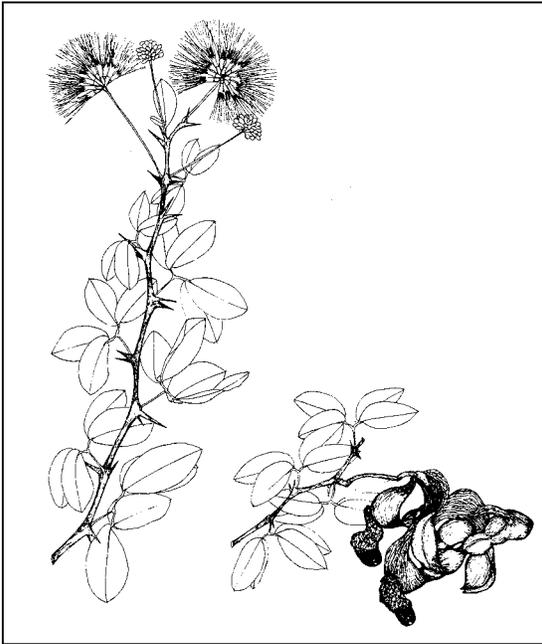


***Pithecellobium unguis-cati* (L.) Benth.**
FABACEAE

bread-and-cheese

Synonyms: *Mimosa unguis-cati* L.
Zygia unguis-cati (L.) Sudw.



General Description.—Bread-and-cheese is the common name used in the Virgin Islands and the English-speaking Lesser Antilles. The species is also known as cat's claw and black bead in Florida and doctor long, groven eye, ña de gato, rolón, bois crabbe, griffe-chatte, collier-diable, tendra à caulilou-rivière, and bébèl elsewhere (Howard 1988, Liogier 1988, Little and others 1974). Bread-and-cheese is a shrub or small tree usually 3 to 9 m in height and 4 to 13 cm in stem diameter (Little and others 1974). However, it occasionally grows to impressive proportions. The national record tree, found in Camino Real, Florida, measures 22 m in height and 121 cm in diameter (Champion Tree Project 2001). The plant usually has multiple stems arising at or below ground level. The stems and branches are gray and nearly smooth with lenticels and rings at the nodes. The paired spines are persistent. Bread-and-cheese produces a taproot and abundant lateral and fine roots. Alternate hairless leaves have petioles 2 to 5 cm long and leaf blades 2 to 6 cm long. There are four obliquely obovate or oblong leaflets per leaf. The greenish-yellow, yellow, or pink flowers form terminal or axillary racemes or panicles in heads.

The legume, 5 to 10 cm long, is coiled or curved and splits open to reveal 4- to 6-mm shiny, black seeds surrounded by white to red fleshy arils (Howard 1988, Liogier 1988, Little and others 1974). Bread-and-cheese is easily confused with *P. dulce* (Roxb.) Benth., which grows as an exotic in many Caribbean islands. The latter is a tree with somewhat smaller leaves, coarser twigs, larger fruits, and less pronounced rings at the nodes.

Range.—Bread-and-cheese ranges from Florida through the Greater and Lesser Antilles, Trinidad and Tobago, Bonaire, Curacao, Aruba, Guyana, and Venezuela (Liogier 1988, Little and other 1974). Planting has not been reported outside its native range.

Ecology.—Bread-and-cheese grows in Puerto Rico from near sea level to about 450 m in elevation on soils derived from both igneous and sedimentary rocks (author's observation). The species prefers well-drained soils, but all soil textures appear to be tolerated. With few exceptions, it grows in areas receiving less than 1000 mm of annual precipitation. Because of reduced competition from trees, the species tends to grow on sand dunes, coastal strands and keys, and on shallow rocky soils, sometimes forming thickets (West and Arnold 1952). It does survive and grow in the understory of open, dry forests, but maintains thin crowns and seldom flowers in these situations. Bread-and-cheese appears to tolerate salt spray and salty groundwater.

Reproduction.—Bread-and-cheese flowers and fruits irregularly through the year (Little and others 1974). Seed yield can be heavy but inconsistent from year to year. A sample of seed collected in Puerto Rico contained 14,300 seeds/kg and germinated at 31 percent, beginning 3 days after sowing (Francis and Rodríguez 1993). Artificial propagation is by seed; it is one of the easiest shrubs to grow (Workman 1980). Natural seedlings are seldom abundant. The shrubs resprout readily after cutting or fire.

Growth and Management.—Plants started from

seed grow relatively slowly at first and somewhat faster after deep rooting. Supplemental watering and fertilization are unnecessary. As a landscaping plant, it can be easily pruned and shaped (Workman 1980). In the poor habitat where the species usually occurs in the wild, growth is very slow and plants live for several decades.

Benefits.—Although it is difficult to harvest because of the spines, the wood of bread-and-cheese is used for fuel. It is heavy and hard and has an oven-dry heat of combustion of 19.05 megajoules/kg (Timyan 1996). The fleshy aril is edible, although not highly desirable because of the lingering flavor. The seeds of bread-and-cheese are used to make necklaces. The species is planted to form impenetrable hedges (UVI Wetlands Reserve 2001). Bread and cheese is listed as a nitrogen fixing species (Winrock International 2001). The fruits are one of the food plants of the endangered yellow-shouldered amazon parrot (*Amazona barbadensis*) in Venezuela, and the islands of Margarita, La Blanquilla, and Bonaire (Island Resource Foundation 2001). The large orange sulfur (*Phoebis agarithe* Boisduval) and the Miami blue (*Hemiargus thomasi* Clench) butterflies both use bread-and-cheese as rearing plants for their larva (Association of Florida Native Nurseries 2001). A small treehopper insect (Homoptera) has developed an extended thorax that mimics a bread-and-cheese thorn and serves as protective camouflage (Workman 1980).

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John K. Francis, Research Forester, U.S. Department of Agriculture, Forest Service, International Institute of Tropical Forestry, Jardín Botánico Sur, 1201 Calle Ceiba, San Juan PR 00926-1119, in cooperation with the University of Puerto Rico, Río Piedras, PR 00936-4984