



Implications of Philately in Promoting the Protected Natural Areas (III): Cozia National Park

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Authors' contributions

This work was carried out in collaboration among all authors. Authors BVC and ALP designed the study, performed the literature searches and wrote the first draft of the manuscript. Author MC managed the analyses of the study. All authors read and approved the final manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Romania is a blessed place with many areas of unique beauty - as part of the natural heritage - with places where the spectacle of nature delights your eyes and take your breath with every step. Constantly promoting philatelic themes that use natural wealth and the beauty of our country as subjects, the administrative entity (with various names over time) responsible for issuing postage stamps performs a series of postage stamps in whose images are found rarities of flora and fauna, a miracle of nature. To show that protected natural areas have a special beauty, and to make them known to everyone, in this paper, we bring to the discussion the most significant philatelic peculiarities in the Cozia National Park.

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1. INTRODUCTION

Cozia National Park is located in the central-southern part of the Southern Carpathians (Romania). The boundaries of the park overlap over the eastern part of the Căpățâni Mountains, the entire massif of the Cozia Massif and over the southeastern part of the Lotru Mountains. The entire surface of 17,100 ha of the park is located in Vâlcea County [1].

The natural area extends in the eastern part of Vâlcea county (close to the border with Argeș county), on the administrative territories of Brezoi and Călimănești cities and on those of Berislăvești, Perișani, Racovița and Sălătrucel communes and is crossed by the national road DN7, connects the municipality of Râmnicu Vâlcea with the city of Tâlmăciu [2,3].

The first proposal for the establishment of the Cozia National Park took place in 1966, and this being declared a protected area by Law no. 5 of March 6, 2000 (on the approval of the National Spatial Planning Plan - Section III - protected areas) [4]. In 2003, by Government Decision no. 230 of 4 March (on the delimitation of biosphere reserves, national parks, and natural parks and the establishment of their administrations) restores its boundaries and area [5]. Cozia National Park also includes the Călinești - Brezoi Forest nature reserve, protected area (with an area of 200 ha) of geomorphological importance (Brezoi conglomerates), floristics and landscaping (see Fig. 1) [2].

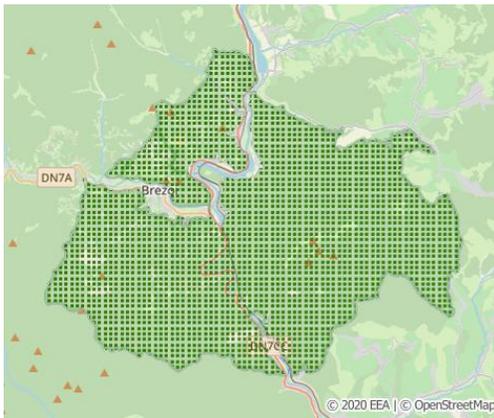


Fig. 1. Cozia National Park reference area [2]

The park is a mountainous area with a great geological and geomorphological diversity (karst

relief with sharp peaks, towers, needles, limestone ridges, caves, quays, valleys, forests, and meadows), which has several types of habitats [1,3] respectively alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*, Dacian beech forests of *Luzulo-Fagetum* and *Asperulo-Fagetum* type, oak forests with hornbeam of *Galio-Carpinetum* type, rubble and ravines, *Picea abies* forests in the mountain region, alpine and boreal scrub, boreal and alpine meadows on siliceous substrate, *Nardus* mountain meadows rich in species on siliceous substrates, edge communities with high hygrophilous grasses from the plains to mountain and alpine, siliceous debris from the mountain to the alpine floor, mountain meadows, herbaceous vegetation on the banks of mountain rivers, rocky slopes with chasmophytic vegetation on limestone rocks aros, woody vegetation with *Myricaria germanica* and *Salix eleagnos* along the mountain rivers, which shelter a diverse range of flora and fauna specific to the southern chain of the Carpathians.

2. MATERIALS AND METHODS

The documentation for this paper started, as was likely and obvious, from the authors' concerns for environmental education and environmental protection [6,7] and not least, because they love the idea of a harmoniously developed community, with care for protected areas and the biodiversity that populates them [8,9]. Having at hand a series of extremely relevant studies at the national level, both in terms of the management of protected areas [10-12] and the philatelic issues published in catalogs and journals [13,14] the authors decided to extrapolate those approaches to the relatively limited space of the existing ecosystem in Cozia National Park.

