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Traditional Uses of Medicinal Plants for Respiratory Diseases in Transylvania

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Inhabitants of some Transylvanian farms in Romania have a valuable archaic knowledge of medicinal plants because of their isolation and the insufficiency of official medical treatment. In this work we present ethnobotanical data about the use of medicinal plant taxa for various respiratory diseases in the villages Lövete and Nagybacon. Altogether 34 plant taxa were documented in Lövete and 26 species in Nagybacon with 15 concordant data of the villages. This information plays an important role in the documentation of the disappearing indigenous medical information of the villages.

Keywords: respiratory diseases, medicinal plants, Lövete, Nagybacon, ethnobotanical survey.

Traditional ethnobotanical health systems feature special curative methods in several regions of the world. People collect and use plants, animals, human materials and minerals in their environment for various diseases treated by unique methods and terminology [1]. Ethnobotanical surveys summarize and detail the human-plant and human-environment relationships based on the collected data of traditional healing knowledge [2]. In the middle of the 20th century several ethnobotanical studies were launched with data collections presenting numerous scientific descriptions about the Transylvanian plant species [3a-3f].

In Transylvania, people speak Hungarian as well as Romanian, which facilitated communication. The vernacular plant names were applied sometimes to more than one species [4], or to other scientific taxa than in Hungary, necessitating field-based correct plant identification by botanists and special works [5a]. In this study ethnobotanical data were collected about the local healing methods involving several medicinal plants in the villages of Lövete [5b] and Nagybacon in Transylvania. Altogether, 143 plant taxa were described in Lövete and 169 in Nagybacon that were used for various illnesses in the everyday life of people. For different respiratory problems the inhabitants of Lövete use 34 species in the form of tea, syrup, vinegar, gargle, rinse, cataplasm and liniment, as opposed to 26 taxa in Nagybacon for the same diseases and in the same application forms, except as a vinegar. The aerial parts, flower, cone, leaf, bark, root, bulb, sap, essential oil, fruit and seed of the plants are used in the villages (Table 1). From the species applied in the two villages, the following plant taxa can be found also in the European Pharmacopoeia 6th: *Agrimonia eupatoria*,

Aloe barbadensis, *Betula pendula*, *Citrus aurantium*, *Citrus limon*, *Crataegus monogyna*, *Equisetum arvense*, *Juniperus communis*, *Lavandula angustifolia*, *Matricaria recutita*, *Origanum vulgare*, *Pinus sylvestris*, *Plantago lanceolata*, *Sambucus nigra*, *Taraxacum officinale* and *Thymus serpyllum*. This collection work has a significant role in conservation and documentation of the valuable indigenous curative information of the settlements.

Experimental

Collection places: One of the studied villages in Romania was Lövete, in the Homoród-valley, which has about 3500 'székely' inhabitants, some of whom are elderly and know and collect medicinal plants. The other village was Nagybacon with about 2000 inhabitants, who use the plants and ancestral practices beside modern phytotherapeutical methods in their everyday life.

Plant materials: Medicinal plants and drug parts were collected in the course of several field trips. Plant taxa were identified as species, but in some cases only at generic level with the identification key of Király [6a], and documented herbaria [6b,6c]. Voucher specimens of each species have been deposited at the Department of Pharmacognosy at the University of Pécs.

Data collection and documentation: Altogether 70 inhabitants were interviewed in the summers of 2008-2010 with a dictaphone (Olympus VN-4100 PC, China) in the villages. The popular plant names were written in *italics* according to the special terminology of the inhabitants. We tried to separate these data from each other and only the elements of inherited knowledge were documented.

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Table 1: Medicinal plants used for respiratory diseases in the studied villages.

