

# RESEARCH AND VALORISATION HISTORY OF MINERAL WATERS IN BRAȘOV COUNTY

MEREȚ RODICA<sup>1</sup>, ZAHARIA LILIANA<sup>2</sup>

**ABSTRACT.** Research and valorisation history of mineral waters in Brașov county. There are different types of mineral water in several settlements of Brașov County, such as Perșani, Rodbav, Homorod, Rupea, Codlea, Grid, Veneția de Jos, Zizin, Târlungeni, etc. This paper aims to briefly present a history of research and valorisation of mineral waters within the main settlements of Brașov County. It is based on relevant information extracted from pertinent scientific papers, archival research, interviews with local people and authorities, and field observations performed between 2010 and 2013. The paper highlights novel aspects with regard to the first mentions and descriptions of the county's mineral waters, exploitation facilities and their current state.

**Keywords:** mineral waters, exploitation, spa resorts, Brașov County.

## 1. INTRODUCTION

Mineral waters have been known and used in Romania since ancient times. There are numerous artefacts belonging to the Roman period that confirm their use for healing purposes. Starting with the second half of the 18<sup>th</sup> century, but especially in the 19<sup>th</sup> and the beginning of the 20<sup>th</sup>, increasingly more written mentions of mineral waters can be found, and their exploitation begins based on medical recommendations. Dr. Ștefan Vasile Episcopescu, in "*Apele Metalice ale României Mari*" (*Metallic waters of Greater Romania*) (1837) quoted by Berlescu (1971), highlights the importance of mineral waters and of their exploitation in Romania, and Dr. Anastasie Fătu, in his *Descrierea și întrebuințarea apei comune și a apelor minerale din România* (*Description and use of common and mineral water in Romania*) (1874) quoted by Berlescu (1981), details all theretofore known mineral waters in Romania (this paper is considered to be the most important Romanian study in the field up to that time).

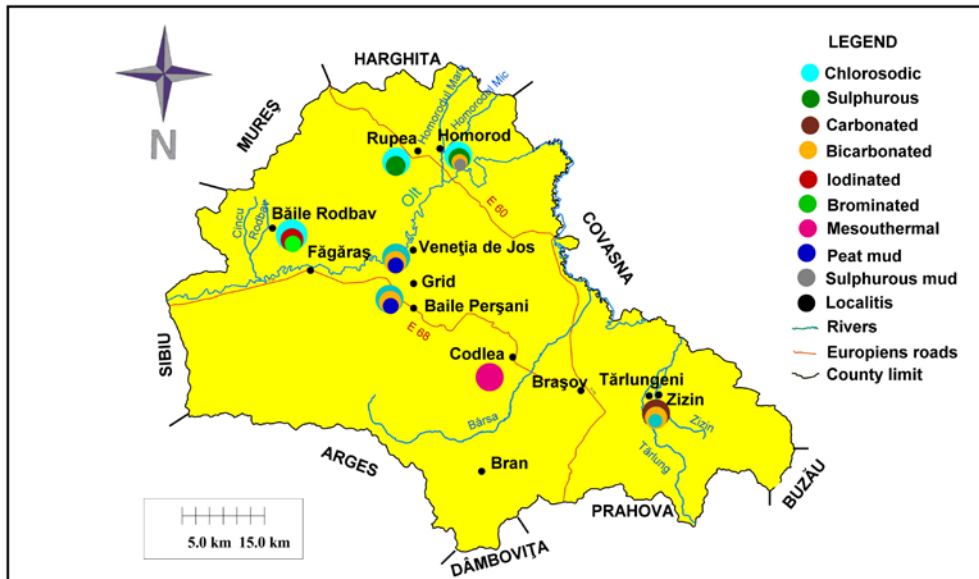
This paper aims to highlight representative issues regarding the research and valorisation history of mineral waters in the main Brașov County settlements, which have become small seasonal or permanent spa resorts of local interest: Zizin, Perșani, Rodbav, Homorod, Rupea, Predeal, Codlea, Veneția de Jos - "Băile Sărata" (Fig. 1). We believe that, through the data it provides - the first mentions

---

<sup>1</sup> Secondary School No. 19, Brașov, Romania  
e-mail: kanord2908@yahoo.com

<sup>2</sup> University of Bucharest, Faculty of Geography, Bucharest, Romania  
e-mail: zaharialili@hotmail.com

and descriptions of the mineral waters, exploitation facilities and their current state-, this paper is of interest and relevant to completing and updating the existing information on the county's mineral waters and on their past and present use.



