

Anamirta Covvulus

(*Menispermum cocculus* (L.) Blanco; *M. lacunosum* Lamk; *Cocculus lacunosus*, *C. suberosus* DC.)

#### LACAL NAME

Laktag, Liktag, Suma, Lanta, Lintag bagin, Tuba, Tuburi, Balasin, Bayati (tag. Vis., Pam.)



Anamirta Covvulus is parasitic in this tree.

#### USE

One of the uses to which the India berries (Cocas de Levante) are put in the Philippines, is to throw them into small sluggish streams or into lakes with the object of intoxicating the fish which soon come to the surface and float there as if dead. This custom is very extensive in Malaysia, in India and even in Europe, where, in order to avoid the case of poisoning which this practice has occasioned in the consumers of fish taken in this way, it has been found necessary to forbid the sale of the berries except in the pharmacies. These restrictions are practice in France.

In Binondo market in Manila the root of this plant may be found in abundance; it is yellow and very bitter. The natives use the infusion (5~10g to 300cc of water) in fevers, dyspepsia and menstrual derangements. In India also the root is used in the same complaints.



Juvenile Anamirta Covvulus (Vine plants)



Specimen of Anamirta Covvulus for medicine

The fruit contains the highly toxic principle picrotoxin, and others as follow: menispermin ( $C_{18} N_{24} N_2 O_2$ ) is an alkaloid, which crystallizes in pyramidal prisms, is soluble in alcohol and ether and insoluble in water. Hot nitric acid converts it into oxalic acid and a yellow substance of a resinous appearance.

Picrotoxin ( $C_{30} H_{24} O_{13}$ ) is not an alkaloid as may be seen from its formula. Its properties are not well known at the present time. It crystallizes in small quadrilateral prisms, white and transparent, or in needles grouped in stars. No odor; taste bitter, insoluble in water, partly soluble in alcohol and in ether, freely soluble in acid and alkalis. A solution in concentrated sulphuric acid has a saffron-yellow color. Nitric acid transforms it into oxalic acid.

Picrotoxinin exists in picrotoxin in the proportion of 32 to 100, and may be separated by boiling in benzene. It is bitter, poisonous, reduced by Fehling's solution and nitrate of silver. Sixty-six percent, of picrotoxin consists of another bitter substance, non-poisonous-picrotin, which is insoluble in benzene and is reduced by Fehling's solution and nitrate of silver.

Lastly, anamirtin is found in the mother water of picrotoxin; it is not bitter, not poisonous, and not reducible by the aforementioned reagents.

The fruit of the anamirta, the coca de Levante is an acrid, narcotic poison, which may not be employed internally; its uses are limited to external medication. In the Pharmacopoeia of India is given the formula for a parasiticide ointment, highly recommended in the treatment of pedicul: Unguentum anamirtoe: Cocculus berries, powdered, 4g Vaseline, 30g, M., fiat unguentum.

In applying this ointment it is necessary to make sure that there is no wound or abrasion of the skin through which absorption might take place.



Anamirta Covvulus (Vine plants)



Juvenile plants

## BOTANICAL DESCRIPTION

A vine with leaves alternate, entire, glabrous, broadly oval, pointed, with 5 nerves, which unite at the base, long petioles. Flowers dioecious, in compound racemes. Male flowers consist of a perianth without corolla, the sepals arranged by threes in two or three whorls. The end of the receptacle expanded like a bead, bears a large number of stamens in 6 vertical series, with anthers sessile and 4-lobed. Female flowers analogous as regards the perianth, with 6-9 sterile stamens. Carpels formed of 5 ovaries, free, unilocular, containing one ovule each. Fruit, a drupe of a purple color, the size of a filbert, kidney-shaped, the albumen horny.



Vine of Anamirta Covvulus & author