

PSYCHOTOMIMETIC PLANTS OF ECUADOR

1. Pernettya parvifolia: Fruits (a kind of small berry) and leaves of this plant known by the vernacular name of "taglli" produce hallucinogenic effects in human being that eat the fruits and severe intoxication characterized by a long-lasting narcosis in animals.

Our first studies demonstrated that the chemical active principles were not alkaloids. Further studies suggested that the active substances separated by thin layer chromatography have a complex molecular structure. They belong to the andromecotoxine group of compounds being the most abundant in this plant either grayanotoxina or a derivative very closely related to it.

2. Datura tatula: This plant known by the kichwa* name of "chamico", which means "to drive mad" contains alkaloids in the seeds and leaves. The main active substance found is 1-hioscine or scopolamine, but also it contains small quantities of atropine and other tropane derivatives. Large doses of the natural product or of its alkaloids produce intense psychic changes. In view of this chemical findings some of the old traditions of psychotomimetic and aphrodisiac effects appear justified.

3. Datura sanguinea: Chemical analysis of this plant known by the vernacular name of "huantug" demonstrated the presence of alkaloids in the seeds, leaves and flowers, being 1-hioscine or scopolamine the most important.

4. Ethnological findings: Some archeological pieces, especially ceramic objects, that we found in the Northern Coastal area of Ecuador, similar to others found in Central

* One of the native languages. This language was spoken by the incas indians.

America and the Caribbean Islands reveal that hallucinogenic snuffs were used by our primitive Indians, at least 2.000 years ago. Snuffs were prepared from seeds of plants of the genus Anadenanthera and from the bark of plants of the genus Virola.