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FOREST TREES IN ROMANIAN TOPONYMY

Andra Simon [1], Georgiana Arsene [1], Emilia Vechiu [2], Cristian Mihai Enescu [3*]

[1] Faculty of Agriculture, University of Agronomic Sciences and Veterinary Medicine of Bucharest, 59 Mărăşti Boulevard, Bucharest-011464, România
[2] "Marin Drăcea" National Institute for Research and Development in Forestry (INCDS), 13 Cloşca Street, Braşov-500040, Romania
[3] Department of Soil Sciences, University of Agronomic Sciences and Veterinary Medicine of Bucharest, 59 Mărăşti Boulevard, Bucharest-011464, România

Abstract
According to paragraph (3) of Article 3 of Romanian Constitution, the territory is organized in communes, cities and counties. Currently, there are 41 counties, plus Bucharest, 324 cities (including municipalities) and 2861 communes, with a total of 12.957 villages. The aim of this study was to highlight the relation between the names of the localities and the forest tree and shrub species found in Romania. The names of a total of 456 localities were related with the names of the forest tree and shrub species. Both hardwood and coniferous species were well represented, the names of the localities related with the softwood species being more common in mountainous regions. The most common names of the localities were related to silver fir, Cornelian cherry and the oaks. In most of the cases, a strong correlation between the natural distribution range of forest tree and shrub species and the names of the localities was found.These results suggest that Romania is a country with a strong forestry-related heritage.

Keywords: commune, forests, toponymy, Romania.

1. INTRODUCTION

According to paragraph (3) of Article 3 of Romanian Constitution, the territory is organized in communes, cities and counties. Currently, there are 41 counties, plus Bucharest, 324 cities (including 107 municipalities) and 2.861 communes, with a total of 12.957 villages (INS, 2017). The distribution of the communes and cities at the county level is not uniform, Suceava County being in the top in both cases (Figure 1).

It is well known that the current territory of Romania was inhabited since the Iron Age by the Thracians and other populations who led their traces in the nowadays toponymy (Janitsek, 2004-2005; Buza, 2011; Cizer, 2011). Perhaps the most known forestry-related terms are *Bucovina*, that was given by the Austrians at the end of the 18th century, and *Transilvania*, which according to the Hungarians means the land beyond the forests (Nicolae, 2007). Another example is the word *copac*, that is very similar with the Albanese word *kopaç* (meaning *trunk* or *piece of wood*) and it is estimated to be a very old one, being mentioned around 10th-11th centuries (Botnaru, 2013).

*Corresponding author, E-mail address: mihaienescu@agro-bucuresti.ro

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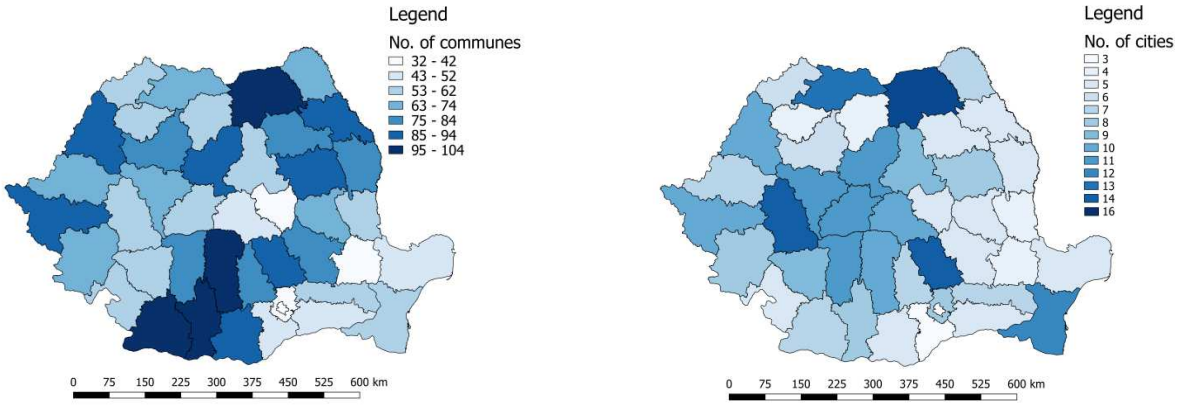

Figure 1. *Distribution of the communes (left) and the cities (right) across Romania*

As regards the drymonyms (names of forests), the suffix *–iş* is one of the most used in Romanian toponymy (Loma, 2008), *aluniş*, *cărpiniş* and *stejăriş* being among the most common composed words, meaning a forest dominated by common hazel (*Corylus avellana* L.), common hornbeam (*Carpinus betulus* L.) and oaks (Genus *Quercus* L.), respectively. Another example is the suffix *–et*, *pinet* (a pine-dominated forest) and *frăsinet* (an ash-dominated forest) being among the most common words (Botnaru, 2006).

