PLANTS FROM FORMER VLAŞCA COUNTY THAT ARE PRESENT IN "ALEXANDRU BELDIE" HERBARIUM

Cătălin-IonelCIONTU^{1*}, LucianDINCĂ²

¹ "Marin Drăcea" National Institute for Research and Development in Forestry, Timișoara, Romania

² "Marin Drăcea" National Institute for Research and Development in Forestry, Brașov, Romania

* Correspondence author. E-mail: * Ciontu_Catalin@yahoo.com

Abstract. The present paper aims to present the plants collected from former Vlasca County that can be found in one of the most important Romanian grasslands - "AlexandruBeldie" Herbarium of "Marin Drăcea" National Institute for Research and Development in Forestry. The former Vlasca County, whose Slavic name means "Vlahilor Country", is located in the southern part of the country and has known, in ancient times, the Roman domination, then that of Byzantium. Giurgiul derives its name from a Genoese settlement that flourished here especially after the establishment of the Latin Eastern Empire. The county was located in the southern part of Greater Romania, in the southern part of the historical region of Muntenia, in the plain part of it, next to an old ford of the Danube. In 1938, the county was disestablished and incorporated into the newly formed Tinutul Arges, but it was re-established in 1940 after the fall of Carol II's regime - only to be abolished 10 years later by the Communist regime. The population of the county after the 1930 census was 296,412 inhabitants. "AlexandruBeldie" herbarium from "Marin Drăcea" National Institute for Research and Development in Forestry systematizes and presents different species collected from the former Vlasca County, amounting to 71 species and 151 specimens. These are presented according to their harvesting place and year, as well as the name of the specialist who harvested the plant. Also, additional criteria can be found, such as: drawer number, voucher number, botanical collection, species name, date of harvest, place of harvest, specialist who collected and / or determined the species, as well as the degree of conservation, classified on a scale from 1 to 4, where 1 represents a very good conservation and 4 represents a very poor conservation state. The conclusions present some special aspects regarding these species from Herbarium, collected from the former Vlaşca county.

Keywords: Vlaşca County, herbarium, botanic collection, species

INTRODUCTION

Highlighting local history in the context of national history and even international is a constant concern of Romanian historians from the past and from present. This line of concern is included in this work as well wishes to contribute to bringing to light the history of Vlaşca county by presenting the most common and numerous species from the grass "Alexandru Beldie" from the National Institute for Research and Development in Forestry "Marin Drăcea" collected from the territory of the former county.

Vlașca County was a first-order administrative unit in the Kingdom of Romania, located in the historical region of Muntenia. The county seat was Giurgiu.

The county was located in the southern part of Greater Romania, in the south of the Muntenia region. The county was bounded on the west by Teleorman county, on the north-west by Argeş county, on the north by Dambovita county, on the east by Ilfov county, and on the south by

Bulgaria. Its surface largely coincides with that of the present Giurgiu county, but there are small portions of it in Teleorman County today.

The relief is a plain that, in the north of the county, approaches 150 m altitude; it is separated in numerous bands by the right tributaries of Argeş; to the south, however, there is a single plain, (the plain of Burnasului), which is over 80 m high and bounded on the north by the VE depression through which flows Câlniştea, which stretches across the entire width of the county and falls in steps (terraces) towards the wide meadow, with ponds of the Danube. The Plain of Burnas is, in fact, a larger morphological unit, passing both in Ilfov County, towards the East, and in Teleorman County, towards the West. The two relief regions of the county correspond equally to the vegetation regions: the Nordic plain includes associations of oak forests (the real and the old Vlaşcă - Vlăsia - that is, a place owned by a Romanian population); and Burnas, a steppe in which the grasslands predominate, interrupted to the line of Câlniştei by several oak logs (Comana). The Danube Basin, finally, includes associations of reeds, mosses and white essences, especially willows and poplars (https://wikipedia.org).

"Marin Drăcea" National Institute for Forest Research and Development from Bucharest hosts a herbarium created in 1929, "AlexandruBeldie" Herbarium. Inscribed in Index Herbarium and having the international BUCF code, the herbarium contains approximately 40.000 vouchers (CHISĂLIȚĂ et al., 2017; VECHIU ET AL., 2018; DINCĂ M. ET AL., 2017).

