

## NEW DATA ABOUT EPIPHYTIC LICHENS FROM MOTRU TOWN AREA - OLTENIA

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**Abstract.** A list of 47 lichen taxa, including mainly epiphytic, is reported from Motru City area. Two taxa are newly recorded for Romania and 40 taxa are new for Motru City area.

**Keywords:** lichenized fungi, diversity, epiphytic, Motru, România.

**Rezumat. Date noi privind lichenii epifitici din zona orașului Motru-Oltenia.** Lucrarea prezintă 47 taxoni licheni epifitici, identificați în zona orașului Motru. Doi taxoni sunt noi pentru România, iar 40 taxoni sunt noi pentru zona orașului Motru.

**Cuvinte cheie:** licheni, diversitate, epifitic, Motru, România.

### INTRODUCTION

The study area is 60 km<sup>2</sup>, summarizing Motru city and the villages around (Râpa, Meriș, Horăști, Insurăței, Dealul Pomilor, Lupoia - Gorj County and Zegujani, Florești - Mehedinți).

Geographically, the studied area lies in the Lower Basin of the Motru River, in the western part of the Getic Piedmont. Administrative-territorially, the territory under research is located at the borderline between Gorj and Mehedinți counties. Being situated in the south-western part of the country and of the Getic Piedmont, the studied area has a Central-European climate with sub-Mediterranean influences.

From this area, there are known sporadic data about lichens (COSTACHE, 2002; 2005); a complete taxonomical inventory has not been made yet. Studies about the lichens from Oltenia have been achieved before (CIURCHEA, 1969; 1970; BARTÓK, 1990; COSTACHE et al., 2007; ÇOBANOĞLU et al., 2009).

### MATERIALS AND METHODS

**Collecting materials.** Lichens can be collected in each month of the year, because they do not have buds or flowers in their life cycle.

In the field, there were used a lot of instruments, that made the work easier and certain:

- The coordinates and altitudes of the stations were established by means of a GPS receiver;
- Using an X10 zoom camera, the lichen samples and the aspect of the stations were photographed in the field;
- Knife, for cutting the substrate of the species (bark, branch or even soil);
- Paper bags for putting the collected species and plastic bags for grouping the paper bags from each station;
- Pencil, marker, and notebook to note the stations, substrate and other useful information about the stations

(area, county, km from the nearest map town, habitat type, elevation, latitude, longitude, date).

The lichen species were collected together with the substrate (branches or bark). In the herbarium, the specimens were cleaned by excess, sorted, and prepared for processing (gluing). The fruticose and foliose species were prepared for immediate packeting. The specimens were cleaned by excesses and put on paper towels for drying. The big samples can be pressed. After that, the specimens were placed (one collection number per sheet) between newspapers. The newspapers were marked with collection number and include slip as well. The newspapers were placed between two blotters, and separated using cardboards. The blotters and cardboards were changed at each 24 hours, until the specimens were completely dry. The last step was preparing the study packets. The specimens were put in some special paper bags, glued, on the paper bags being written the area of collection, the number of stations, the date, and the substrate. After that, the specimens were classified and put in special boxes, being ready for identification.

**Identification of taxa.** Lichen material was examined by using different methods for identification, sometimes requiring fewer steps, sometimes more. First of all, the general appearance of the thallus was analyzed to observe the growth forms for each specimen: crustose, foliose or fruticose. Different morphological aspects such as the shape of the lobes, their size or colour, the presence or the absence of some properties on the upper surface or on the lower surface, were analyzed with free eye and with the microscope. For instance, the presence of some sexual reproduction structures like apothecia, vegetative parts such as isidia, soredia, soralia, root-like attachment organs like cilia or rhizines, different type of air-pores as cyphellae or pseudocyphellae, all of them being very important in the steps of identification. But even these morphological aspects are not enough for identification. In most of the cases, sections are taken with a sharp razor blade, from different layers of the thallus, for analyzing the microscopic structures. Taking sections from the apothecia, to analyze different layers or size and shape of ascospores, is one of the most useful techniques. The sections have been made by hand, using a sharp razor blade, under a dissecting microscope, fitted with a strong focused light. The section should be measured less than 20 micrometers thick. For better results, some sections were cleared using KOH. The dried specimens were first wetted with water, the section were made after half a minute. Sections were taken