The subject of the study, in the form of a philatelic circuit of Cozia National Park, is based on the sites that host philatelic content such as Colnect, Delcampe, Stamp World, PicClick, etc., which come in addition to discussion forums and online meetings with other collectors and passionate philatelists.

3. RESULTS AND DISCUSSION

3.1 Cozia National Park from an Ecological Perspective

The national park overlaps with the Cozia - site of community importance, based on the

designation of several faunal and floristic species listed in Annex Ia of European Council Directive 92/43/EC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. wild flora) [1,3] as follows:

- six species of mammals - brown bear (*Ursus arctos*), wolf (*Canis lupus*), lynx (*Lynx lynx*), common bat (*Myotis myotis*), large horseshoe bat (*Rhinolophus ferrumequinum*) and wide-eared bat (*Barbastella barbastellus*);
- two species of amphibians - the yellow-bellied ivory (*Bombina variegata*) and the crested newt (*Triturus cristatus*);
- three species of fish - barbel (*Barbus meridionalis*), woodpecker (*Cottus gobio*) and stingray (*Sabanejewia aurata*);
- seven species of invertebrates - the radish (*Lucanus cervus*), the Transylvanian mower (*Pholidoptera transsylvanica*), the large oak tailor (*Cerambyx cerdo*), the gray oak tailor (*Morimus funereus*), the mountain-mower-with-red-legged (*Odontopodisma rubripes*), a cricket (endemic to Cozia) of the species *Isophya harzi* and a beetle of the species *Carabus variolosus*.

The presence of plant species (listed in the same annex to the European Directive) [1,3] such as the queen flower (*Leontopodium alpinum*), the mountain bell (*Campanula serrata*), the grass-neck (*Tozzia carpathica*), ligularia (*Ligularia sibirica*) and wild iris (*Iris aphylla ssp. hungarica*), is reported along with other floristic rarities: angelica (*Angelica archangelica*), mousetail (*Achillea crithmifolia*), mountain romaine (*Anthemis carpatica*), arnica (*Arnica montana*), carnations (*Dianthus henteri*, *Dianthus carthusianorum*, *Dianthus superbus*, *Dianthus giganteus*), soft buckthorn (*Euonymus latifolius*), forest lily (*Lilium carnolicum*) and others.

3.2 Cozia National Park from a Carto-Philatelic Perspective

Symbol of the National Park, the Cozia massif is defined as a mountainous area with a great geological and geomorphological diversity, up to forests, and meadows, with specific fauna and flora, as can be seen in Fig. 2 [15,16].

There are of course other views, which we managed to identify and analyze, in the form of illustrated postcards, which present the area

considered for this study. Most of them refer to Cozia with the Olt Valley, as shown in Fig. 3 [17-19].

Also, on the occasion of the fourth edition of the International Conference "The most famous mountains in the world" in Râmnicu Vâlcea, the City Hall, through the Association of Philatelists from Râmnicu Vâlcea, issued two philatelic envelopes in a circulation of 100 of copies. The philatelic products have as illustrations the Sphinx from Bucegi and Mount Cozia, being obliterated at the Post Office no. 1 with two stamps dedicated to the event, dated September 25 and 28. The stamps used for obliteration have a value of 50 bani and as an image the flora specific to the mountain relief (see Fig. 4) [20,21].

On August 23, 2019, Romfilatelia selected some of the rarest and most beautiful flowers in the area, to promote them among lovers of protected areas and beyond, under the theme "Flowers of the mountains, Mount Cozia" (see Fig. 5) [22,23].

