An approach to medicinal plants by the analysis of traditional diseases in Mexico. Two examples: Caxan and Tlazol.

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INTRODUCTION

Medicinal plants are used in traditional and popular medicine within a sociocultural context. The use of the plant has a conceptual frame with a particular taxonomy of ailments and diseases. Thus, an integrated study of these traditional ailments and diseases including historical, ethnobotanical and clinical aspects, allows a wider understanding of the sociocultural context, needed for the characterization of the therapeutic resources used on it.

Tlazol and Caxan are two diseases from the nahuatl medicine in Southwest Puebla and Southwest Morelos, Mexico. Some medicinal plants identified belonging to the actual treatment of both diseases are presented here.

CAXAN

Caxan or Caxanqui is a disease affecting women in the puerperium. There are popularly recognized two types of Caxan, depending on the agent that causes the interruption of the puerperal quarantine: "Caxan de quehacer" (domestic work) and "Caxan de hombre" (sexual intercourse). From a modern clinical point of view, Caxan can suggest at first an endometrial infection. But Caxan has some clinical manifestations that are not necessary explained when we interprete it as an endometritis: joint oedema and pain, hair loss and anorexia. Some of these manifestations could also suggest an endocrine functional desequilibrium to be evaluated with a detailed case analysis. Caxancapatle blanco (*Marsdenia lanata* P.G. Wilson, *Asclepiadaceæ*) or Caxancapatle rojo (*Cæsalpinia platyloba*, *Leguminosæ*) are used in the traditional treatment of the disease, orally and in poultices.

TLAZOL AND IXTLAZOL

Tlazol and Ixtlazol are today the remaining elements from a nosological complex in nahuatl medicine, the "garbage airs", some kind of pathogenic emanations produced in an involuntary way by people with sexual "misbehavior", mainly adultery. From the modern clinical approach, Tlazol has a strong component of serious malnutrition, and Ixtlazol implies an infection on one or both eyes. Both diseases affect only little children.

Cordoncillo (*Piper amalago* L., *Piperaceæ*), Tlazoltomate grueso (*Nicandra physalloides*, *Solanacæ*) and Injerto de Ciruelo (*Psittacanthus calyculatus* [DC.] Don, *Loranthaceæ*) are used among other plants in the traditional treatment of tlazol. In this case, treatment consists in baths made with the decoction of these plants and praying.

Both diseases, Caxan and Tlazol, are useful in the illustration of different kinds of situations when we analyse the ethnographical data from traditional nosologic taxonomies: in the case of Tlazol, it is difficult to consider any direct correspondence with a classified disease in the modern medical approach, resulting the use of the plants explained as part of a symbolic efficacy procedure, mediated by an hypothetical psychoneuroimmunological effect (ADER *et al.*, 1991, REICHLIN, 1993). On the other side, in Caxan we find some clues for pharmacological research of the therapeutic resources (antinflammatory, antimicrobial effects, for instance) according to the refered symptomatology.

DISCUSSION

Ethnopharmacology as an interdisciplinary science (ETKIN, 1988, DOS SANTOS and FLEURENTIN, 1991), studies the vegetal, animal or mineral resources used in traditional medicine, but analysing the sociocultural context of that resources. This context has an axis: the **health problem** that generates the therapeutical, preventive or diagnostic need, frequently conceived and classified outside the frame of the International Diseases Classification authorized by the World Health Organization. Medical science is today structurated on the base of this classification, with the nosological entity as the core unity of it (RODRÍGUEZ-RIVERA, 1982). As a true scientific interdisciplinary space, ethnopharmacology has the task of not only obtain information about the use of a plant for guiding the modern research, but to study the popular/traditional uses of natural and other products in order to modify also some schemes of research and application of drugs worldwide used (VAN DER GEEST and WHITE, 1988): the plant is studied taking into account the traditional uses, but these uses are, by themselves, a source for reflection about modern drug technology and therapy.

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However, if a traditional or indigenous use of a plant is strongly shaped in specific cultural terms, that is, if the health problem which is the motive for the use of that plant has a strong character as a culture bound syndrome (SIMONS and HUGHES, 1985, ZOLLA *et al.*, 1988), it is more difficult to determine possible therapeutic uses from the point of view of the classic pharmacology. We present here two examples about this situation: Tlazol as a traditional disease which has a clear nature as a cultur bound syndrome, and Caxan, another traditional disease which can be reduced easierly in mechanicistic terms. We know, because it has been an historical trend, that research can be directed easier and fruitfully in the second type of diseases (those reductible in mechanicist terms), but we have to consider what would be the specific contribution from ethnopharmacology as an interdisciplinary field in the analysis of the so-named Culture Bound Syndromes and the symbolic procedures related to plant, mineral and animal substances used in these syndromes

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Table 1

Caxan and Tlazol, two traditional diseases, Morelos and Puebla, Mexico; main symptoms and therapeutic resources

Disease	*Patient*	*Causality*	*Symptom*	*Therapeutic Resources*
Caxan	Puerperal Woman	Interruption of Quarantine	Hair loss Fever Joint oedema Anorexia Malaise Vaginal discharges	*Marsdenia lanata* P.G. Wilson, *Asclepiadaceæ* *Cæsalpinia platyloba*, *Leguminosæ*
Tlazol	Children, smaller than 3 year old	Exposure to "garbage airs" generated by an adult with "sexual misbehavior"	Weakness Hyporexia Crossing of the legs Weight loss	Praying Baths with a decoction of water from a pig's puddle with plants: *Piper amalago* L., *Piperaceæ* *Nicandra physalloides*, *Solanaceæ* *Psittacanthus calyculatus* (DC), *Loranthaceæ*