrapa cenargen). Photo BL MaassJose FM Valls, *Arachis*-curator of Embrapa, at a collection site of an *Arachis pintoï* population N of Planaltina DF, Brazil. Photo BL Maass

## PRODOCOVA

### A program of documentation, conservation and valorization of native flora, Argentina

In North Argentina, livestock principally graze natural rangelands. Tropical and subtropical grass species (*Chloris gayana*, *Panicum maximum* and *Brachiaria*) are cultivated on small areas. *Melilotus albus* (white sweet clover) is the only cultivated forage legume. Forage species need to be frost-tolerant; some areas are challenged with saline soils. Since the early 1900s, mainly foreigners have collected forage genetic resources in Argentina that are conserved in other countries. PRODOCOVA works systematically from prioritization over collecting, studying plant biology, pre-breeding and breeding to cultivar diffusion and smallholder seed production. UNL started collecting native forage germplasm in 2003 (legumes: *Desmanthus*, *Macroptilium*, *Aeschynomene*, *Chamaecrista*; grasses: *Elymus*, *Trichloris*, *Setaria*, *Bromus*). The UNL germplasm bank, established in 2011, maintains ca. 500. accessions today. Several forage cultivars have been developed whose seed is now increased under contract by the seed enterprise [Oscar Pemán Asoc SA](#).

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## The INTA germplasm network, Argentina

Since 1988, the Argentinian INTA runs a [Genebank Network](#) with the aim to conserve, evaluate, distribute and utilize plant genetic resources and preserve germplasm of species used mainly in agriculture. High demand of species adapted to different uses and environments has increased germplasm conservation in Argentina in conjunction with plant breeding projects. Several seed collections, field and *in vitro* collections are located in different agro-ecological areas (INTA Experimental Stations) of the country. A Base Bank located in INTA-IRB-Castelar maintains safety duplicates mainly of seed collections. Accession data are included in a program especially designed (DBGerma). Principal use of the collections is in research and breeding (private or public), reintroduction into farmers' fields or for bio-restoration of deteriorated areas. The wide list of species preserved includes many temperate, but only some subtropical forages obtained by local collections or introduced by exchange with different countries and institutions.

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Smallholder forage seed production in Argentina (*Macroptilium lathyroides*). Photo from UNL. Project: Reconversion of smallholder family farms in NE Santa Fe Province.