

Taxonomy and Natural Distribution

(Sin: *Cratylia floribunda* Benth., *Dioclea argentea* Desv.)

Family: Leguminosae
Sub-family: Faboideae
Tribe: Phaseoleae
Sub-tribe: Diocleinae

Cratylia is a neotropical genus, distributed in south of Amazon river and east of the Andes, including part of Brazil, Peru, Bolivia and basin of Parana river in eastern Argentina. There are five species of *Cratylia*: *C. bahiensis*, *C. hypargyrea*, *C. intermedia*, *C. mollis* y *C. argentea*. (Queiroz & Coradin 1995).

This last one has the largest distribution in South America, mainly in Brasil since Pará to Mato Grosso and Goiás (East –west), and since Peru to state of Ceará in Brazil (North – south) (Figure 1). Individuals have been collected between 300 and 930 m.a.s.l. In open areas of several habitats with largest populations in Cerrados of poor and acid soils.



Figure 1. Natural distribution of *Cratylia argentea*

Research History

- 1978 1980 First collections by National and International institutions ARCO CERES, EMBRAPA, CSIRO and CIAT as part of explorations for forage germoplasm.
- 1991-1993: Studies of feeding value and influences on milk production..
- 1995: Workshop of the potential of the genus *Cratylia* as forage legume (EMBRAPA, CENARGEN, CPAC, CIAT).
- 1996: Agronomic evaluations in several regions of Central and South America (Mexico, Costa Rica, Colombia and Brazil).
- 1997: Special emphasis on germplasm collection field trips in Brazil looking for a broad diversity of the species. Studies realized about the floral biology.
- 1998: Wide divulgation of the advantages of *C. argentea* as shrub legume for acid soils in wet tropics.
- 2000: More detailed agronomic studies about a dry season feeding alternative and evaluation of milk production systems.
- 2001 – 2002: Release of cultivars: **Cultivar Veraniega** (mixture of accessions CIAT 18516 and 1868) in Costa Rica and **Cultivar Veranera** in Colombia, respectively.
- 2003 – 2005: Economic impact and feeding quality among the most important forage species.

Literature Cited

•Queiroz, L. P. de y Coradin, L. 1995. Biogeografía de *Cratylia* e Areas Prioritárias para Coleta. En: Potencial del Género *Cratylia* como Leguminosa Forrajera. Pizarro, E. A. y Coradin, L. (eds.). EMBRAPA, CENARGEN, CPAC y CIAT, Memorias Taller sobre *Cratylia* realizado del 19 al 20 de julio de 1995 en Brasilia, Brasil. p. 1-28.