Edelweiss (*Leontopodium alpinum*), the plant that ennobles the stamp with a face value of 1.40 lei, is part of the *Asteraceae* family, being popularly known as "corner flower" or "albumen" (see Fig. 6a) [24,25]. This is a plant found in the alpine and subalpine floors, which grows on steep and sunny slopes and calcareous substrate. It is declared a natural monument, is a real ornament of the Cozia, Maramureș, Rarău, Rodnei, Bistrița, Ceahlău, Giurgeu, Hășmaș, Vrancei, Ciucaș, Bârsei, Bucegi, Făgăraș, Căpățâni, Retezat, Godeanu, Țarcu, Trascăului and Bihorului Mountains. It can also be found in the Abruzzi Mountains, the Alps, the Balkans, the Carpathians, the Pyrenees, in Central and East Asia. The plant has a cylindrical rhizome, covered with remnants of black-brown leaves, from which many roots emerge. The stem is erect, unbranched, and has a height of 5-30 cm. The leaves of the basal and stem rosettes are entire, slightly hairy on the face, and often fluffy on the back. The flowers are grouped, and they are clustered in dense buds. The ones on the disc are hermaphroditic, tubular, sterile, and the radiate ones are female flowers, narrowly tubular, arranged in several series. The inflorescences are surrounded by an envelope of uneven leaves, white woolly-tomentose, and extended stellate. The queen's flower blooms between July and August, being threatened with extinction due to its collection by tourists, a fact prohibited by law.



(a) "Cozia Massif"



(b) "Olt Valley, Cozia Massif and Monastery"

Fig. 2. The illustrated postcards representing "Cozia Massif", Meridiane P. House, Bucharest

St John's Worth (*Hypericum richeri*) represented on the stamp with a face value of 1.60 lei is a perennial plant from the *Hypericaceae* family (see Fig. 6b) [24,25]. The plant has a horizontal, cylindrical rhizome and a simple stem, 10-50 cm high. The leaves are elliptical or oval, and have a series of black dots on the edge. The flowers are light yellow, often reddish on the outside and slightly fringed at the edges. The sepals are glandular and have fimbriae though. The fruit is an ovate capsule with black vesicles. It blooms from July to August and is spread from the spruce floor to the alpine floor, through meadows, bushes and rocks.

Dogtooth Violet (*Erythronium dens-canis*) is illustrated on the stamp with a face value of 1.70 lei (see Fig. 6c) [24,25] and is also known in Romania as the monk flower, cochineal, cochlea and cocorai, being an original indigenous plant, from Europe and North America. It belongs to the family *Liliaceae* and is the only species of *Erythronium* that occurs spontaneously in Europe. The ciuta mass is a perennial herbaceous plant with an elongated-linear bulb, which can reach a height of 30 cm. Its leaves are broadly elliptical, ovate or oblong-lanceolate, usually brown-spotted. The stem is simple, with a single terminal, nourishing flower, with the leaves of the perigon reflected. The fruit is an obovoidal capsule with many seeds inside.

The stamp with a face value of 7 lei illustrates the Oxlip (*Primula elatior*), as can be seen in Fig. 7a [24,25]. It is part of the *Primulaceae* family and is a common herbaceous, heliophilous plant on temperate soils, through meadows, pastures, meadows, clearings, forest edges and well-lit shrubs from the hilly to mountainous region, being widespread both in Europe and in Asia. It is also popularly known as the cuckoo's or cow's breast. The cuckoo's beak has an

oblique, vigorous rhizome from which white roots start. The leaves are ovate or elongate-ovate, membranous, at the base suddenly narrowed in the petiole often wide-winged. Its stem is scapiform, 6-30 cm high, which terminally bears a multifloral umbel, with flowers bent sideways. The funnel-shaped corolla, sulfur-yellow, in the middle, at the neck of the tube has an orange ring. Its fruit is a capsule the length of a calyx or longer, with brown seeds, strongly warty. This flower blooms between March and May, being used in both human and veterinary medicine. In Romanian empirical medicine, its flowers have been used to treat many ailments, without having a scientific justification.