According to an inventory of toponyms indicating the presence of forest stands, it is estimated that in the past about 80% the current territory of Romania was occupied with forests (Costea, 2013), suggesting a strong relationship between the inhabitants and the foreststands. A similar connection was found to be also in the case of the mushrooms (Dincă et al., 2016).

By analyzing on the whole the Romanian forest terminology there is no doubt of its Latin origin,the word *pădure* (forest), that is originating from the Latin word – *padūlem* being perhaps the best proof (Botnaru, 2006, 2012).

The aim of this study was to highlight the relation between the names of the localities and the forest tree and shrub species found in Romania.

2. MATERIALS AND METHODS

The first step of this study was the identify the list of all 13.281 localities (324 cities and 12.957 communes) from Romania. The main source of information as regards the names of the localities was the website Wikipedia.

The second step consisted in centralizing the names of the localities for each county, separately for cities and villages, respectively. Afterwards, only the simple and composed names that were related to forest tree and forest shrub species were taken into consideration.

In the case of the most common names, the distribution maps were done by using theopen-source cross-platform desktop geographic information system application QGIS, version 2.18.

3. RESULTS AND DISCUSSIONS

The names of a total of 456 localities (3.43% of the total localities) were related with the names of the forest tree and shrub species. The county with the lowest number of forest trees or shrubs-related names was Satu Mare (two localities), while in the case of Prahova County the highest number of localities (30) was recorded. The majority of the names was found in the counties across Carpathians, where the forests are well represented (Figure 2).

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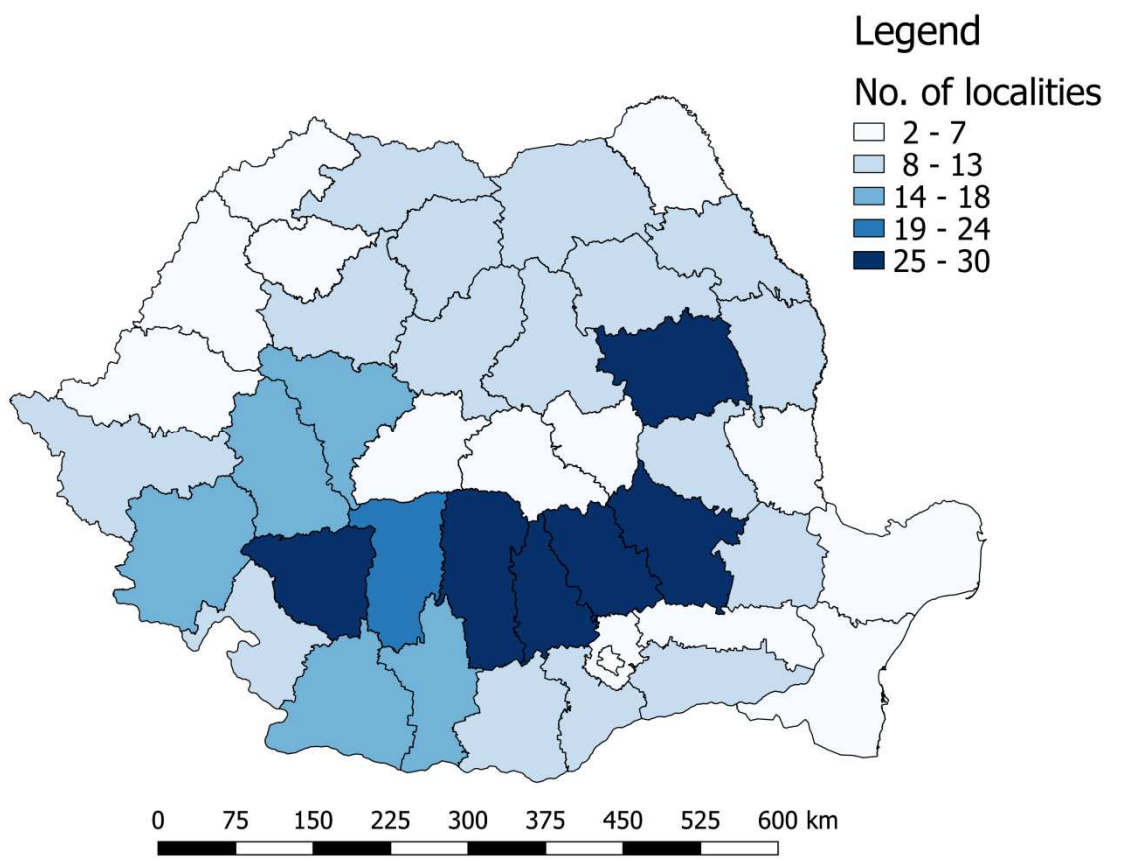