Botany Description

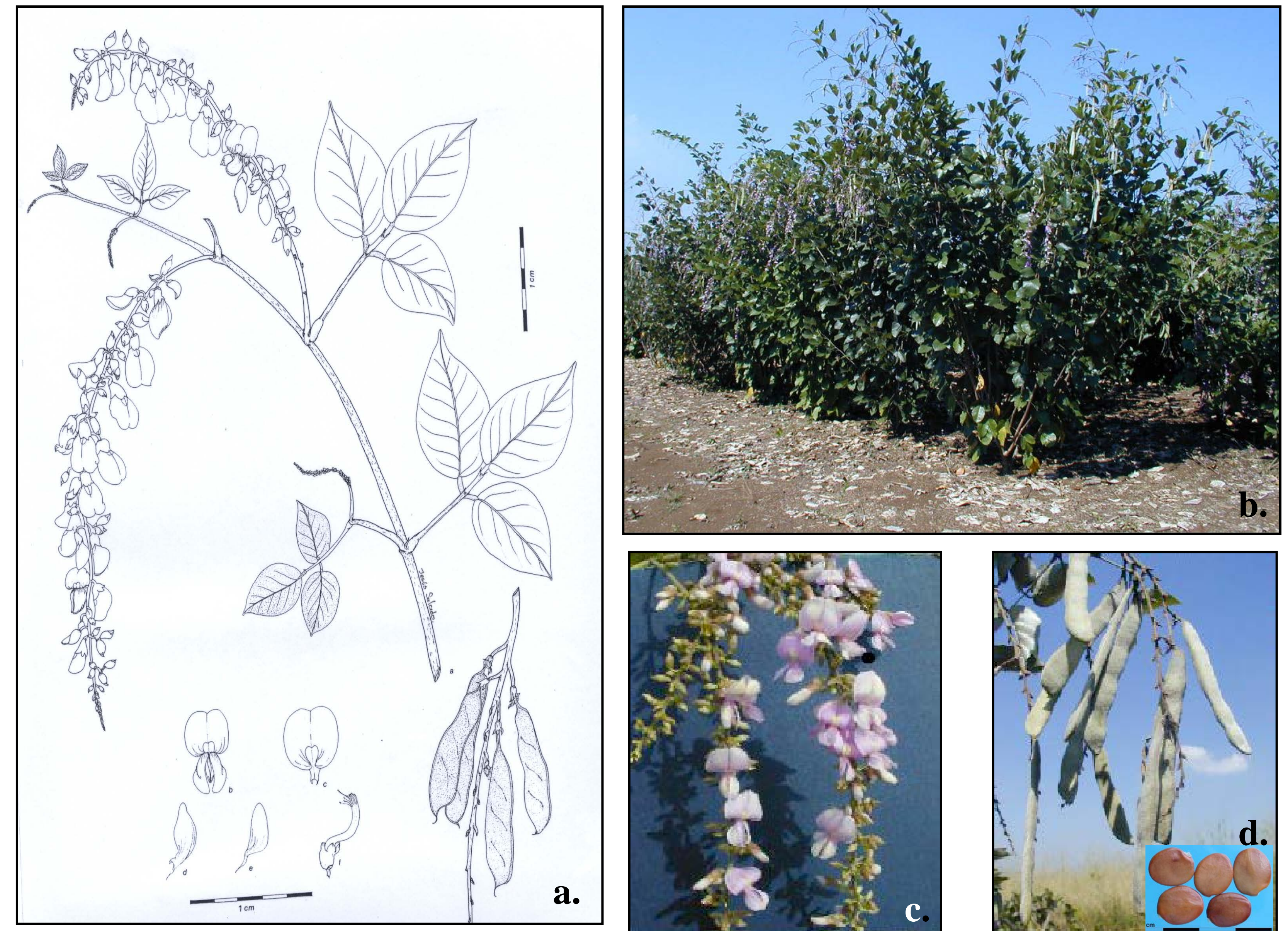


Figure 2. a- drawings made from plants grown in CIAT Palmira, b- habit, c-Inflorescence, d- Pods and seeds.

This specie is a perennial, deep-rooting shrub that branches from the base of the stem, reaching between 1.5 and 3 m in height. Leaves are trifoliolate of consistency papyrus; leaflets are broadly-ovate with a silvery pubescence on their undersurface. Flowers are arranged in an elongated, many-noded pseudoraceme up to 30 cm long, with 6-9 flowers per node. Size of flowers ranges from 1.5-3 cm (length and width); petals are lilac or, very exceptionally, white. Pods are straight, flat, up to 20 cm long and 1-2 cm broad, dehiscent, containing 4-8 oval to almost circular seeds of about 1.5 cm diameter. Seeds are dark yellow to brown, when maturing under high-humidity conditions, dark brown (Figure 2).