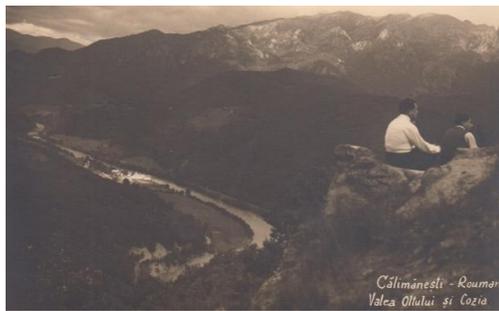
The stamp with a face value of 8.50 lei has as subject the Trumpet Gentian (*Gentiana acaulis*), a species from the *Gentianaceae* family that includes 87 genera and over 1500 species (Fig. 7b) [24,25]. The genus *Gentiana* comprises about 400 species and is a cosmopolitan genus that occurs in alpine habitats in the temperate regions of North America, Asia, and Europe. This is a short plant with a stem of 5-10 cm. The cups have elliptical stem leaves, 1-2 pairs, and the basal rosette consists of matte leaves, elliptical to obovate, thick, spread on the ground, and at the top have a single large flower in the shape of an elongated cup of dark blue, with longitudinal ribs olive green. The flowers grow on a very short peduncle of 3-6 cm. The leaves are 2-3.5 cm high. Cups love sunny places, blooming in late spring and summer between June and July, preferring meadows in the forested area.

The stamp with a face value of 11.50 lei graphically depicts Dittany (*Dictamnus albus*), a herbaceous plant, which is part of the *Rutaceae* family (Fig. 7c) [24,25]. It is widespread in areas with shrubs, at the edge of forests, meadows, meadows, from the plain area to the beech floor,

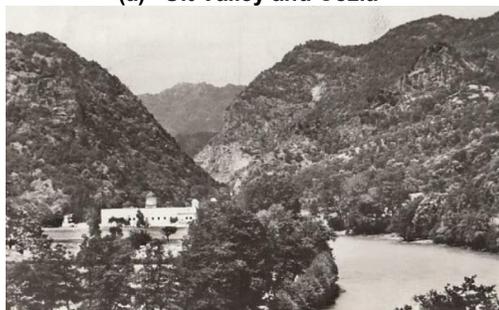
found both in Europe and in Asia, being cultivated for ornamental purposes, in parks and public gardens, for flowers especially of beautiful. Dittany has a gray-black rhizome, from which the roots start and an erect, rigid, simple, hairy and tall stem, which can reach up to 120 cm. The root and rhizomes contain volatile oil, which has a strong odor. The leaves are leathery, glandularly dotted, alternate, short-hairy, and the flowers are large, pink, or pink-lilac, rarely white, with purple veins. The plant blooms between May and July.

The fruits are capsule-shaped, with 2-3 seeds in each box. Dittany has multiple therapeutic uses, being used in human medicine especially to combat circulatory and coronary insufficiency.

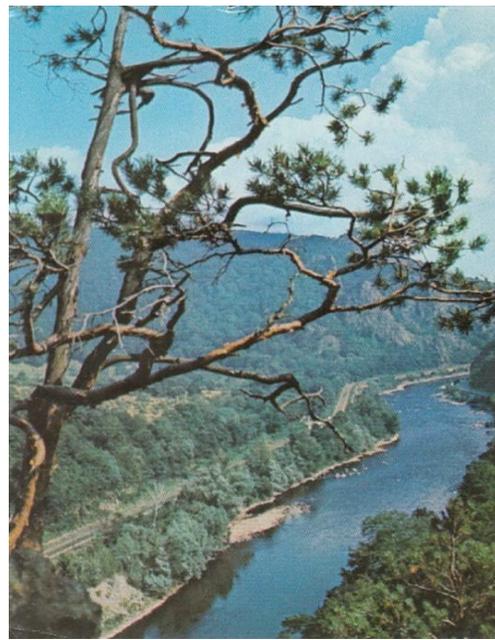
Regarding the technical characteristics of the show "Flowers of the mountains, Mount Cozia", they were summarized in Table 1, and refer to stamps, as well as the block and packages [22,26].