from the middle part of the apothecia, the most mature portion, where all the elements are well developed, for instance, the ascospores. Because they are small, asci and hamothecia typically are hard to be seen clearly even when they are viewed under a good-quality microscope. Therefore, the microscope image was improved either by staining the sections or by altering the optics of the microscope. Lichens produce a wide array of both primary and secondary metabolites. Because of this, chemical spot tests, classic spot tests, were used in the identification of almost all the levels of taxa. Two substances were used particularly: NaHClO (Clorox), noticed "C" and KOH, noticed "K". These substances were applied on different component parts of the thallus, cortex, medulla (exposed by cutting the upper cortex with a sharp razor blade), apothecia, soralia, isidia etc., using a needle and touching carefully the portions with test solution. The colors that appeared after these reactions, praised the different substances containing in those structures, making the work, in this way, much easier.

All these methods were applied following the keys for identification (BRODO et. al., 2001; DOBSON, 1992; PURVIS et al., 1999). The nomenclature follows mainly the Index Fungorum and Checklist of lichens and lichenicolous fungi of Romania (CIURCHEA, 2007, 2009). The names of the authors are abbreviated according to BRUMMITT & POWELL (1992).

The lichen specimens are preserved in the Herbarium of the Faculty of Horticulture, Craiova University, Romania, with numbers: CRA 442-697.

## RESULTS AND DISCUSSIONS

Each identified lichen taxa is listed below in alphabetical order, including 47 taxa, which belong to 24 genera (42 species, 2 subspecies, 2 varieties, 1 form), following with the types of substrata, coordinates and Herbarium number (Table 1).

Table 1. List of Taxa epiphytic lichens.  
Tabel 1. Lista taxonilor lichenilor epifitici.