Germplasm Distribution and Divulgation

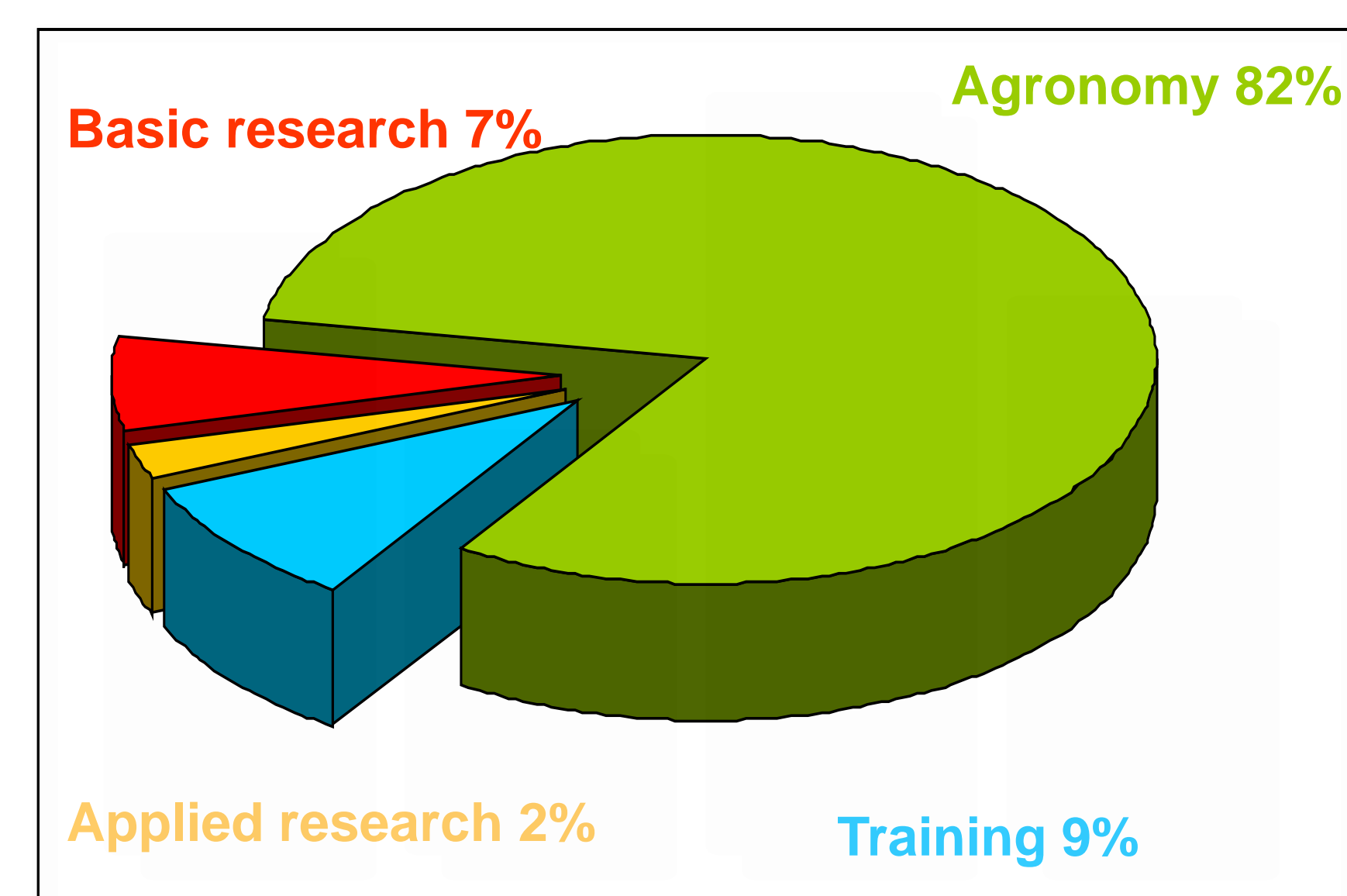


Figure 3. Distribution of *Cratylia argentea* by purpose between 1984 -2005