(a) "Olt Valley and Cozia"

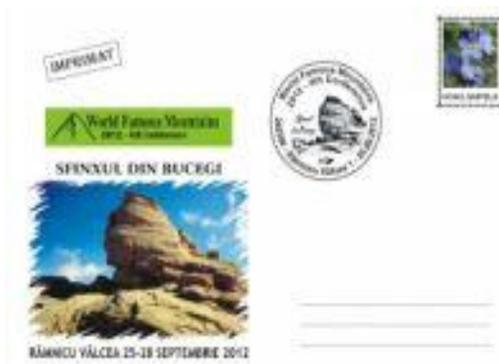


(b) "Olt River near Cozia"

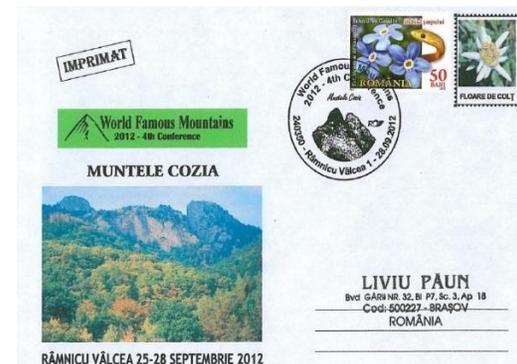


(c) "Olt Valley at Cozia"

Fig. 3. Illustrated postcards referring to the Cozia area



(a) Special philatelic envelope "The Sphinx from Bucegi", 25.09.2012, Râmnicu Vâlcea



(b) Special philatelic envelope "Cozia Mountain", 28.09.2012, Râmnicu Vâlcea

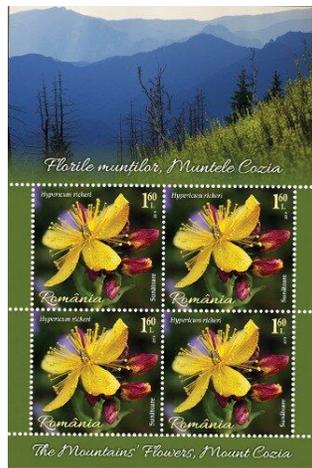
Fig. 4. Philatelic products issued on the occasion of the International Conference "The most famous mountains in the world", 25-28.09.2012, Râmnicu Vâlcea



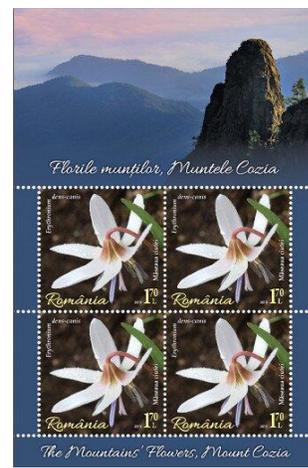
Fig. 5. FDCs of “Flowers of the mountains, Cozia Mountain”, 23.08.2019, Bucharest



(a) *Leontopodium alpinum*

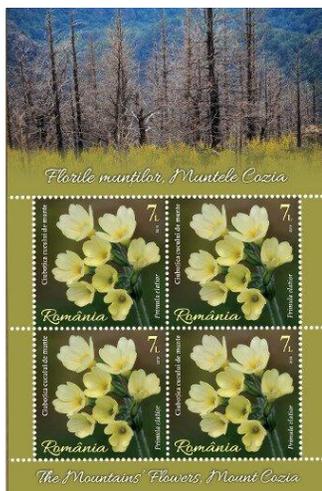


(b) *Hypericum richeri*

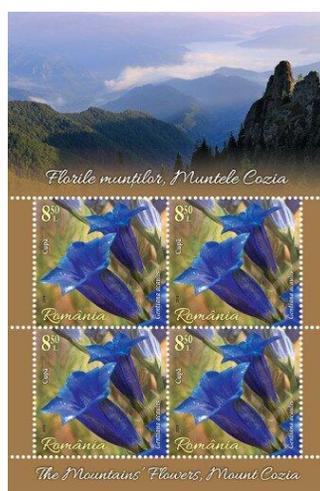


(c) *Erythronium dens-canis*

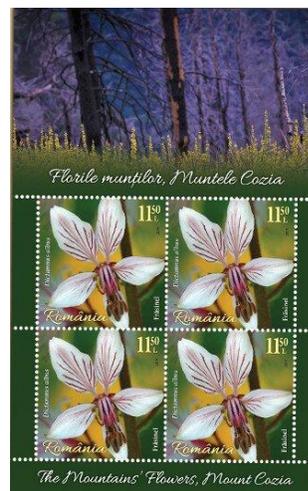
Fig. 6. Blocks - “Flowers of the mountains, Cozia Mountain”, 23.08.2019, Bucharest (I)