*Fig. 1. Location and typology of mineral waters in Braşov County*

## 2. DATA AND METHODS

This paper is based mainly on the use of three types of data: 1) information extracted from pertinent scientific papers (including cartographic documents); 2) information obtained from archival documents (studies, photographs) retrieved from the Braşov County State Archives and 3) information obtained by field investigations between 2010 and 2013 (interviews with city hall representatives, locals from the study area, personal observations on mineral water springs and on the current state of the formerly spa resorts).

The main methods were analysis, synthesis, observation, and the mapping of mineral water spring municipalities. The mapping operations entailed the use of GIS techniques (ArcGIS 10.1).

## 3. HISTORICAL MILESTONES OF MINERAL WATER KNOWLEDGE AND EXPLOITATION

Among the first writings on the mineral waters of Braşov County, the work of Lucas Wagner (1773), and Francz și V.F. Tauche's *Sinapsia fontanae Austriae* (1777-1779), published in Vienna (Greissing, 1855), stand out. Balázs Orbán's *Description of the Székely Land (Descrierea ținuturilor secuiești)* (1873) refers also to Transylvanian mineral waters, with details on Zizin Spa. Dr. Hankó Vilmos

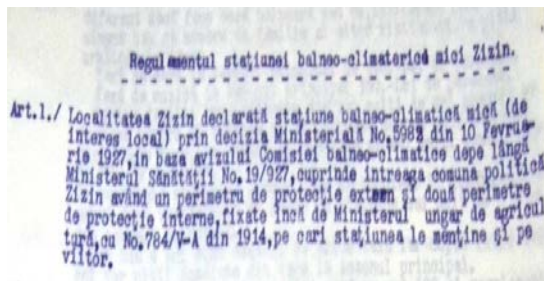
writes about the mineral waters in Zizin in his *Description of the spas and mineral waters in Transylvania (Descrierea băilor și apelor minerale din Ardeal)* (1891), and about the ones in Rupea in the brochure "*Băile Rupea*" (Rupea Spa) (1914), focusing on their therapeutic properties.

The doctors E. Țeposu and L. Câmpeanu, in *Transylvanian mineral waters and spas (Apele minerale și stațiunile balneo-climaterice din Ardeal)* (1921), analysed the mineral waters at Zizin, Tărlungeni, and Cohalm (Rupea) Spa. Mircea Pascu, in *Quarries and mineral waters in Romania (Carierele și apele minerale din România)*, 1927), mentions the mineral waters at Rupea, Homorod, Mercheașa, Zizin, Tărlungeni and the sulphurous water spring in the Gârcinului Valley. Information on the mineral waters in Predeal can be found in *Romanian mineral waters and climatic health resorts (Apele minerale și stațiunile climaterice din România)*, published by Al. Șaabner-Tuduri (1906). E. Berlescu (1971) and A. Pricăjan (1985) also describe mineral water sites in Brașov County. The 1994 issue (no. 76, Munich, Georgstag) of the Zeidner Gruss newspaper featured extensive information on the Codlea Resort.

**Zizin mineral waters.** Zizin village is located 16 km east of Brașov, at an altitude of 610 m. Lucas Wagner showed, as early as 1773 (Berlescu, 1971), that the mineral waters in Zizin were exploited locally both therapeutically and for bottling. Balazs Orban (1873) describes three mineral water springs of notable therapeutic value at Zizin, namely: "Hideg lobogo" spring, where water bubbled up from the ground, Lajos-Ludovic spring, and Ferdinand spring (Fig 2). In 1912, Șipos Janosne, after having bought the resort from the Brașov City Hall, restored it and opened the Bela Spring.



**Fig. 2. Ferdinand Spring at Zizin**  
(Source: Okazii.ro)



**Fig. 3. Zizin Resort rules in 1927**  
(Source: County State Archives, Brașov)

Zizin is also described by Țeposu and Câmpeanu (1921), according to whom there were 11 springs being used both therapeutically and as drinking water sources; the most important of which were the Ferdinand, Lobogo, and Tărlungeni springs. On February 10<sup>th</sup> 1927, *Băile Zizin* was declared "Small mineral spa" by decision of the Ministry of Health (Fig.3 ) and became one of the popular resorts in the area during the interwar period (*Zizin Resort rules*, County State Archives,

Braşov). Water is presently being captured at only two springs - F1 bis and F2 - by the "Apemin" – Zizin Bottling Plant, and two more are being used by local residents (Nyaroş spring, and the spring located in the forest bordering the village on the southeast).