***Figure 2**. Distribution of the forest trees and shrubs-related names of the localities at county level*

A total of 31 genera were represented, out of which 4 were representatives of softwoodspecies (genera *Abies* Mill., *Picea* Mill., *Pinus* L. and *Taxus* L.), the names related with the silver fir (*Abies alba* Mill.) being the most common ones. Silver fir forests account for about 5% of the total forested land from Romania, but the current area is lower than it used to be 200 years ago (Scărlătescu et al., 2012).

The top three was completed by the names related to genera *Cornus* and *Quercus* (Figure 4). If in the case of silver fir and the oaks no doubts exist as regards the meanings of the common words (*brad* and *stejar*, respectively), the word *corn* could have two meanings, namely the shrub Cornelian cherry (*Cornus mas* L.) or the horns of the mammals. In the generic group *stejar* it was also included the word *gorun* that in Romanian language represents the sessile oak [*Quercus petraea* (Matt.) Liebl.].

On the following positions, the willows and poplars-related names appeared. This could be explained by the distribution of the representatives of genera *Salix* L. and *Populus* L, especially the white willow (*Salix alba* L.), Babylon willow (*Salix babylonica* L.), silver poplar (*Populus alba* L.) and black poplar (*Populus nigra* L.) across Romania.

The main forest tree species from Romania, namely the beech (*Fagus sylvatica* L.), that according to recent statistics accounts for 31.5% of the forests in Romania (MMAP, 2016), ranked on the eighth position, being followed by another well-known shrub species, namely the hazel (*Corylus avellana* L.).

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Surprising results were recorded for Norway spruce [*Picea abies* (L.) H. Karst.], which ranked on the last position. This could be explained by the fact that the general public is not able to make the difference between the silver fir and the Norway spruce, the Romanian word for *A. alba* (*brad*) being more common in folklore, literature, etc.

