

## ETHNOBOTANY IN TRADITIONAL EUROPEAN COMMUNITY

Maria Corette Pasa<sup>1</sup>Olga Duarte Silva<sup>2</sup>Maria Inês Pires Neves Esteves<sup>3</sup>**ABSTRACT (ETHNOBOTANY IN TRADITIONAL EUROPEAN COMMUNITY).**

Knowledge about the use of medicinal plants is a way of recording customs and empirical management in traditional communities. The present study is a contribution to the ethnobotanical study of the medicinal plants used in the Parish of Penha Garcia, in Portugal. The corpus of the work is composed of 65 individuals between the ages of 51 and 102 years. We apply semi-structured interviews, direct observation, oral history, tour-guided and photographic record. About 105 plants were identified, with emphasis on the Asteraceae, Fabaceae and Lamiaceae families. The plants are mainly used in the form of tea, to treat diseases such as urinary infections, skin diseases, wounds, constipation, menstrual pains and personal protection, mainly. The community presents a wide knowledge and use of plants in the practice of traditional European medicine.

**Keywords:** Ethnomedicine, mediterranean plants, empirical knowledge.

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## INTRODUCTION

Ethnobotany is the study and interpretation of human knowledge about the cultural meaning, management and traditional uses of flora elements, and describes it as a dynamic relationship between plants and people (VOEKS, 2017).

For Caballero (1979), ethnobotany is the study and interpretation of human knowledge about the cultural meaning, management and traditional uses of flora elements, and Voeks (2017) describes it as a dynamic relationship between plants and people.

The traditional medicine is practiced by ethnic groups, which through interdisciplinary methods of ethnobotany and anthropology, focuses on traditional knowledge that is transmitted between generations through orality (WHO, 2002).

We define the traditional medicine as not only mere practices but also a study of much knowledge, and beliefs that incorporate herbal, animal or mineral remedies, spiritual therapies, manual techniques and exercises; they are also applied singly or in combination to maintain well-being, as well as to treat, diagnose, or prevent diseases (WHO, 2007). The traditional medicine, as an alternative therapy for the treatment of diseases, the aim was to register cultural repertoires involving local ethnobotanical knowledge.

## MATERIAL AND METHODS

### *Study site*

Parish of Penha Garcia is a Portuguese village (42° 2 '35, 58 "N and 8° 60 '42" W) characterized by Mediterranean vegetation. The Freguesie is a small village belonging to Portugal, the area under study is characterized as belonging to the Mediterranean Region, Western Mediterranean Sub-region, Mediterranean-Ibero-Atlantic Province, Luso-Extremaduran Subprovince, Superdistrito Cacerense (COSTA, 1998). For M'Bokolo, (2007), the community consists mainly of elderly people, mostly of European origin and Afro-Portuguese minority, who came after the independence of the former Portuguese colonies in Africa.

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### *Methodology*

We application of ethnobotanical techniques such as semi-structured interviews (Minayo 1994; 2007), direct observation, guided tour and oral history (Meihy 1996). The identification followed Nova Flora de Portugal (Franco, 1984), and vouchers were deposited in LISC (Herbarium of the Tropical Research Institute, Lisbon). In the community data were recorded as the plant uses, forms of uses, used parts, dosages and health-related categories, such as medicines, food, mystical, and religious. The indications were grouped based on the classification of diseases proposed by International Classification of Diseases (ICD 10) of the World Health Organization (WHO, 2014).

### **RESULTS AND DISCUSSION**

The total number of people interviewed was 65, with the majority female (65%). The age ranged from 51 to 102 years, with the majority of those interviewed with elementary education incomplete. In the present community the traditional knowledge is expressive among the elderly and the cultural transmission between the generations is still practiced with the younger generations and predominant religion is Catholic.

An important component in the relationship between traditional populations and nature is the affinity with their territory, a space on which a society claims and guarantees its members, stable rights of access, control or use of the natural resources there that it desires or is capable of using and this space provides the means of subsistence, labor and production and the means to produce the material aspects of social relations (Godelier 1984). The plants used in traditional medicine have a multitude of uses to treat health problems and the number of citations varied according to the number of respondents and / or the size of the community. Species such as *Cucurbita moschata* Dusch is used as food and medicine, *Annona squamosa* L. (food and medicine), *Rosmarinus officinalis* L. (food and medicine – as blood purifier and smoke from leaves burned as personal protection) and *Arnica montana* L. (cosmetic - hyperpigmentation of the skin or in combination with other treatments helps accelerate healing, according to Isui (2015).