**The Perşani Spa (Băile Perşani)** are situated in the vicinity of European route E 68, 47 km north-west of Braşov, at an altitude of 400 m. Mineral waters here are of chlorinated, bicarbonated, ferruginous and hypertonic nature (Berlescu, 1975). Although they were discovered in 1928 (Ştefănescu, 1967), their exploitation began several years later. There were four mineral water springs, thermal bath facilities and two outdoor mineral water pools. Perşani also featured a hot salt water valve-based treatment facility, mud wraps and a medical centre.

Mineral water heating was done with the help of a locomotive caldron, similarly to the resort in Cohalm (Rupea) Spa. According to Popescu *et al.* (1953) there was a spring filling two communicating concrete pools, and an additional spring captured in a cemented well. In time, these pools have deteriorated severely. After 1990, the resort was granted into concession to a investor from Zărneşti, who sent three samples of mineral water to Switzerland in April 1991, for a thorough physicochemical analysis potentially conducive to starting using the water therapeutically.

The resort development occurred mainly after 2009, and included the enlargement and compartmentalization of the salt water pool, building shower cabins, hygienic toilet facilities, and two and four-bed wooden cottages. The Perşani Spa resort is presently an important tourist attraction, although only during the summer season.

**“Sărata Spa” (“Băile Sărata”)- Veneţia de Jos.** The “Sărata Spa” was located 3 km from the Veneţia de Jos municipality, at an altitude of 450 m. The earliest water usage and exploitation actions were conducted here around 1922-1923 (Fig. 4). The resort’s six mineral springs were collected by two cement pools, paved with thick perforated oak planks, which allowed the water to arise (Comanicu, 1981). In 1922, a collaboration involving financially-potent individuals (doctors, lawyers, industrialists from Braşov and Făgăraş), was suggested in order to build modern hot and cold baths, a restaurant and a 60-room hotel.



**Fig. 4. Sărata Spa between 1923-1930**  
(Source: Veneția page-Facebook)



**Fig. 5 Ruins of Sărata Spa's old establishments, in 2012** (Photo: R. Meret)

As the project was not agreed upon, Veneția lost the opportunity to have modern spa and from the old establishments only ruins remained (Fig. 5). As established by the laboratory analysis conducted in 1955 at the Balneology Institute of Bucharest, this spring water is sodium chloride- and sodium bicarbonate-rich, and of hypotonic, athermal, and calcium magnesium type (Berlescu, 1971).

**Rodbav Spa** are located 25 km north-west of Făgăraș, in the Hârtibaciului plateau, at an altitude of 467 m. Rodbav mineral waters have been known since 1880, when a pool was first dug there. In 1910 – 1911, another 7 m deep pool became operational, capturing a spring with a discharge of 6 m<sup>3</sup>/day. However, the research was redirected towards the discovery of methane deposits. Subsequently, drilling operations were executed at various depths in 1914, 1938, 1960, 1972, and 1978 (*Studiu de fezabilitate - Resort development project*, 2008). The resort featured balneal facilities, consisting of two pools (Fig. 6) for cold baths and several cabins for thermal baths, the season starting on May 15<sup>th</sup> and ending on September 15<sup>th</sup>. Accommodation was ensured by seasonally-active villas or, for those seeking ambulatory treatment, by local residents (Berlescu, 1975). In the 1980 Romanian spa guide, published in French by a team of doctors from Bucharest, Băile Rodbav (Rodbav Spa) appeared as a permanent balneal climatic health resort with valuable alkaline and salt-iodine-rich mineral waters, recommended for various health issues: rheumatic, gynecological, posttraumatic, cardiovascular, digestive and endocrine. Today at Rodbav there is a spa complex with closed circuit.



**Fig. 6. The pools at Rodbav Resort in 2010**

*(Photo: R. Meret)*



**Fig. 7. Rodbav Spa complex, in 2012**

*(Photo: R. Meret)*

**The Homorod Spa** were located 1.5 km from the Homorod commune, at an altitude of 460 m. Local mineral water exploitation began in 1880. The spa was set up by a local named Ioan Weiss and were called “The Honterus Spa” (Statistical Bulletin, 1948 - County State Archives, Brașov). In 1933, by Ministerial Decision No. 94.655 of December 12<sup>th</sup>, published in the Official Monitor on December 19<sup>th</sup>, the resort was registered as a small balneal centre (spa of local interest). They were operational until 1939. In the interwar period, there were six springs in the area, captured in two pools; the water was rich in bicarbonate-calcium and chlorine (Berlescu, 1975).