No.	Epiphytic Taxa	Substrata, Coordinates, and Herbarium number
1.	+ <i>Anaptychia ciliaris</i> (L.) KÖRB.	( <i>J.r.</i> ): Alt. 211 m, N-44°48'211" E-22°58'106" CRA- 442; ( <i>Q.c.</i> ): Alt. 268 m, N-44°48'315" E-22°59'101" CRA- 443; Alt. 273 m, N-44°31'116" E-23°22'266" CRA- 444; ( <i>R.p.</i> ): Alt. 271 m, N-44°46'196" E-22°38'172" CRA- 445.
2.	+ <i>Candelaria concolor</i> (DICKS.) STEIN	( <i>Q.c.</i> ): Alt. 268 m, N-44°48'315" E-22°59'101" CRA- 446; ( <i>J.r.</i> ): Alt. 211 m, N-44°48'211" E-22°58'106" CRA- 447; ( <i>T.p.</i> ): Alt. 259 m, N-44°51'618" E-22°89'615" CRA- 448.
3.	+ <i>Candelariella reflexa</i> (NYL.) LETTAU	( <i>P.c.</i> ): Alt. 197 m, N-44°47'963" E-22°57'126" CRA- 449; Alt. 217 m, N-44°47'447" E-22°57'545" CRA- 450; ( <i>J.r.</i> ): Alt. 246 m, N-44°47'158" E-22°58'121" CRA- 451; Alt. 211 m, N-44°48'211" E-22°58'106" CRA- 452; Alt. 210 m, N-44°47'184" E-22°58'110" CRA- 453; ( <i>Py.c.</i> ): Alt. 244 m, N-44°46'050" E-22°58'710" CRA- 454; ( <i>P.d.</i> ): Alt. 235 m, N-44°46'932" E-22°57'688" CRA- 455; ( <i>M.a.</i> ): Alt. 260 m, N-44°48'712" E-22°58'389" CRA- 456; ( <i>S.a.</i> ): Alt. 196 m, N-44°47'625" E-22°57'876" CRA- 457; ( <i>R.p.</i> ): Alt. 271 m, N-44°46'195" E-22°38'172" CRA- 458; ( <i>T.p.</i> ): Alt. 259 m, N-44°51'618" E-22°89'615" CRA- 459; ( <i>Q.f.</i> ): Alt. 238 m, N-44°47'067" E-22°57'778" CRA- 460; ( <i>Q.c.</i> ): Alt. 275 m, N-44°48'779" E-22°58'298" CRA- 461; Alt. 272 m, N-44°61'122" E-22°71'566" CRA- 462; Alt. 273 m, N-44°31'116" E-23°22'266" CRA- 463; Alt. 246 m, N-44°46'752" E-22°57'591" CRA- 464; ( <i>A.v.</i> ): Alt. 218 m, N-44°47'266" E-22°58'151" CRA- 465.
4.	+ <i>Candelariella vitellina</i> f. <i>vitellina</i> (EHRH.) MÜLL. ARG.	( <i>J.r.</i> ): Alt. 215 m, N-44°47'158" E-22°58'121" CRA- 466; Alt. 262 m, N-44°47'272" E-22°58'140" CRA- 467.
5.	+ <i>Candelariella xanthostigma</i> (PERS. ex ACH.) LETTAU	( <i>J.r.</i> ): Alt. 210 m, N-44°47'184" E-22°58'110" CRA- 468.
6.	+ <i>Cladonia coniocraea</i> (FLÖRKE) SPRENG	( <i>Q.f.</i> ): Alt. 252 m, N-44°46'823" E-22°57'645" CRA- 469.
7.	<i>Cladonia fimbriata</i> (L.) FR.	( <i>Q.c.</i> ): Alt. 272 m, N-44°61'122" E-22°71'566" CRA- 470; ( <i>Q.f.</i> ): Alt. 252 m, N-44°46'823" E-22°57'645" CRA- 471.
8.	<i>Cladonia furcata</i> subsp. <i>furcata</i> (HUDS) SCHRAD.	( <i>F.e.</i> ): Alt. 266 m, N-44°46'144" E-23°05'889" CRA- 472; ( <i>Q.f.</i> ): Alt. 252 m, N-44°46'823" E-22°57'645" CRA- 473.
9.	+ <i>Cladonia pyxidata</i> (L.) HOFFM.	( <i>Q.f.</i> ): Alt. 252 m, N-44°46'823" E-22°57'645" CRA- 474; ( <i>F.e.</i> ): Alt. 266 m, N-44°46'144" E-23°05'889" CRA- 475.
10.	+ <i>Cladonia subulata</i> (L.) WEBER ex F.H. WIGG.	( <i>Q.c.</i> ): Alt. 269 m, N-44°46'854" E-22°57'676" CRA- 476.
11.	<i>Evernia prunastri</i> (L.) ACH.	( <i>P.d.</i> ): Alt. 235 m, N-44°46'932" E-22°57'688" CRA- 477; Alt. 261 m, N-44°61'622" E-22°77'519" CRA- 478; Alt. 237 m, N-44°47'070" E-22°57'708" CRA- 479; Alt. 237 m, N-44°47'186" E-22°57'700" CRA- 480; ( <i>F.e.</i> ): Alt. 266 m, N-44°46'144" E-23°05'889" CRA- 481; ( <i>C.a.</i> ): Alt. 259 m, N-44°51'515" E-22°88'261" CRA- 482; ( <i>Q.c.</i> ): Alt. 272 m, N-44°61'122" E-22°71'566" CRA- 483; Alt. 237 m, N-43°46'122" E-22°18'109" CRA- 484; ( <i>J.r.</i> ): Alt. 211 m, N-44°48'211" E-22°58'106" CRA- 485; ( <i>A.v.</i> ): Alt. 218 m, N-44°47'266" E-22°58'151" CRA- 486; ( <i>R.p.</i> ): Alt. 271 m, N-44°46'195" E-22°38'172" CRA- 487.
12.	+ <i>Flavoparmelia caperata</i> (L.) HALE	( <i>P.d.</i> ): Alt. 237 m, N-44°47'070" E-22°57'708" CRA- 488; Alt. 235 m, N-44°46'932" E-22°57'688" CRA- 489; ( <i>Q.f.</i> ): Alt. 238 m, N-44°47'067" E-22°57'778" CRA- 490; ( <i>Q.c.</i> ): Alt. 237 m, N-43°46'122" E-22°18'109" CRA- 491; Alt. 275 m, N-44°48'779" E-22°58'298" CRA- 492; Alt. 238 m, N-44°46'858" E-22°57'691" CRA- 493; Alt. 259 m, N-44°48'196" E-23°09'318" CRA- 494; ( <i>Py.c.</i> ): Alt. 244 m, N-44°46'050" E-22°58'710" CRA- 495; ( <i>S.a.</i> ): Alt. 199 m, N-44°47'359" E-22°57'166" CRA- 496; ( <i>F.e.</i> ): Alt. 266 m, N-44°46'144" E-23°05'889" CRA- 497; ( <i>C.a.</i> ): Alt. 259 m, N-44°51'515" E-22°88'261" CRA- 498; ( <i>T.p.</i> ): Alt. 259 m, N-44°51'618" E-

