Erosion of traditional ecological knowledge in Hungary, Central-Europe *MOLNÁR Krisztina, MOLNÁR Zsolt, and BÓDIS Judit* University of Pannonia, Georgikon Faculty, Department of Plant Science and Biotechnology Deák F. str. H-8360 Keszthely, Hungary

<u>Aims</u>

Our aim was to assess people's folk knowledge of plants and compare the knowledge of three generations

Methods

Data were collected during interviews. Photographs of 35 plant species were used. Photos were tested for recognition, and usually showed several salient plant parts and also the whole plant.
Inteviews were made in Sztána and Zsobok villages with families where two or more generations grew up in the village. In total, we made 60 interviews.

• Our questions during the inteviews were:

- Plant name
- Flowering or ripening time
- Habitat preference of the species
- Present and past use of the species
- Beliefs, tales, folk songs, superstitions and legends connected to the species
- Time when the interviewee learnt the name, use or habitat

Research area: Romania, Transylvania, Kalotaszeg, Sztána and Zsobok





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Species list

Trees

- Acer campestre
- Populus tremula
- Fagus sylvatica
- Quercus petraea

<u>Shrubs</u>

- Cornus mas
- Cornus sanguinea
- Euonymus europaeus
- Staphylea pinnataRubus caesius
- <u>Ferns</u>
- *Dryopteris filix-mas* Herbs
- Briza media
- Bromus spp.
- Festuca rubra
- Phragmites australis
- Eriophorum latifolium
- Carex acutiformis

- Asarum europaeum
- Anemone nemorosa
- Sanguisorba officinalis
- Dictamnus albus
- Lychnis flos-cuculi
- Silene latifolia
- Oxalis acetosella
- Rhinanthus spp.
- Amaranthus retroflexus
- Galinsoga spp.
- Centaurea jacea-micranthos
- Xanthium italicum
- Sonchus spp.
- Carduus acanthoides
- Cirsium oleraceum
- Tussilago farfara
- Dipsacus spp.
- Neottia nidus-avis
- Orchis purpurea



1. picture: Landscape of Zsobok



3. picture: Sztána, stream valley

Living traditions

Cornus mas: It can be used in various ways. Its spirit is valuable, the compote pulls fever and is good againts diarrhea

Dipsacus spp.: Some old ladies still remember the old joke that if girls wash their hair with the water which is collected on the leaf after rain they will have a strong and beautiful hair.
Tussilago farfara: It is regarded as two folk taxa, only some knew that the leaf and blossom belong to the same taxon.
Fagus sylvatica: On 1st of May boys bring a branch for the girls. They use it in various ways.
The leaf is edible, oil can be made of its acorns.



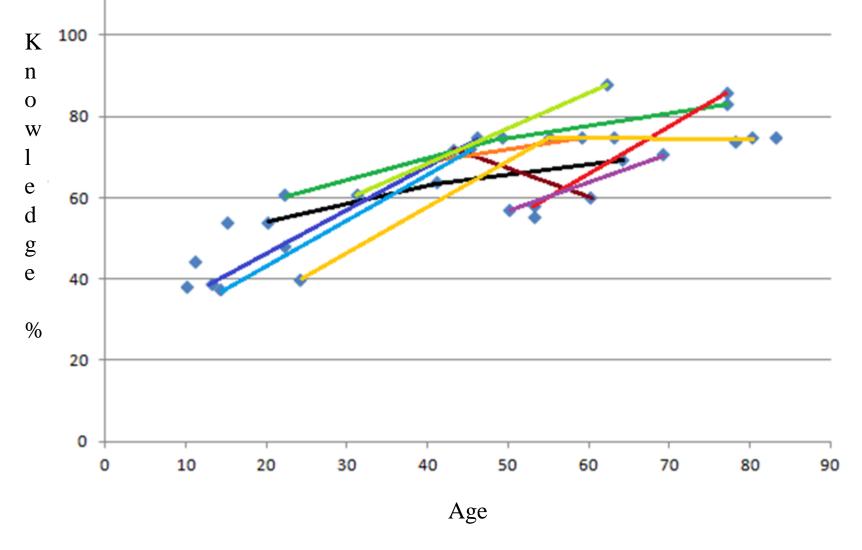
2. picture: Meadow by the spring, at the border of Sztána and Zsobok