The Herbarium was developed thanks to the work realized by important personalities interested in collecting and determining varied plants. In this regard, the Herbarium was named after AlexandruBeldie, one of the most important Romanian botanists who has dedicated his life to studying the flora from Bucegi Mountains (BELDIE, 1967; BELDIE, 1972).

In addition to the species collected from the former Vlaşca County, this herbarium also contains:131 *Aconitum* species(CIONTU, et al., 2019), 97 *Epilobium* species (CIONTU, et al., 2019) 41 *Polygonum* species (VECHIU et al., 2018), 15 *Veronica* species (DINCĂ et al., 2017), 69 *Potentilla* species (CRIŞAN V.et al., 2017), 19 *Scorzonera* species (DINCĂ et al., 2017), 15 *Ornitogalum* species (ENESCU et al., 2017), 80 *Trifolium* species (Cântaret al., 2018), 21 *Agrostis* species (Cântaret al., 2019) and 19 *Centaurea* species (DINCĂ et al., 2017).

MATERIALS AND METHODS

The studied material was represented by "AlexandruBeldie" herbarium's collection. The plants harvested from former Vlaşca County were selected from this herbarium and systematized based on the species, the specialist who has gathered them and the harvesting's place.

The systematization method included each plant harvested from former Vlaşca County and then organizing them based on a number of criteria such as: herbarium drawer number, drawer voucher number, botanic collection to which it belongs, species name, harvesting date, harvesting place, the specialist that has collected and/or determined it, as well as the plant's conservation degree. This last aspect was graded on a scale of 1 to 4, where 1 means a very good conservation state and 4 a poor conservation state (table 1).

Table 1
Plants harvested from formerVlaşca County present in
"AlexandruBeldie" Herbarium- excerpt

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Drawe r Numb er	Vouche r Numbe r	Herbarium/Botanic Collection/Institution(from the herbarium's voucher labels)	Species Name	Harvesting Date	Harvesting Place	Collected/ Determine d by:	Conservatio n Degree (14)
36	124	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	?	1945.05.19.	VlascaCount y, Comana	I. Morar	2
2	4	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Abutilon theophrasti	1942.04.11.	Vlasca County,Bane asa forest	I. Morar	1
6	2	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Acer campestre L.	1938.05.15.	Vlasca County,Com ana forest	Lupu	1
6	122	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Acer campestre L.	1931.07.06.	Vlasca County,Com ana forest	C. Georgescu	2
5	89	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Acer tataricum L.	1938.05.15	Vlasca County,Com ana forest	I.Lupe	1
15	56	ICEF	Agropironrep ens (L.)P. Beauv.	1934.07.25.	Vlasca County, Ghimpati	M. Petcut, P. Cretzoiu	1
13	105	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Ajugareptans L.	1939.04.23.	Vlasca	Al. Bledie	1
30	2	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Amaranthusa lbus L.	1942.08.01	Vlasca District	I.Morariu	1
30	9	I.Morariu Herbarium	Amaranthusa ngustifolius Lam.	1944.08.26	Vlasca County, Ghimpati	I.Morariu	1
30	10	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Amaranthusa ngustifolius Lam.	1942.08.06	Vlasca County,Bane asa Forest	I.Morariu	1
30	11	I.Morariu Herbarium	Amaranthusa ngustifolius Lam.	1944.08.01	Vlasca County, Ghimpati	I.Morariu	1
30	71	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Amaranthusr etroflexus L.	1942.10.17	Vlasca	I.Morar	1
32	48	??	Anemone ranunculoide s L.	1933.04.01	Comana village,Vlasc a	P.Cretzoiu	1
32	54	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Anemoneran unculoides L. f.latifoliawbc	1947.04.04	Comana village,Vlasc a	I.Morariu	1

	36	129	Bucharest Polytechnic's Herbarium, Silviculture Faculty, Botanic Laboratory	Anthriscusce refolium L.	1938.05.15.	Vlasca County	I. Lupe	1	
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RESULTS AND DISCUSSIONS

"AlexandruBeldie" Herbarium from, Marin Drăcea" National Institute for Research and Development in Forestry contains 71 species and 151 plants collected from former Vlașca County.