Collection place	Scientific plant name	Hungarian vernacular plant name	Used drug part	Application form	Traditional use
L	<i>Aloe barbadensis</i> Miller	doktorlapi, doktorvirág	leaf sap	in raw form	cough
L	<i>Arctium lappa</i> L.	ragodály, keserülapi	seed	tea	cough
L	<i>Betula pendula</i> Roth.	nyír	sap (virics)	drink	cough
L	<i>Brassica oleracea</i> L.	káposzta	leaf sap	in raw form	pneumonia
L	<i>Cichorium intybus</i> (L.) Spreng.	kék katáng	herb	tea	cough
L	<i>Citrus aurantium</i> L.	narancs	essential oil	in raw form	on sugar for cough
L	<i>Citrus limon</i> (L.) Burm.	citrom	essential oil	in raw form	on sugar for cough
L	<i>Dipsacus laciniatus</i> L.	szamártövis	herb	tea	cough
L	<i>Galanthus nivalis</i> L.	hóvirág	flower	tea	with <i>Convallaria majalis</i> for pneumonia
L	<i>Lavandula angustifolia</i> Mill.	levendula	essential oil	in raw form	on sugar with <i>C. limon</i> for cough
L	<i>Malus silvestris</i> (L.) Mill.	valdama	fruit vinegar	cataplasm	cough
L	<i>Matricaria recutita</i> L.	kamilla	flower	tea	cough
L	<i>Potentilla anserina</i> L.	libapimpó	leaf	tea	cough
L	<i>Quercus cerris</i> L.	cserefa	bark	gargle	throat inflammation
L	<i>Rumex acetosella</i> L.	lósóska, lósósdí, kabalasósdí	herb	cataplasm	pneumonia
L	<i>Satureja hortensis</i> L.	csombor	herb	tea	sore throat
L	<i>Sempervivum tectorum</i> L.	körörsza	leaf sap	drink	with <i>Malus silvestris</i> and honey for sore throat
L	<i>Viburnum opulus</i> L.	kányafa, veres kánya	fruit	tea	pneumonia
L	<i>Vitis</i> sp.	szőlő	sticky sap	drink	pneumonia
N	<i>Crataegus monogyna</i> Jacq.	galagonya	flower	tea	cough
N	<i>Daucus carota</i> L. ssp. <i>sativus</i> Hoffm.	murok	root	in raw form	with <i>Armoracia</i> and honey for lung
N	<i>Equisetum arvense</i> L.	fenőfű, zsúrlófű	herb	rinse	throat inflammation
N	<i>Juniperus communis</i> L.	borsika	fruit	tea	asthma
N	<i>Malva neglecta</i> Wallr.	papsajt	herb	tea	larynx inflammation
N	<i>Pinus nigra</i> L.	fekete fenyő	cone	syrup	with sugar for cough
N	<i>Pinus sylvestris</i> L.	lucfenyő	cone	syrup	with sugar for cough
N	<i>Plantago lanceolata</i> L.	hegyes útilapi	leaf	tea	cough
N	<i>Rosa gallica</i> L.	selyemrózsza, fátolrózsza	flower	tea	sore throat
N	<i>Salvia glutinosa</i> L.	erdei zsálya	herb	tea	throat inflammation
N	<i>Tussilago farfara</i> L.	martilapi	flower	tea	asthma
L, N	<i>Agrimonia eupatoria</i> L.	tüdőfű	herb	tea	cough
L, N	<i>Allium cepa</i> L.	piroshagyma	bulb scale	tea	cough
L, N	<i>Armoracia lappathifolia</i> Usteri	torma	root	in raw form	with honey for lung and cough
L, N	<i>Convallaria majalis</i> L.	gyöngyvirág	flower	tea	pneumonia
L, N	<i>Eryngium planum</i> L.	szúrós kotáng/kék tilinkó	herb	tea	cough
L, N	<i>Juglans regia</i> L.	dió	cotyledon	in raw form	cough
L, N	<i>Laurus nobilis</i> L.	babér	leaf	tea	cough
L, N	<i>Origanum vulgare</i> L.	ezerjófű/szűfű	herb	tea	sore throat
L, N	<i>Picea abies</i> (L.) H. Karst.	vörösfenyő/veresfenyő	cone	syrup	with sugar for cough
L, N	<i>Plantago major</i> L.	útilapi/széles útilapi	leaf	tea	cough
L, N	<i>Raphanus sativus</i> L. var. <i>niger</i> J. Kern.	fekete retek	root	in raw form	with honey or sugar for cough
L, N	<i>Salvia pratensis</i> L.	zsálya	flower	tea	throat inflammation
L, N	<i>Sambucus nigra</i> L.	bodza, bojzafa	flower	tea	cough
L, N	<i>Taraxacum officinale</i> Weber ex Wiggers	cikória, lánccvirág/tyúkvirág	flower	syrup	cough
L, N	<i>Thymus serpyllum</i> L.	vadcsombor	herb	tea	cough

Collection places: (L) Lövete, (N) Nagybacon.

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