

## MEDICINAL PLANTS FROM ȚARA HAȚEGULUI USED IN FOLK MEDICINE

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**Abstract:** *This paper supplies and facilitates access to information regarding medicinal plants from spontaneous flora, to rural people from Țara Hațegului; their harvesting is possible provided the laws for nature protection are observed. In this way, agriculturists can make better decisions regarding the opportunities for new sources of income. The research method relies on collecting information based on a survey applied to people from the researched rural area; thus, a new image on the level of information regarding the use and valorisation of medicinal plants in the research area has taken shape. The locations where we carried out research are Fărcădin, Tuștea, Densuș, Hățăgel, and Sălașul de Jos. Because of the ageing population in the research area, the survey was also applied to the elderly to see how knowledge on the use and valorisation of medicinal plants is transmitter from generation to generation. Analysis allowed the identification of twenty six genus of medicinal plants from the spontaneous flora that are currently used. There is also proper knowledge of the way medicinal and aromatic plants are used from either scientific or fold sources. Medicinal plants are harvested directly from the nature. However, harvesting does not observe the need for recovering the potential of the natural area (it lacks scientific grounds).*

**Key words:** *medicinal plants, folk medicine, spontaneous flora, rural area*

### INTRODUCTION

Nowadays, people tend to appeal to antibiotics when they get sick or to purchase plant mixes or herbal teas from specialised shops despite the fact that the spontaneous flora supplies a remarkable diversity of medicinal plants and that knowing them is good not only for our health but involves minimum effort and low costs. Țara Hațegului is a region that benefits from both historical, and ethnographic and floristic richness. Knowing and valorising this floristic richness can be useful in treating certain conditions and supplying a supplementary source of incomes.

### MATERIAL AND METHODS

The method used in this study was the method of the questionnaire; it contained 12 multiple-choice questions and addressed the elderly because the population in the area is ageing and we needed to see how they transmit knowledge from one generation to another. The sample was made up of 20 people aged 60-78 from the villages of Fărcădin, Tuștea, Densuș, Hățăgel, and Sălașul de Jos.

### RESULTS AND DISCUSSIONS

Favourable climate conditions of Romania produce a remarkable floristic diversity; hence, the large number of medicinal and aromatic plants. In this regard, the study of medicinal plants in the spontaneous flora has been a concern and a priority of specialists. (AGOPIAN, 1973, CONSTANTINESCU ET AL., 1975; ARDELEAN ET AL., 1997; POPESCU, 1984; MUNTEAN ET AL., 2007; IMBREA, BORCEAN, 2004; IMBREA ET AL., 2010; PRODAN ET AL., 2010; IMBREA ET AL., 2011).

Lately, the Romanians have become increasingly interested in natural remedies and in knowing and harvesting different medicinal and aromatic plant species. Most medicinal plants have been long used in folk tradition.

Besides questionnaires, we also collected from the natives data regarding the way these plants are used, recipes, and harvesting, drying, and storing techniques. The questionnaires applied are analysed below.

Question no. 1 „Do you know the benefits regarding the use of medicinal plants in prevention and treating diseases?": the response was yes in percentage of 100%.

Question no. 2 „Do you use medicinal plants in treating diseases?" (Figure 1): 75% of the respondents answered they use medicinal plants in treating diseases, 15% said NO, and only 10% said they sometimes use them. The conclusion based on the information thus collected is that most people in the rural area appeal to plant therapy in treating different conditions.

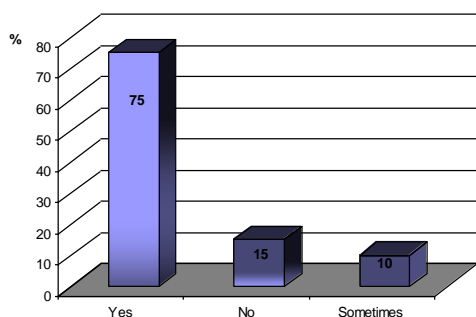


Figure 1. The percentage of medicinal plants used by the people questioned

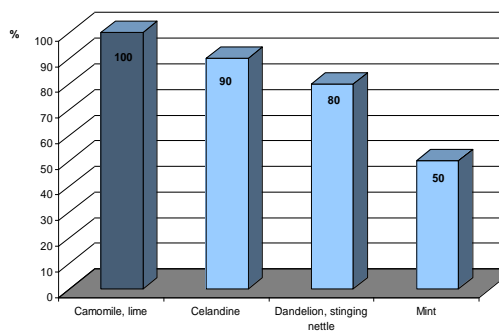


Figure 2. The percentage of medicinal plants used most frequently

Question no. 3 „What medicinal plants do you use most frequently?" (Figure 2): The answers were the ones we expected: 100% of the 26 respondents said they use chamomile and lime, 90% said they also use common celandine, 80% said they use dandelion and stinging nettle, and 50% said they use mint. Other medicinal plants they use are milfoil, common bur, shepherd's purse, etc.