		22°89'615'' CRA- 499.
13.	+ <i>Hypogymnia farinacea</i> ZOPF	( <b>Q.c.</b> ): Alt. 276 m, N-44°48'634'' E-23°06'944'' CRA- 500; ( <b>C.a.</b> ): Alt. 208 m, N-44°47'280'' E-22°58'139'' CRA- 501; ( <b>M.a.</b> ): Alt. 263 m, N-44°47'216'' E-22°88'151'' CRA- 502; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'151'' CRA- 503; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 504; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'359'' E-22°57'166'' CRA- 505; ( <b>P.d.</b> ): Alt. 261 m, N-44°61'623'' E-22°77'411'' CRA- 506; Alt. 235 m, N-44°46'932'' E-22°57'688'' CRA- 507; Alt. 237 m, N-44°47'070'' E-22°57'708'' CRA- 508; Alt. 237 m, N-44°47'186'' E-22°57'700'' CRA- 509.
14.	+ <i>Hypogymnia physodes</i> (L.) NYL.	( <b>P.d.</b> ): Alt. 261 m, N-44°61'623'' E-22°77'411'' CRA- 510; ( <b>J.r.</b> ): Alt. 211 m, N- 44°48'211'' E-22°58'106'' CRA- 511; ( <b>Q.c.</b> ): Alt. 281 m, N- 44°40'613'' E- 23°81'811'' CRA- 512.
15.	+ <i>Hypogymnia tubulosa</i> (SCHAER.) HAV.	( <b>Q.c.</b> ): Alt. 281 m, N- 44°40'613'' E- 23°81'811'' CRA- 513; ( <b>P.d.</b> ): Alt. 261 m, N- 44°61'623'' E-22°77'411'' CRA- 514.
16.	+ <i>Lecanora albella</i> (PERS.) ACH.	( <b>J.r.</b> ): Alt. 262 m, N- 44°47'272'' E- 22°58'140'' CRA- 515; Alt. 211 m, N- 44°48'211'' E-22°58'106'' CRA- 516.
17.	<i>Lecanora argentata</i> (ACH.) MALME	( <b>J.r.</b> ): Alt. 262 m, N- 44°47'272'' E- 22°58'140'' CRA- 517; ( <b>M.a.</b> ): Alt. 260 m, N-44°48'712'' E-22°58'389'' CRA- 518; ( <b>S.a.</b> ): Alt. 203 m, N-44°47'734'' E-22°57'582'' CRA- 519; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'151'' CRA- 520.
18.	+ <i>Lecanora carpinea</i> (L.) VAIN.	( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 521; Alt. 215 m, N-44°47'158'' E-22°58'121'' CRA- 522; Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 523; Alt. 210 m, N-44°47'184'' E-22°58'110'' CRA- 524; ( <b>Q.c.</b> ): Alt. 259 m, N-44°47'186'' E-22°58'611'' CRA- 525; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 526.
19.	+ <i>Lecanora chlorotera</i> NYL.	( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 527; ( <b>P.c.</b> ): Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 528.
20.	* <i>Lecanora impudens</i> DEGEL.	( <b>S.a.</b> ): Alt. 203 m, N-44°47'734'' E-22°57'582'' CRA- 529; Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 530; ( <b>P.c.</b> ): Alt. 190 m, N-44°47'125'' E-22°58'679'' CRA- 531.
21.	+ <i>Lecanora intumescens</i> (REBENT.) RABENH.	( <b>Q.c.</b> ): Alt. 237 m, N-44°46'913'' E-22°15'693'' CRA- 532.
22.	+ <i>Lecanora symmicta</i> (ACH.) ACH.	( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 533; ( <b>P.d.</b> ): Alt. 235 m, N-44°46'932'' E-22°57'688'' CRA- 534.
23.	+ <i>Melanelixia fuliginosa</i> subsp. <i>glabratula</i> (LAMY) J. R. LAUNDON	( <b>Q.c.</b> ): Alt. 276 m, N-44°48'634'' E-23°06'944'' CRA- 535; Alt. 275 m, N-44°48'779'' E-22°58'298'' CRA- 536; Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 537; Alt. 268 m, N-44°48'315'' E-22°59'101'' CRA- 538; Alt. 246 m, N-44°46'752'' E-22°57'591'' CRA- 539; Alt. 261 m, N-44°61'623'' E-22°77'411'' CRA- 540; ( <b>Q.f.</b> ): Alt. 238 m, N- 44°47'067'' E-22°57'778'' CRA- 541; ( <b>P.d.</b> ): Alt. 261 m, N-44°61'622'' E-22°77'519'' CRA- 542; Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 543; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 544; Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 545; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 546; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 547; ( <b>P.y.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA- 548. ( <b>P.c.</b> ): Alt. 200 m, N-44°47'639'' E-22°57'822'' CRA- 549.