The most common and numerous species present in this county are: *Quercus pedunculiflora x Q. pubescens* (35 vouchers), *Quercus pubescens Willd*.(14 vouchers), and *Cytisus austriacus L*. (4 vouchers).



Fig. 1 QuercuspedunculifloraFig. 2 Quercus pubescens Willd.
(Photo: Yonatan Matalon-http://www.colorfulnature.com) (Photo: S. Filoche-https://inpn.mnhn.fr)



Fig. 3*Cytisusaustriacus* (Photo: TatjanaSova-http://ukrbin.com)

The plant's harvesting period was between 1903 and 1958, with a maximum during 1941-1950, when the collection was enriched with 87 samples(fig.4). The oldest plant harvested from Vlaşca County and kept in the herbarium is Rubuscaesius L., collected in 1903 by Iacobescu M. in Comana Forest. The plant is still kept in good conditions.

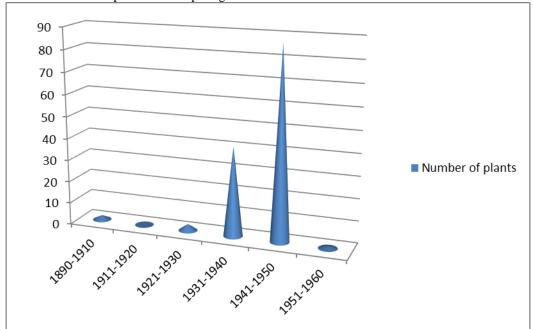


Fig. 4. Harvesting periods for plants hosted in INCDS Herbarium from former Vlaşca County

The samples were gathered by Romanian specialists (Al. Beldie, C. Georgescu, I. Morariu, I. Petcu, M. Iacobescu, S. Pascovschi, M. Badea, M. Petcuţ, P. Cretzoiu, DimonieIacobescu, I. Lupe, I. Morar, N. Celac).

The data contained by each herbarium voucher has allowed for the creation of a county map regarding harvesting locations and the maximum development periods (Fig. 5). It can be observed that the majority of plants were harvested from the county's central and southeast parts.

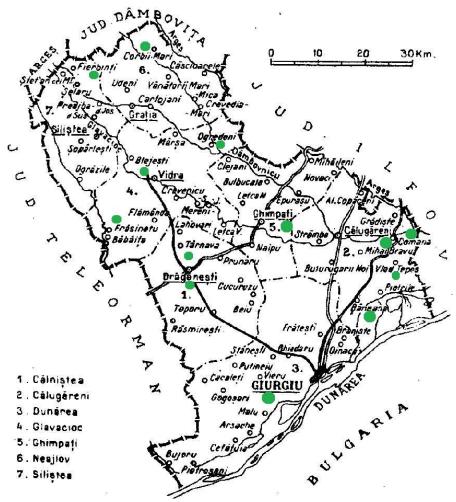


Fig. 5. The map of harvesting places for plants present in "AlexandruBeldie" Herbarium from former Vlaşca County

CONCLUSIONS

"Marin Drăcea" National Institute of Research and Development in Forestry hosts a herbarium that has the name of a famous Romanian botanist, "AlexandruBeldie" Herbarium. This herbarium in inscribed in Index Herbariorum and contains approximately 40.000 vouchers that are organized in 600 drawers.

The samples harvested from Vlaşca County and present in the above-mentioned herbarium have an exceptional historic value, with the oldest sample dating back to 1903 (a Rubuscaesius L. sample, harvested in 1903 by Iacobescu M. in Comana forest).

As is illustrated in Figure number 5, the plant's harvesting was achieved on the entire surface of Vlasca County, with a focus in the central and southeast parts.

In regard with the harvesting period, this was mainly situated between 1903 and 1958, with a maximum during 1941-1950. This last period has enriched the herbarium with 87 samples, even though from an historic point of view, the period coincided with the Second World War. This did not impede our specialists(Al. Beldie, C. Georgescu, I. Morariu, I. Petcu, M. Iacobescu, S. Pascovschi, M. Badea, M. Petcuţ, P. Cretzoiu, Dimonielacobescu, I. Lupe, I. Morar, N. Celac)in leaving us a wonderful heritage: AlexandruBeldie Herbarium.

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