Question 4 „How do you get these medicinal plants?" (Figure 3). The answers were as follows: 50% of the respondents use to harvest them themselves, 40% purchase them on the market from reliable traders, and only 10% purchase them from specialised shops. The conclusion is that, with proper information, the number of people who could get the necessary medicinal plants could increase and that other people from the area could start their own business harvesting and valorising these plants and, thus, increase their income sources.

Question no 5 „How do you use medicinal plants?" (Figure 4). As shown in the figure below, 100% of the respondents use medicinal plants as herbal teas, 20% use them as syrup, and only 10% as tincture.

Question no. 6 „What are the health conditions you treat with medicinal plants?" (Figure 5). We see that 100% of the elderly use medicinal plants externally, 90% use them to treat the respiratory tract, and 70% use them to treat the digestive tract.

Question no. 7 „Are you satisfied with medicinal plants used as medicine?" (Figure 6). As shown in the figure below, 70% of respondents said they were satisfied with medicinal plants, 5% said they were not, and 25% said the treatment was sometimes effective.

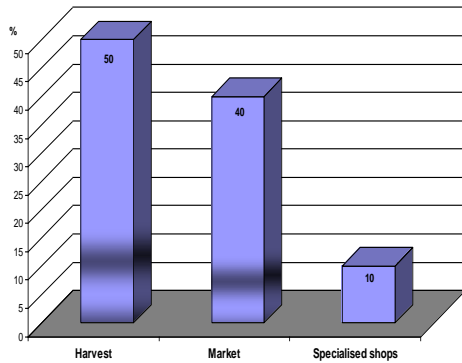


Figure 3. The source of medicinal plant used by the people questioned

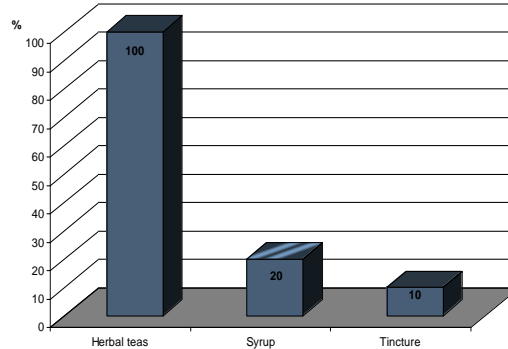


Figure 4. The percentage of how medicinal plants are used

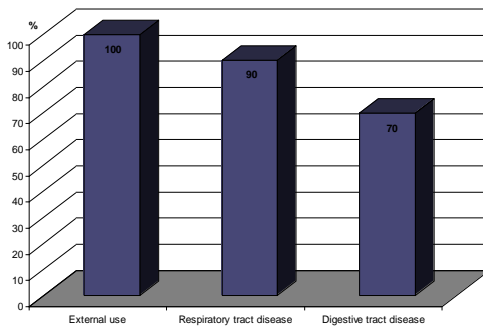


Figure 5. The percentage regarding the health conditions treated with medicinal plants

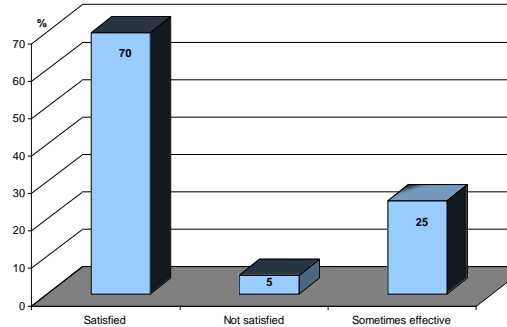


Figure 6. The percentage of the degree of satisfaction of the people

Figure 7 presents the answers to question no. 8 „Do you use medicinal plants by doctor recommendations?": 85% of the elderly said they always used medicinal plants upon doctor's order, and only 15% said they sometimes follow the doctor's order.

Question no 9 „Do you take only medicinal plants or medicinal plants in association with synthesis medicine?" (Figure 8): 30% of respondents said they prefer medicinal plants because they are healthier and effective, 70% said they prefer to combine medicinal plants with medicine (antibiotics) and 0% only antibiotic.

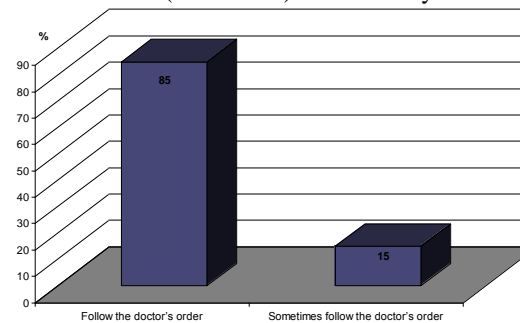


Figure 7. The percentage regarding the reason of using medicinal plants

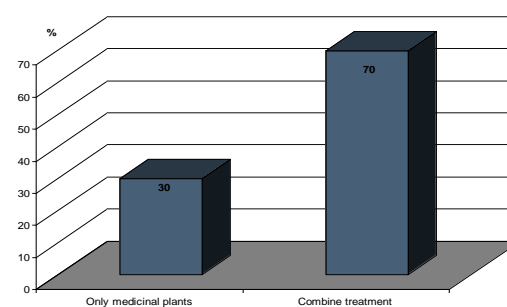


Figure 8. The percentage on the association or not regarding herbal treatments with synthetic drugs

Answers to Question no. 10 „How did you get information related to the use and preparation of medicinal plants?“ (Figure 9) show that 60% of respondents said all the information about the use of medicinal plants were from their parents, their grandparents or the elderly of their childhood, while 40% said they had also read some literature, 0% from TV.