24.	+ <i>Melanelia subargentifera</i> (NYL.) ESSL.	( <b>Q.c.</b> ): Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 550; Alt. 272 m, N-44°61'122'' E-22°71'566'' CRA- 551; Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 552.
25.	+ <i>Parmelia saxatilis</i> (L.) ACH.	( <b>P.y.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA-553; ( <b>P.d.</b> ): Alt. 261 m, N-44°61'622'' E-22°77'519'' CRA- 554; ( <b>C.a.</b> ): Alt. 259 m, N-44°51'515'' E-22°88'261'' CRA- 555; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 556.
26.	+ <i>Parmelia sulcata</i> TAYLOR	( <b>P.c.</b> ): Alt. 197 m, N-44°47'963'' E-22°57'126'' CRA- 557; Alt. 268 m, N-44°48'564'' E-23°00'206'' CRA- 558; ( <b>Q.c.</b> ): Alt. 276 m, N-44°48'634'' E-23°06'944'' CRA- 559; Alt. 275 m, N-44°48'779'' E-22°57'688'' CRA- 560; Alt. 269 m, N-44°46'854'' E-22°57'676'' CRA- 561; Alt. 238 m, N-44°46'858'' E-22°57'519'' CRA- 562; Alt. 259 m, N- 44°47'186'' E-22°58'611'' CRA- 563; Alt. 237 m, N-44°46'913'' E-22°15'693'' CRA- 564; ( <b>Q.f.</b> ): Alt. 238 m, N-44°47'067'' E-22°57'778'' CRA- 565; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 566; ( <b>J.r.</b> ): Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 567; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 568; ( <b>C.b.</b> ): Alt. 259 m, N-44°47'202'' E-22°58'188'' CRA- 569; ( <b>C.v.</b> ): Alt. 208 m, N-44°47'280'' E-22°58'139'' CRA- 570; ( <b>R.p.</b> ): Alt. 271 m, N-44°46'195'' E-22°38'172'' CRA- 571; ( <b>P.y.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA-572; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'151'' CRA- 573.
27.	+ <i>Parmelia pastillifera</i> (HARM.) HALE	( <b>Q.c.</b> ): Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 574; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 575; ( <b>F.e.</b> ): Alt. 266 m, N-44°46'144'' E-23°05'889'' CRA- 576.
28.	+ <i>Parmelia tiliacea</i> (HOFFM.) ACH.	( <b>Q.c.</b> ): Alt. 275 m, N-44°48'779'' E-22°57'688'' CRA- 577; Alt. 268 m, N-44°48'315'' E-22°59'101'' CRA- 578; Alt. 272 m, N-44°61'122'' E-22°71'566'' CRA- 579; Alt. 280 m, N-44°48'580'' E-23°00'950'' CRA- 580; Alt. 280 m, N-44°48'580'' E-22°57'700'' CRA- 581; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 582; ( <b>P.c.</b> ): Alt. 217 m, N-44°47'447'' E-22°57'545'' CRA- 583.
29.	+ <i>Pertusaria amara</i> (L.) ARNOLD	( <b>P.d.</b> ): Alt. 237 m, N-44°47'070'' E-22°57'950'' CRA- 584; Alt. 237 m, N-44°47'186'' E-22°57'700'' CRA- 585; ( <b>Q.c.</b> ): Alt. 269 m, N-44°46'854'' E-22°57'676'' CRA- 586; Alt. 246 m, N-44°46'752'' E-22°57'591'' CRA- 587.
30.	+ <i>Pertusaria hemisphaerica</i> (FLÖRKE) ERICKSEN	( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 588; ( <b>F.e.</b> ): Alt. 266 m, N-44°46'144'' E-23°05'889'' CRA- 589; ( <b>Q.c.</b> ): Alt. 246 m, N-44°46'752'' E-22°57'591'' CRA- 590; Alt. 269 m, N-44°46'854'' E-22°57'676'' CRA- 591.
31.	+ <i>Phaeophyscia orbicularis</i> (NECK.) MOBERG	( <b>P.c.</b> ): Alt. 197 m, N-44°47'963'' E-22°57'126'' CRA- 592.
32.	+ <i>Physcia adscendens</i> (TH. FR.) H. OLIVIER	( <b>P.c.</b> ): Alt. 197 m, N-44°47'963'' E-22°57'126'' CRA- 593; Alt. 200 m, N-44°47'639'' E-22°57'822'' CRA- 594; Alt. 190 m, N-44°47'125'' E-22°58'679'' CRA- 595; Alt. 217 m, N-44°47'447'' E-22°57'545'' CRA- 596; Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 597; ( <b>J.r.</b> ): Alt. 246 m, N-44°47'158'' E-22°58'121'' CRA- 598; Alt. 218 m, N-44°47'184'' E-22°58'110'' CRA- 599; Alt. 210 m, N-44°47'280'' E-22°58'139'' CRA- 600; Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 601; Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 602; ( <b>V.v.</b> ): Alt. 246 m, N-