Thereafter, especially after World War I, the Homorod Spa progressively deteriorated. A document sent to the Balneal Climate Division of the Ministry of Health by the Homorod City Hall in 1948, draws attention to the fact that the Homorod-Honterus baths were in utter ruin. Their former owner, Ioan Weiss, had been expropriated under the provisions of the 1945 Agrarian Reform Law and the land had been transferred to the Zootechnical Department (Braşov County State Archives). During the communist regime, as part of the nationalization process, the Homorod Spa became state property. After 1990, Weiss's descendants reclaimed their land, which is currently registered as "private property" (Homorod City Hall, 2010). At the present time, on the facilities baths' site, only a few abandoned concrete structures remain standing (Fig. 8).



*Fig. 8. The ruins of Homorod Spa in 2010  
(Source: R. Meret)*

**The Rupea (Cohalm) Spa**, also named by Wihelm Hanko (1914) the "jewels of Transylvania", were located 65 km from Braşov, at an altitude of 450 m. In a 1914 brochure, the renowned chemist described the beauty of the lands, as well as the exceptional quality of the Rupea mineral waters, highlighting the fact that they were part of the rare class of waters which surfaced "cold, salty and sulphur-rich".

The Rupea mineral waters were discovered by the landowner Martin Jacobi, a merchant who used them to heal the sick in the area. The spa had two wells, 13 first-class cabins and a large outdoor pool for cold baths, which used the water of two other wells. The balneal establishment had ten valve cabins and the water was heated in a locomotive caldron (Hanko, 1914).

In their description of the Rupea (Cohalm) Spa, E. Ţeposu and L. Câmpianu (1921) mentioned that the mineral waters had also been analysed by Dr. Muler and the results had proven that this was "one of the few sodium chloride-rich sulphated waters". In 1936, Iocobi Rudolf became the owner of the thermal baths and the season began on May 15<sup>th</sup> and ended on September 30<sup>th</sup> (according to Braşov County State Archives). In the documents provided by the Braşov County State Archives, information on the Rupea Spa can be found up to 1950, when, starting with August 1<sup>st</sup>, due to water scarcity, the resort was closed. The analyses and tests, conducted in 2004 by the City Hall management team, proved that the water composition had not changed over time (Rupea City Hall Analysis Report).

In present time, the two pools located on the side of the road leading to Rupea Fortress are the only reminders of a once-thriving resort.

**Mineral waters in Predeal.** Predeal is located 25 km south of Braşov, at an altitude of 1090 m. Mineral springs have been discovered in several areas, but they have dried up in time due to relatively low discharge. The first springs were discovered in 1859 by Dr. Davila at the Predeal Skete (three springs at an altitude of 1050 m), which belonged to the Crown (Saabner-Tuduri, 1906). In *Mineral waters and climatic health resorts in Romania (Apele minerale și stațiunile climaterice din România)*, he mentions that in 1871, after analyzing the water composition, the doctor of the 1<sup>st</sup> Predeal Battalion recommended the baths for rheumatism treatments. That same year, Dr. Bernard determined that the waters here contained iron, iodine and chlorine. Other springs were later discovered in Râşnoavei Valley, at Poiana Pietroasă (springs no. 1 and no. 2), which belonged to the King and the Civil Hospital Group and did not feature any treatment facilities. The bathing sessions were conducted in a pool. In Joiţa Valley, by the road near the former Predeal customs office, there was another spring. The property belonged to the King – ECS Bucharest. The water was clear and salty, containing “solid matter composed of chloride, iodide, carbonate; it was also rich in sodium chloride, which was its main characteristic” (Saabner-Tuduri, 1906). A telegrapher from Câmpina, Fink, noticed while changing the telegraph poles that the holes were filled with ferruginous water. Dr. Văleanu examined it and classified it as highly concentrated (Saabner-Tuduri, 1906).