As for the use of aromatic plants from the spontaneous flora (Question 11, Figure 10), 95% of respondents use mint (*Mentha* sp.) most of all aromatic plants, 60% said they use shepherd’s thyme (*Thymus* sp.), 55% said they use cumin (*Carum carvi*), and 10% said they use artichoke (*Cynara scolimus*).

As far as the use of medicinal plants from the spontaneous flora as food is concerned (Question 12, Figure 11), 100% of respondents said they use sorrel (*Rumex* sp.) and stinging nettle (*Urtica dioica*) as foods, 60% also added horse radish (*Armoracia rusticana*), and 25% said they also use wild garlic (*Allium ursinum*).

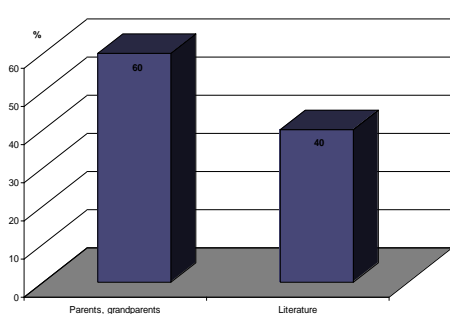


Figure 9. The percentage regarding the way the information was collected

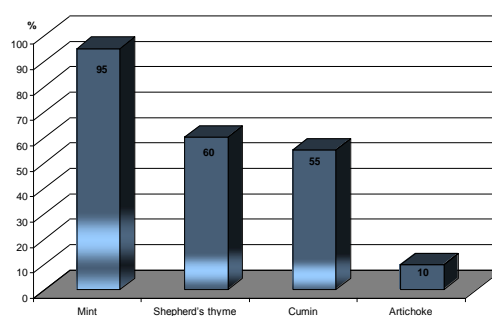


Figure 10. The percentage regarding the most used wild medicinal plants

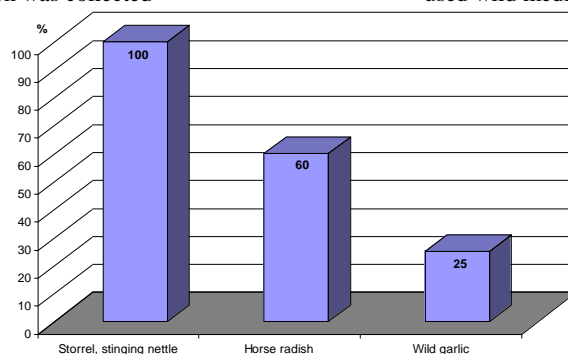


Figure 11. The percentage of wild plants used as food

Though the potential of the area is richer in medicinal and aromatic plants, only 26 genus are used currently: *Arctium lappa*, *Thymus* sp., *Equisetum arvense*, *Achillea millefolium*, *Alchemilla vulgaris*, *Armoracia rusticana*, *Galium verum*, *Allium ursinum*, *Rumex acetosella*, *R. acetosa*, *R. crispus*, *Mentha* sp., *Matricaria chamomilla*, *Malva vulgaris*, *Acorus calamus*, *Taraxacum officinale*, *Plantago lanceolata*, *Lycopodium clavatum*, *Tussilago farfara*, *Epilobium parviflorum*, *Chelidonium majus*, *Salvia* sp., *Eryngium planum*, *Leonurus cardiaca*, *Tilia cordata*, *Capsella bursa-pastoris*, *Urtica dioica*, and *Viscum album*.

The way the respondents use medicinal plants is correct, in accordance with the use mentioned in literature; this shows that information from books or journals are transmitted

from one person to another, in parallel with older information transmitted from generation to generation, getting to replace the latter.

Our interviews with the natives show that harvesting spontaneous flora does not take into account the need to perpetuate species of interest. Uncontrolled harvesting can exhaust harvesting pools producing ecologic unbalance and allowing other species (some of which are invasive, allergenic, weed species) to populate the niches.

Proper harvesting methods are, according to the economic mapping of spontaneous medicinal flora, underground organs (bulb, rhizome, tuber, bulb-tuber) – only about 39% every five years; aerial parts (*herba*) – 30-40% annually; leaves, flowers, fruits, seeds – 40-60% annually (ALEXAN M. *ET AL.*, 1983, BOJOR, 1981).

### CONCLUSIONS

With proper information on medicinal plants from the spontaneous flora and on the benefits for human health, we could increase their level of valorisation and use and set the grounds for new sources of income for the population living in the rural area.

We need to make the population aware of the danger of harvesting medicinal plants in an uncontrollable manner, of mistaking poisonous plants for medicinal plants, of purchasing plants from unauthorised people.

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