		44°47'158'' E-22°58'121'' CRA- 603; ( <b>Q.c.</b> ): Alt. 269 m, N-44°46'854'' E-22°57'676'' CRA- 604; Alt. 259 m, N-44°47'186'' E-22°58'611'' CRA- 605; ( <b>Q.f.</b> ): Alt. 238 m, N-44°47'067'' E-22°58'220'' CRA- 606; ( <b>S.f.</b> ): Alt. 203 m, N-44°47'734'' E-22°57'582'' CRA- 607; ( <b>S.a.</b> ): Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 608; Alt. 178 m, N-44°47'300'' E-22°58'530'' CRA- 609; Alt. 188 m, N-44°47'901'' E-22°57'206'' CRA- 610; Alt. 193 m, N-44°47'517'' E-22°58'150'' CRA- 611; ( <b>S.n.</b> ): Alt. 197 m, N-44°47'294'' E-22°58'220'' CRA- 612; ( <b>C.b.</b> ): Alt. 259 m, N-44°47'202'' E-22°58'188'' CRA- 613; ( <b>C.v.</b> ): Alt. 208 m, N-44°47'280'' E-22°58'139'' CRA- 614; ( <b>M.d.</b> ): Alt. 263 m, N-44°47'216'' E-22°88'151'' CRA-615; ( <b>R.p.</b> ): Alt. 271 m, N-44°46'195'' E-22°38'172'' CRA- 616; ( <b>Py.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA-617; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'713'' CRA- 618; ( <b>Pr.c.</b> ): Alt. 194 m, N-44°47'376'' E-22°58'257'' CRA-619; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 620.
33.	+ <i>Physcia aipolia</i> (EHRH. ex HUMB.) FÜRNR.	( <b>J.r.</b> ): Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 621; ( <b>P.c.</b> ): Alt. 217 m, N-44°47'447'' E-22°57'545'' CRA- 622; ( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 623.
34.	+ <i>Physcia dubia</i> (HOFFM.) LETTAU	( <b>P.c.</b> ): Alt. 190 m, N-44°47'125'' E- 22°58'679'' CRA- 624.
35.	+ <i>Physcia leptalea</i> (ACH.) DC.	( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 625; ( <b>S.f.</b> ): Alt. 178 m, N-44°47'300'' E-22°58'530'' CRA- 626; ( <b>P.c.</b> ): Alt. 200 m, N-44°47'639'' E-22°57'822'' CRA- 627; Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 628; ( <b>R.p.</b> ): Alt. 271 m, N-44°46'195'' E-22°38'172'' CRA- 629.
36.	+ <i>Physcia stellaris</i> (L.) NYL.	( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 630; ( <b>M.a.</b> ): Alt. 260 m, N-44°48'712'' E-22°58'389'' CRA- 631; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 632; ( <b>Q.c.</b> ): Alt. 273 m, N-43°46'122'' E-22°18'109'' CRA- 633; ( <b>P.c.</b> ): Alt. 217 m, N-44°47'447'' E-22°57'545'' CRA- 634; ( <b>Py.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA- 635; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'713'' CRA- 636.
37.	+ <i>Physconia distorta</i> (WITH.) J.R. LAUNDON	( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 637; Alt. 193 m, N-44°47'517'' E-22°58'150'' CRA- 638; ( <b>S.f.</b> ): Alt. 178 m, N-44°47'300'' E-22°58'530'' CRA- 639; ( <b>P.c.</b> ): Alt. 268 m, N-44°48'564'' E-23°00'206'' CRA- 640; Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 641; ( <b>C.a.</b> ): Alt. 259 m, N-44°51'515'' E-22°88'261'' CRA- 642; ( <b>Q.c.</b> ): Alt. 272 m, N-44°61'122'' E-22°71'566'' CRA- 643; ( <b>Py.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA- 644; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 645; ( <b>P.d.</b> ): Alt. 237 m, N-44°47'186'' E-22°57'700'' CRA- 646; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 647.
38.	+ <i>Physconia enteroxantha</i> (NYL.) POELT	( <b>Q.c.</b> ): Alt. 259 m, N-44°47'186'' E-22°58'611'' CRA- 648; Alt. 268 m, N-44°48'315'' E-22°59'101'' CRA- 649; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 650; ( <b>P.c.</b> ): Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 651; ( <b>S.f.</b> ): Alt. 203 m, N-44°47'734'' E-22°57'582'' CRA- 652; ( <b>S.a.</b> ): Alt. 188 m, N-44°47'901'' E-22°57'206'' CRA- 653.