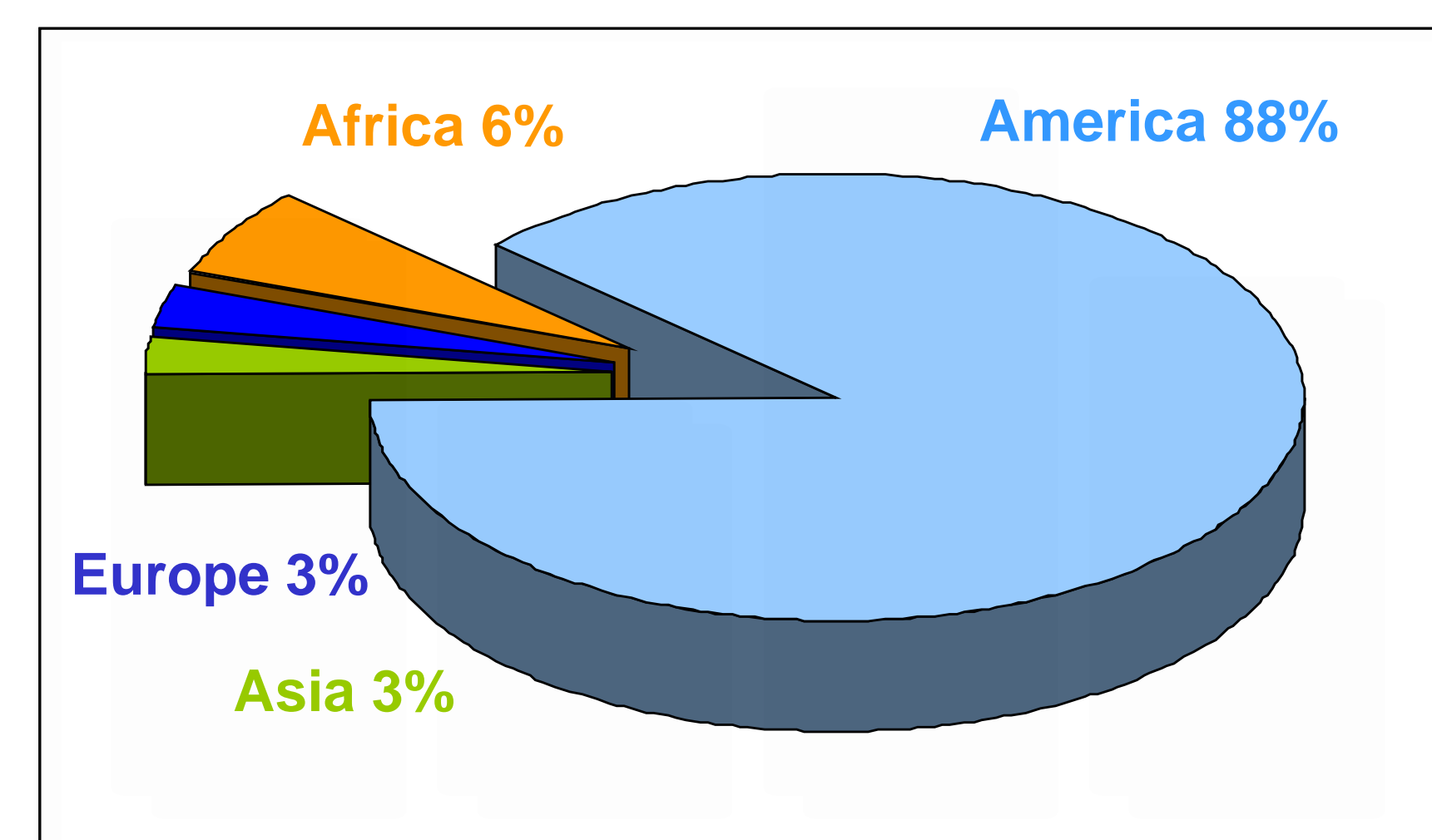


Figure 4. Distribution of *Cratylia argentea* germplasm to 44 countries between 1984 -2005

