

COCA LEAVES

Coca plant is a bush that can reach heights of 1.5 up to 3 meters; it has specific and constant botanical characteristics. The coca bush lives for many years. It grows in South America: in all the Peruvian, Bolivian, Ecuadorian and Colombian territory.

The leaves have very clear longitudinal curved lines curved towards the central vein that are simply thickened from the epidermis cells resulting from the way the leaf rolls. In the base of the petiole it has oval stipulates made intrapeciolar characteristics. The flowers are creamy white almost reaching 1 cm and it has five sepals and five petals. When the fruit is ripe, two of the ovules abort, and the loculos are destroyed. The fruit is drupe red, oval with a single seed.

The plant is cultivated in the mountain prairies or plateau terraces, in a tropical and subtropical climate. It can grow in atmospheres unfavorable for other plants. Optimal conditions for the growth of coca bushes are related to humus and clay grounds, rich in iron, and located in valleys surrounded by mountains, where there is a high humidity level and it frequently rains. The plant normally lives up to 30 or 40 years and in ideal conditions it can live up to 100 years.

Plants of this type are cultivated in mountain slopes or plateau terraces that have a tropical or semitropical climate. The plant grows under conditions not suitable for other types of planting. The best conditions for the development of the coca plant are earth with layer of clay, rich in humus and iron, located in protected plateau valleys, where there is permanent humidity and it frequently rain. The plant normally lives and produces for 30 to 40 years; under ideal conditions, it could survive up to 100 years.



Harvesting and Advantages.

The harvesting of the leaves is made 3 to 4 times per year. The coca leaf contains an average of 0,5 to 1,5% of alkaloids, although there are several factors that influence the pickup, like atmospheric conditions, the age and condition of the plant, the quality of the earth, the installments used, the time of planting, the harvest, etc.



The drying process is very important and it takes approximately 2 to 3 days out in the sun. During this process, the leaves must be turned for an even drying. In the drying process the leaf loses more than 75% of its original weight. Once the leaves are dry, they are pressed and packed by arrobas (11.5 kg) for its commercialization.

USE

The use of coca leaves is a millenarian tradition throughout the Andean Region. The coca is a mythical and sacred plant; it was used in rituals more than 40 centuries ago. Nowadays it continues to be an indispensable component when sacred-cults are taken place.

Traditional medicine confirms there is a wide possibility to use coca leaves for human consumption: it is considered an excellent medicine source for the digestive system, prevent the altitude syndrome (vertigo, vomit), prevents physical exhaustion, cramps, toothaches, rheumatic pains, when mixed and crushed it cures wounds and it is an antiseptic, in addition it controls diarrhea. It is a medicinal plant of great importance; his healing and curative value is more appreciated if we take into account that most prepared medicine is toxic for the human organism.

In combination with other medicinal plants coca is used to cure a great deal of diseases, from headaches to rheumatism. With excellent results it is used to do.

Mouth washes, to alleviate sore throats. When mixed and crushed it works as an analgesic, healing and as an antiseptic in wounds or burns.

Nutritional comparison per 100 grams of coca leaves with other food of the Andean Region

Food	Calories	Proteins (gr.)	Calcium (mg)	Iron (mg)	Phosphorus (mg)	Vit. A (IU)	Vit. E (mg)	Tiamina Vit. B1 (mg)	Riboflav. VitB2 (mg)	Niacina Vit. B3 (mg)	Vit. C (mg)
Coca	304	19.9	2097.0	9.8	363	1760.00	44.1	0.30	1.72	6.50	11.5
Corn	325	8.4	6.0	1.7	267	0.02		0.30	0.16	3.25	0.7
Wheat	336	8.6	36.0	4.6	224			0.30	0.08	2.85	4.8
Rice	359	6.1	8.0	1.6	130			0.11	0.07	2.56	
Barley	344	6.9	61.0	5.1	394	0.01		0.33	0.21	7.40	
Kiwicha	365	12.9	179.0	5.3	254			0.20	0.57	0.55	3.2
Quinoa	367	14.0	114.0	7.0	450			0.35	0.32	1.43	6.8
Pope	97	2.1	9.0	0.5	47	0.02		0.09	0.09	1.67	14.0
Cassava	162	0.8	25.0	0.5	52	0.01		0.04	0.04	0.36	30.7
Quinoa leaves	50	4.7	377.0	1.5	63	1.72		0.95	0.95	1.20	11.1
Leaves of turnip	35	2.9	367.0	2.8	95	2.12		0.38	0.38	2.40	49.2
Spinach	32	2.80	234.0	4.3	45	378		0.07	0.20	0.69	15.2

Source of information: Instituto de Nutrición, Lima – Perú