39.	+ <i>Platismatia glauca</i> (L.) W.L. CULB. & C.F. CULB.	( <b>P.d.</b> ): Alt. 237 m, N-44°47'186'' E-22°57'700'' CRA- 654; Alt. 261 m, N-44°61'622'' E-22°77'519'' CRA- 655.
40.	+ <i>Pleurosticta acetabulum</i> (NECK.) ELIX & LUMBSCH	( <b>P.c.</b> ): Alt. 197 m, N-44°47'963'' E-22°57'126'' CRA- 656; ( <b>Q.c.</b> ): Alt. 259 m, N-44°47'186'' E-22°58'611'' CRA- 657; Alt. 268 m, N-44°48'315'' E-22°59'101'' CRA- 658.
41.	+ <i>Pseudevernia furfuracea</i> var. <i>ceratea</i> (ACH.) D. HAWKSW.	( <b>P.d.</b> ): Alt. 235 m, N-44°46'932'' E-22°57'688'' CRA- 659; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 660; Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 661.
42.	+ <i>Pseudevernia furfuracea</i> var. <i>furfuracea</i> (L.) ZOPF	( <b>P.d.</b> ): Alt. 235 m, N-44°46'932'' E-22°57'688'' CRA- 662; Alt. 237 m, N-44°47'070'' E-22°57'708'' CRA- 663; Alt. 261 m, N-44°61'622'' E-22°77'519'' CRA- 664; ( <b>C.a.</b> ): Alt. 259 m, N-44°51'515'' E- 22°88'261'' CRA- 665.
43.	* <i>Punctelia reddenda</i> (STIRT.) KROG	( <b>S.a.</b> ): Alt. 193 m, N-44°47'517'' E-22°58'150'' CRA- 666.
44.	+ <i>Punctelia subrudecta</i> (NYL.) KROG	( <b>S.a.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 667; ( <b>Q.c.</b> ): Alt. 238 m, N-44°46'858'' E-22°57'691'' CRA- 668; ( <b>P.d.</b> ): Alt. 261 m, N-44°61'622'' E-22°77'519'' CRA- 669.
45.	+ <i>Ramalina farinacea</i> (L.) ACH.	( <b>Q.c.</b> ): Alt. 273 m, N-44°31'116'' E-23°22'266'' CRA- 670; ( <b>J.r.</b> ): Alt. 211 m, N-44°48'211'' E-22°58'106'' CRA- 671.
46.	+ <i>Tuckermanopsis chlorophylla</i> (WILLD.) HALE	( <b>P.d.</b> ): Alt. 237 m, N-44°47'186'' E-22°57'700'' CRA- 672.
47.	<i>Xanthoria parietina</i> (L.) TH. FR.	( <b>J.r.</b> ): Alt. 215 m, N-44°47'158'' E-22°58'121'' CRA- 673; Alt. 210 m, N-44°47'280'' E-22°58'139'' CRA- 674; Alt. 246 m, N-44°47'158'' E-22°58'121'' CRA- 675; Alt. 218 m, N-44°47'184'' E-22°58'110'' CRA- 676; Alt. 262 m, N-44°47'272'' E-22°58'140'' CRA- 677; ( <b>S.n.</b> ): Alt. 197 m, N-44°47'294'' E-22°58'220'' CRA- 678; ( <b>C.v.</b> ): Alt. 208 m, N-44°47'280'' E-22°58'139'' CRA- 679. ( <b>M.d.</b> ): Alt. 263 m, N-44°47'216'' E-22°88'151'' CRA- 680; ( <b>Py.c.</b> ): Alt. 244 m, N-44°46'050'' E-22°58'710'' CRA- 681; ( <b>A.v.</b> ): Alt. 218 m, N-44°47'266'' E-22°58'713'' CRA- 682; ( <b>Pr.c.</b> ): Alt. 194 m, N-44°47'376'' E-22°58'257'' CRA- 683; ( <b>S.a.</b> ): Alt. 196 m, N-44°47'625'' E-22°57'876'' CRA- 684; Alt. 188 m, N-44°47'901'' E-22°57'206'' CRA- 685; Alt. 193 m, N-44°47'517'' E-22°58'150'' CRA- 686; Alt. 182 m, N-44°47'359'' E-22°58'394'' CRA- 687; Alt. 203 m, N-44°47'734'' E-22°57'582'' CRA- 688; ( <b>S.f.</b> ): Alt. 199 m, N-44°47'927'' E-22°57'166'' CRA- 689; Alt. 178 m, N-44°47'300'' E-22°58'530'' CRA- 690; ( <b>C.o.</b> ): Alt. 272 m, N-44°48'755'' E-22°58'365'' CRA- 691; ( <b>P.c.</b> ): Alt. 197 m, N-44°47'963'' E-22°57'126'' CRA- 692; Alt. 268 m, N-44°48'564'' E-23°00'206'' CRA- 693; Alt. 200 m, N-44°47'639'' E-22°57'822'' CRA- 694; Alt. 190 m, N-44°47'125'' E-22°58'679'' CRA- 695; Alt. 217 m, N-44°47'447'' E-22°57'545'' CRA- 696; ( <b>M.a.</b> ): Alt. 260 m, N-44°48'712'' E-22°58'389'' CRA- 697.