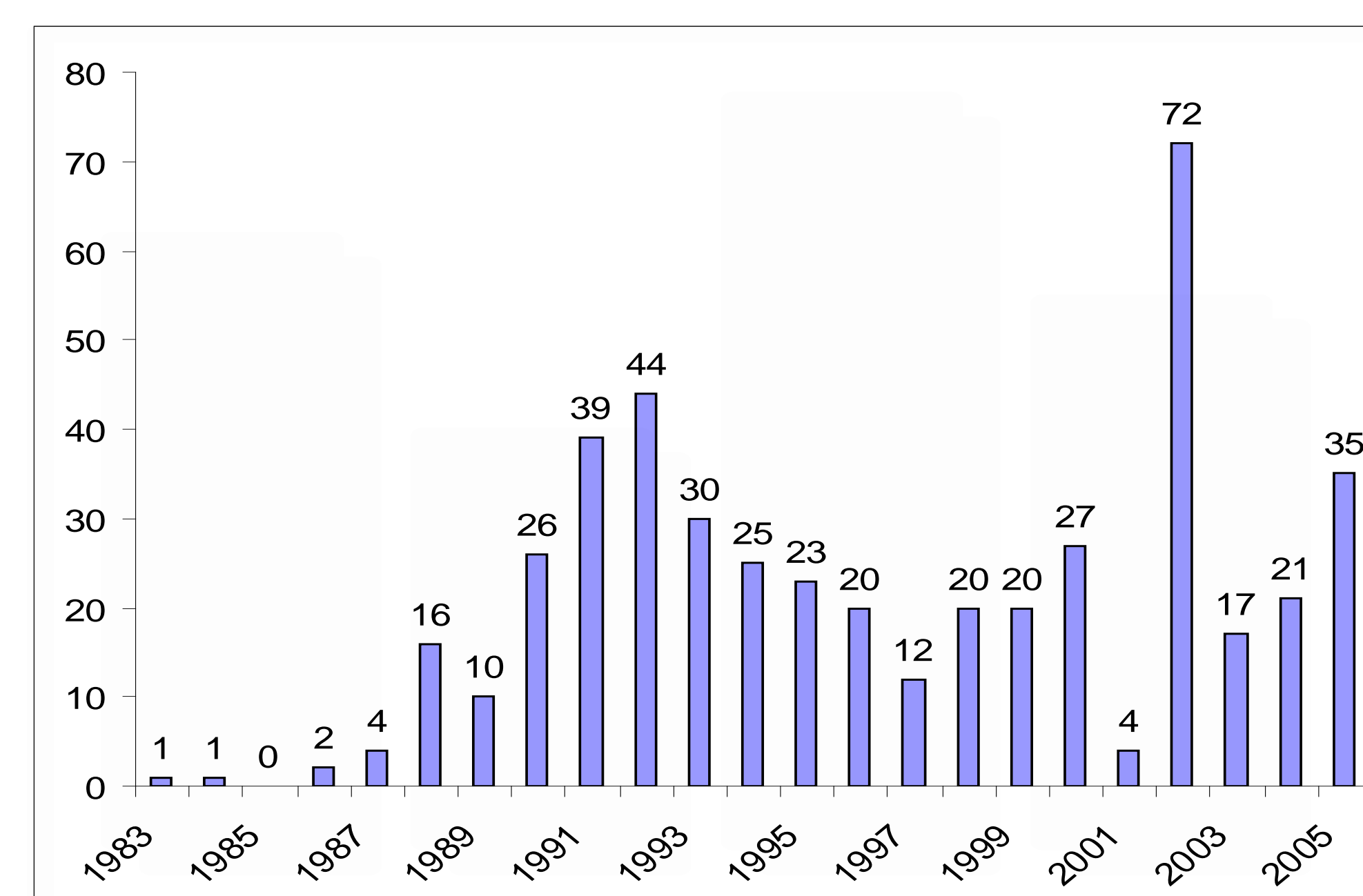


Figure 5. 459 shipment of *Cratylia argentea* germplasm to 44 countries between 1984 -2005*



The wide diffusion and spreading of the uses and potentials of this forage legume has done that the distribution of this species increases during the last years, having a great use in the agricultural sector.

*The distribution dates are actualized to 31 March 2005.