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Among the plants used by the local community, the *Mentha pulegium* L. is clearly the most commonly referred plant for the treatment of colds. Recent studies show that Portuguese poejo actually has antimicrobial properties, explaining the qualities that were attributed to the ingestion of tea by the villagers (TEIXEIRA, 2012).

*Calamintha nepeta* L. is the most used herb in the village to minimize menstrual pain. The collection of this plant involves a certain secrecy, according to the informant testimony:

“...the *Calamintha nepeta* (neveda) must be harvested and brought indoors in secret, were it not for the "outsiders", that is, the men, to know that the girl was with the period - the use of the plant in these situations is not at all devoid of scientific background: the spasmolytic and relaxing properties explain the calming effects attributed to it. It is also added to this information that it has different effects at different times of the year: plants harvested in winter have a greater anti-inflammatory and cytoprotective effect, while plants harvested at spring / summer have a more antioxidant effect.) It should be noted, finally, that the secrecy referred to in relation to the harvest of the neveda shows how much the use of the plant is known, even by the men, revealing to the its effectiveness and the corresponding "universalism" of its use.”

Specie *Lithodora diffusa* herb, as a blood purifier, whose use is governed by the ritual of "3, 5 or 7" days (always a number "in pernão", that is, odd) number of annual uses. Studies corroborate that there is indeed a synergistic effect of the plant compounds in the sense of increasing body vasodilation (KREPSY, 2012).

The Malvas are, without exception, referred to as a plant used for treatments of the skin, either for external use (local washes) or for internal use, in ointments or taken as tisane, orally. They are especially referred to with calming effects, both at the level of wounds and at the level of intestinal problems. Currently, its effects on the treatment of constipation (increasing not only the frequency of exits, but also their consistency), but also their anti-inflammatory effects (reducing local edema by reducing the migration of leukocytes to the affected area (USUI, 2015).

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Although the Malvas are the most commonly referred wound treatment plant in this Arnica deserves special attention because it has been indicated by 13 informants as being exclusively used for wounds. For AL Cfe (2012) and Usui (2015), this is often referred to by the older informants as "Hypericão" or "Hypericão da Terra", due to the similarities with the common Hypericão do Gerês, which, although it was referred to and used by some people, was not a plant that could be found nearby. Arnica has currently been the target of studies for its inclusion in cosmetic potentials for the treatment of hyperpigmentation of the skin or in combination with other treatments (microcurrent therapy) to minimize and accelerate wound healing.

As for *Phlomis lychnitis* (popularly known in the community as Salva-brava) a plant long used for digestive treatments, such as bad dispositions and nausea. Such was the efficacy recognized to the plant that although it was not so easily found in the vicinity of the village, it was brought from outside to be stored and used for such evils. This plant was easily found near the Spanish stream, from where it was brought and stocked. According Algieri (2013) more recently, its anti-inflammatory efficacy has been recognized in gastrointestinal disorders, such as Inflammatory Bowel Diseases.

As regards the provenance of medicinal plants, it was found that they were harvested, for the most part, in the countryside. Later they developed in the gardens for the sake of convenience, which were brought from the field previously.

Only recently has a plant salesman emerged in the village (interviewed 11) who sells them to most of the other interviewees who are now aging and are unable to move to the usual collection sites.

It was also mentioned that it was customary to have the sharing of plants among the inhabitants of the village, whenever necessary, and the same with other categories of uses of the products, such as food, ornamental, firewood, etc.

*"... cut a leaf of the fig tree in half, sprinkle it with sugar or honey and then close it again with a string, letting it hang over a bowl, for the sap to drain. This liquid (syrup) is taken for coughs and colds"*  
(Informant V.E. 89 anos).

Most of the deponents stated that the plants are preferentially used more than the drugs of the pharmacy, due to the isolation of the locality in relation to the health establishments. Even for milder illnesses such as colds or stomach aches, it is always easier and cheaper to use the plants than to look for a pharmacy or even a "healer" because they are usually far from the village.

## CONCLUSIONS

The empirical knowledge about the use of plants in the local community is an integral part of Portuguese culture and contributes significantly to the approximation of science.

Ethnobotanical knowledge is very expressive among the elderly, practicing traditional medicine throughout their lives, as a therapeutic alternative for health.

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