Abbreviations: *Juglans regia* (J.r.); *Quercus cerris* (Q.c.); *Q. frainetto* (Q.f.); *Robinia pseudoacacia* (R.p.); *Morus alba* (M.a.); *Tilia platyphyllos* (T.p.); *Populus canescens* (P.c.); *Salix alba* (S.a.); *S. fragilis* (S.f.); *Fraxinus excelsior* (F.e.); *Cydonia oblonga* (C.o.); *Pyrus communis* (Py.c.); *Prunus cerasifera* (Pr.c.); *P. domestica* (P.d.); *Armeniaca vulgaris* (A.v.); *Cerasus avium* (C.a.); *C. vulgaris* (C.v.); *Malus domestica* (M.d.); *Carpinus betulus* (C.b.); *Vitis vinifera* (V.v.); *Sambucus nigra* (S.n.); \* = New record for România; + = New record for Motru Area.

## CONCLUSIONS

There were identified 47 lichen taxa, which belong to 23 genera, 4 crustose with 13 species, 16 foliose with 27 species and 3 fruticose with 7 species. The species were found on 20 different substrata, collected mainly from *Quercus cerris*, *Populus canescens*, and *Salix alba*, as wild species and from *Juglans regia* and *Prunus domestica*, as cultivated species. Although, the study area is small, there were identified two new species for the Romanian lichen Mycota.

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