**The mesothermal waters in Codlea.** Codlea City is located 14 km north-west of Braşov. In the article *Zeidner Waldbad* written by Karl-Heinz Brenndorfer (1994), it was mentioned that, in the beginning of 1904, a decision was made regarding the construction of a 20 m long, 10 m wide and around 1.5 m deep swimming pool. Work began in May and the inauguration took place on July 4<sup>th</sup> 1904. The investments continued until 1910 in order to extend the resort, and were cut down during World War I. The development operations were resumed in 1932 and completed in 1939. Cabins were added, resting corners were set up and a 7 m high tower for water jumps was built.

In 1969 the construction of a second pool began, which was completed in 1972. Presently, the Codlea swimming pool and the renowned “Carmen Silva Baths”, which used to accommodate tourists from all over the country and abroad, who came in the summertime to enjoy the constant 18°C temperature of the spring water, welcome their visitors with abandoned villas and rusty street signs, reminiscent of the formerly popular tourist resort. In recent years there have been some arrangement works for the swimming pool, so in summer the number of people who come here is growing.

#### 4. CONCLUSIONS

The mineral waters of Braşov County have been known and used since the end of the 18<sup>th</sup> century, and their exploitation culminated in the interwar period, when they were mainly utilized for balneal-related activities. After the Second World War, the state of all Braşov County resorts began to decline. An attempt to reintroduce the former Peşani and Rodbav Spa into the balneal tourist circuit is currently under way, while the Zizin mineral waters are being exploited for bottling. In order to reintroduce them into the tourist circuit, specialists and investors are needed to “fire up the engines” of these local resorts once more, as well as viable projects and programs capable of attracting European or local funds.

#### REFERENCES

1. Berlescu, E., (1971), *Staţiunile balneare de-a lungul timpului şi azi*, Editura Medicală, Bucureşti.
2. Berlescu, E., (1975), *Indicaţii şi contraindicaţii de trimitere la cură balneo-climaterică*, Editura Medicală, Bucureşti.
3. Comaniciu, Gh., (1981), *Monografia satului Veneţia de Jos*.
4. Garoflid, N., (1886), *Apele Minerale ale României*, VII-I, Buletinul Societăţii Geografice Române, Societatea Geografică Română, Bucureşti.
5. Greissing, C., (1855), *Die Mineralquellen zu Zaizon, sowie die beruhmteren Kurorte Siebenburgens: Borszek, Aranyataku, Bassen*.
6. Hankó, V., (1891) *Die Mineralwasser des Klausenburger komitates*, Foldt. Kozl., 21, Budapest.
7. Hankó, V., (1914), *Băile din Rupeni (Cohalm)*.
8. Orbán B., (1873), *Descrierea ţinutului secuiesc*, în “Angustia” vol II, Budapesta.
9. Pascu, R., (1927), *Carierele şi apele minerale din judeţul Braşov*, Institutul de Arte Grafice Bucovina, I.E. Torouţiu, Bucureşti.
10. Pitulescu, G. et al, (1953), *Analize de ape minerale din R.P.R.*, Studii Tehnice şi economice, seria B, nr. 37, Comitetul Geologic de Cercetare şi exploatare a bogăţiilor subsolului.
11. Pricăjan, A. (1985), *Substanţele minerale terapeutice din România*, Editura Ştiinţifică şi Enciclopedică, Bucureşti.
12. Saabner-Tuduri, Al., (1906), *Apele minerale şi staţiunile climaterice din România*, Ed II, Tipografia “Gutenberg”, Joseph Gobel. Bucureşti.
13. Ştefănescu, C., (1967), *Staţiuni balneare şi climaterice din România*, Editura Meridiane, Bucureşti.
14. Ţeposu, E., Câmpeanu, L., (1921), *Apele minerale şi staţiunile balneo-climaterice din Ardeal*, Editura “Viaţa Românească”, S.A., Bucureşti.
15. \*\*\*Buletin statistic nr 7 bis (1948), Ministerul Economiei Naţionale, Direcţiunea Petrolului şi a celorlalte exploatari miniere, Serviciul Statistic, Mediaş.
16. \*\*\*Regulamentul staţiunii Zizin (*Zizin Resort rules*), 34/1931, Direcţia Judeţeană Braşov a Arhivelor Naţionale.
17. \*\*\*Studiu de fezabilitate privind exploatarea, valorificarea şi protecţia rezervelor de ape minerale din zăcămintul Băile Rodbav, judeţul Braşov, Băile Rodbav.
18. \*\*\*Monitorul Expres, Braşov (17.05.2005; 05. 08. 2008).
19. \*\*\*Zeidner Gruss, nr 76, Munchen, Georgstag (1994).