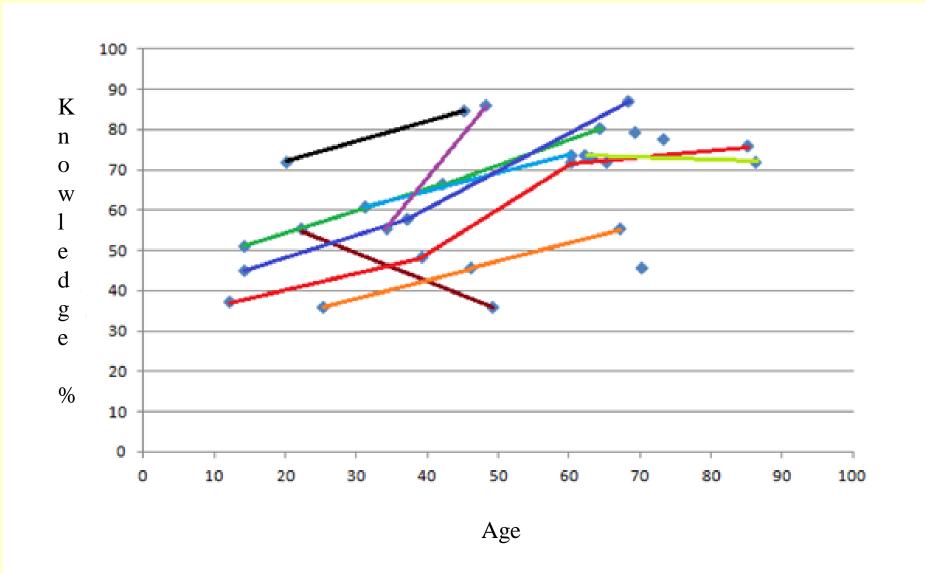
4. picture: An interview(Photo by Miklós Óvári)

Results





Sztána - knowledge difference between generation



Conclusions

The amount of knowledge is dramatically reduced from generation to generation. Compared to grandparents parents knew only 50-60% of the plants studied. (We are planing further analyses to determine if it can be considered to be a knowledge erosion in the community. We are interested at what age the three generations have learnt their plant knowledge. Knowledge loss is also greatly influenced by the way people live, the nature of their work, hobbies, economic and social situation. Nowadays people do not work in farming, so they do not need a thorough knowledge of plants.

60% of the grandchildren learn from their grandparents, because their parents work and the grandparents look after them.

In 70% of the cases people knew the plants at least by sight, they knew where they grow, when they bloom. Names and uses were much less known.

Each person creates some new names for some plants. Usually based on a salient feature. E.g.: *Xanthium italicum*—hedgehog after its fruits; *Briza media*- fish plant, after the shape of the fruits.

Acknowledgements

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<u>Sztána</u>

Ágoston Árpád (62)Bódis Borbála (77)Ágoston István Pál (31)Bódis István (53)Ágoston Jancsi Edit (40)Bódis Szabolcs (22)

<u>Zsobok</u>

Ambrus Ferenc Endre (25)Ruzsa Gyuri Jenő (69)Ambrus Ferenc Irén (46)Ruzsa Gyuri Katalin (60)Gál Bancsi Erzsébet(78)Ruzsa Gyuri Márton (65)

Zsobok - knowledge difference between generation

Colours represent a family.

In Zsobok we found a four generation family (red line). The 85-year-old great-grandmother knew 76% of the plants. In her case ageing has to be considered (presumably her knowledge was bigger). The grandma (60-year-old) knew only 72% of the plants. Her age group still works in agriculture. The mother (39-year-old) knew 48%, the grandchild (14-year-old) only 45%. The sudden knowledge loss between grandparents and parents were caused by social and economic changes. The parents age group works in towns, agriculture is done only as a part-time job.

Agoston Jancsi Erzsébet (59) Ágoston Jancsi Erzsébet (69) Ágoston Jancsi Ottó (50) Ágoston Palkó István (77) Bálint András (80) Bálint Mónika Andrea (11) Berecz Erzsébet (83) Berecz István (55) Berecz Magdolna (46) Berecz Renáta (24) Blényesi Éva Katalin (45) Blényesi Henrietta Éva (14) Bódis Abigél (13) Bódis Attila (49)

Dániel Katalin (78) Fábián Magda (53) Gál Elemér (43) Gál Judit (60) Lőrincz Erzsébet (64) Sando Marton Cristian (15) Szabó Mónika (22) Szőke Judit (44) Török Erzsébet Csilla (41) Török Erzsika (87) Török Szilárd János (20) Vincze Attila (69) Vincze Róbert Attila (10) Gál Bancsi Gyula (87) Ruzsa Judit Zsófia (14) Gál Bancsi Ilona (68) Szalai Andrea (14) Szalai Béláné (85) Gál Jankó Gerlinda (31) Gál Kovács Kata (67) Szalai Ernő (45) Gál Piroska (64) Szalai Erzsébet (69) Kispál Erzsébet (70) Szalai Gyuri Katalin(60) Kispál Ferenc (73) Szalai Ilonka (70) Kispál Jolán (37) Szalai Ilona (60) Kispál Júlia (12) Szalai Jolán (39) Szalai Magdolna (65) Korpos Gergő (22) Korpos Irén (49) Szalai Zsolt (20) Korpos Kata (72) Tárkányi Gornyik Kata (63) Ruzsa Erzsébet (42) Török Kata (48) Ruzsa Gyuri Erzsébet (62) Varga Imre Hajnalka (34)