

118. *DIEFFENBACHIA SEGUINE* (Jacq.) Schott (ARACEAE) — Dumbcane

Widely planted tropical foliage ornamental. According to Walter and Khanna,¹⁴⁶ Latin Americans have used the plant to induce temporary sterility in themselves or permanent sterility in their enemies, concepts which led to experimentation by the Third Reich in Germany (expressed juice led to sterility in male rats for 40 to 90 days, in females for 30 to 50 days). Farnsworth¹⁴⁷ relates a story from a botanist who served during World War II in Germany. The Germans established well-populated concubinary recreation camps for army officers in areas far removed from the war front. Officers admitted to such camps were ordered to chew a leaf of dumbcane once daily, which was believed to induce sterility for 24 hr. Another botanist in South America noted his guide chewing a leaf of dumbcane, to make him sterile for 1 day. Two other members of the dumbcane family are said to exhibit this oral contraceptive attribute. West Indians have used both as a female aphrodisiac (placing the juice on the genitals) and a contraceptive.¹⁴⁸ In Cuba the dumbcane is used to poison cockroaches and rats. Amerindians of many tribes used dumbcane in arrow poisons.

Reported to be aphrodisiac, caustic, contraceptive, insecticidal, poison, and sterilant, dumbcane is a folk remedy for angina, cancer, coma, dropsy, dysmenorrhea, edema, frigidity, impotence, internal ulcers, prurigo, swellings, varicosities, warts, and yaws.³² In Cuba, where called *maté de cancer*, dumbcane juice is applied to corns and warts.⁴ Morton,⁴² however, drawing on a Cuban classic, says "The plant has no medical use in Cuba". The homeopathic tincture is used for frigidity and sexual impotence. Yet natives of the West Indies are said to chew the roots to bring on temporary male sterility. Guatemalans poultice mashed stems and leaves to animal bites, gout, and rheumatism. Salvadorans apply the seed oil to burns, inflammations, and wounds. Costa Ricans apply the sap, like the Cubans, to tumors and warts. For angina, Brazilians gargle the leaf decoction.⁴²

Said to be cyanogenetic.³² Contains L-asparagine and a proteolytic enzyme termed dumbcain (suggestive of the mucunain from *Mucuna*).

Toxicity — Acicular crystals of calcium oxalate, accompanied by a protein (enzyme) or asparagine, may cause severe burning in the mouth and throat. Swelling of the mouth may be severe enough to cause fatal choking.^{34,56} The sap, under some conditions, is irritant and vesicant.⁵⁶ Contact with bruised plants seemed to be necessary for irritation.⁶ Panama natives to this day blame an indolent ulcer I suffered on the ankle on my walking through a patch of dumbcane that had recently been cut. On several occasions I applied fresh latex to my wrist with no problem.

To the physician — Hardin and Arena recommend "Gastric lavage or emesis; symptomatic, give demulcents; cold pack to lips and mouth, antihistamines or epinephrine".³⁴