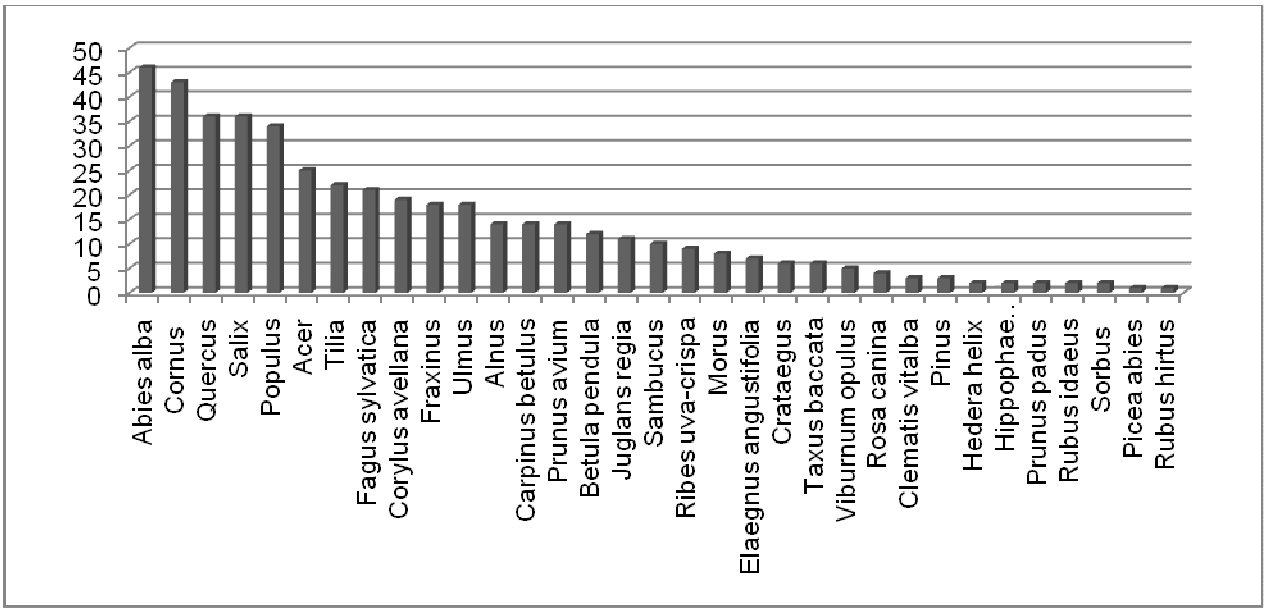

Figure 3. *Representativeness of the forest trees and shrubs-related names of the localities in Romania*

These results could provide insights regarding the past distribution range of some rare species. It is the case of the yew (*Taxus baccata* L.), a tertiary relict shrub species, with a sporadic distribution in beech-fir forests (Togor and Burescu, 2012). According to our results, six names of localities are related to the Romanian word *tisă* (yew), namely Tisa (present in Bacău, Hunedoara, Maramure and Prahova Counties), Tisa-Silvestri (Bacău County) and Tisău (Buzău County). The decline of the yew at European level, including Romania, was due to its extremely toxicity, which led to its removal in many forests (Benham et al., 2016), being reported that it was implicated in several human and animal poisonings (Perju-Dumbravă et al., 2013).

Last but not least, a correlation between the natural distribution range of some species and the occurrence of the names of the localities related to certain tree species was found. For example, in the case of the silver fir, most of the localities were located in counties situated across the Carpathians, such as Prahova, Arge and Hunedoara Counties (Figure 4). Similar results were obtained also in the case of the oaks, Gorj and Vâlcea Counties being in the top (Figure 4). This could be explained by the high percentages of several autochthonous oak species in the region, such as the Turkey oak (*Quercus cerris* L.), Hungarian oak (*Q. frainetto* Ten.) or pedunculate oak (*Q. robur* L.).

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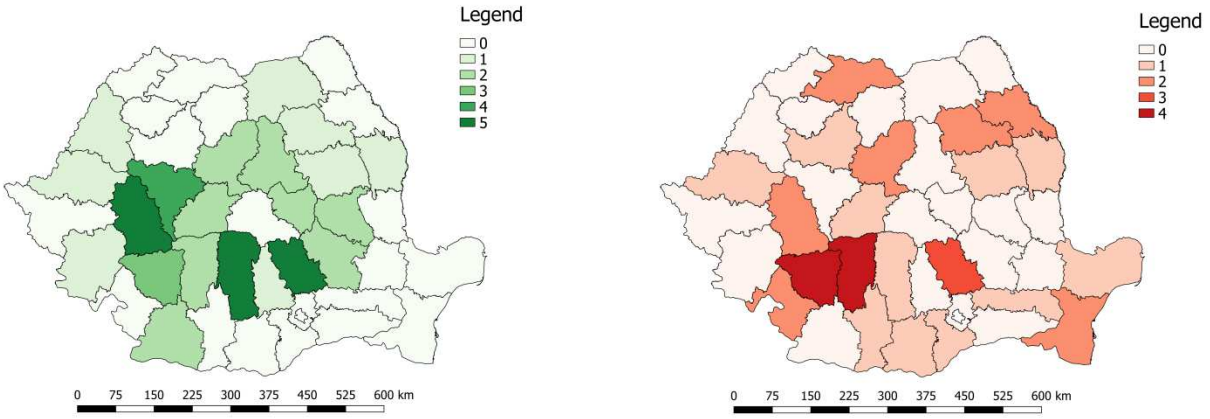

Abies alba *Quercus spp.*

***Figure 4**. Representativeness of the silver fir and oaks-related names of localities at national level*

4. CONCLUSIONS

If we take into account the list of the forest trees and shrubs-related toponyms, we can conclude that Romania has a strong forestry-related heritage.

The main tree species, as regards the area of the forests, were very well represented, with the exception of Norway spruce which could be very easy confused with the silver fir.

In most of the cases, a correlation between the current distribution range of the species and the number of the trees and shrubs-related names of the localities was found.

These findings could also be used for reconstruction of the past distribution range of some rare species or to locate the forest stands situated at the limits of the distribution of certain forest tree species in Romania.

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