(a) *Primula elatior*



(b) *Gentiana acaulis*



(c) *Dictamnus albus*

Fig. 7. Blocks - “Flowers of the mountains, Cozia Mountain”, 23.08.2019, Bucharest (II)

Table 1. Technical (carto-philatelic) characteristics for "Flowers of the mountains, Cozia Mountain", 23.08.2019, Bucharest

Technical characteristics	Values and other observations
Date of issue	23.08.2019
Number of values	6
Stamp/Block/Minisheet size	36×36 mm/135×145 mm/86×134 mm
Page composition	In sheet of 28 stamps, minisheet of 4 stamps with illustrated border and block of 6 imperforated stamps
Printing system	Offset, in 4 colours on chromo-gummed paper - UK origin
Run printing	85,326 stamps - 49,896 in sheets of 28 stamps, 34,200 in minisheets of 4 stamps with illustrated border (8,550 minisheets) and 1,230 in blocks of 6 imperforated stamps (205 blocks)
Designer	Mihai Vămășescu
FDC	430 sets (2 covers) equipped with the postage stamps of the issue, numbered and cancelled with the „first day” postmark
Listing	2252(set), 2252a (philatelic album)

4. CONCLUSION

In the paper, we bring to the fore the area of Cozia National Park both from an ecological point of view - by presenting the species of flora and fauna in the form of a short inventory, and philatelic point of view - by analyzing, describing and disseminating the main pieces identified in within philatelic content e-commerce sites. We were impressed by the way in which over time the Romanian postal administration decided to promote protected natural areas, the pieces identified being of a rare beauty, especially those made in 2019.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Available:https://ro.wikipedia.org/wiki/Parcul_Național_Cozia
- Available:<https://eunis.eea.europa.eu/sites/11174>
- Available:www.protectedplanet.net/parcul-national-cozia-national-park
- LAW no. 5/2000 on the approval of the National Spatial Planning Plan - Section III - protected areas. Available:www.cdep.ro/pls/legis/legis_pck.htp_act_text?id=22636. Romanian DECISION no. 230 of March 4, 2003 on the delimitation of biosphere reserves, national parks and natural parks and the establishment of their administrations. Available:www.legex.ro/Hotararea-230-2003-36800.aspx. Romanian
- Pop AL, Cioruța B, Coman M. Considerations regarding the implications of philately in ecological education, Scientific Bulletin of North University Center of Baia Mare, Mining, Mineral Processing, Non-ferrous Metallurgy, Geology & Environmental Engineering. Baia Mare. 2017;31(1):57-62.
- Mesaroș M, Cioruța B, Coman M. Protected natural heritage on route from philosophy to environment engineering, Scientific Bulletin of North University Center of Baia Mare, Mining, Mineral Processing, Non-ferrous Metallurgy, Geology & Environmental Engineering. Baia Mare. 2018;32(1):63-72.
- Cioruța B, Pop AL, Coman M, Luran A. Implications of philately in promoting the protected natural areas (I): Ceahlău National Park, Scientific Bulletin of North University Center of Baia Mare, Series D, Mining, Mineral Processing, Non-ferrous Metallurgy, Geology and Environmental Engineering, Baia Mare. 2018;32(1):87-96.
- Pop AL, Cioruța B, Coman M. Implications of philately in promoting the protected natural areas (II): "Pețea Creek" Natural Reservation, Scientific Bulletin of North University Center of Baia Mare, Series D, Mining, Mineral Processing, Non-ferrous Metallurgy, Geology and Environmental Engineering, Baia Mare. 2018;32(2):43-52.
- Stanciu E, Florescu F, Protected areas in Romania, "Green Steps" Publishing House, Brașov, 2009. Available:https://propark.ro/images/upload_s/file/manual_arii_protejata_net.pdf. Romanian.

11. Rațiu A. Legal regime of protected natural areas - practical aspects, Brașov, 2017. Available:www.juridice.ro/wp-content/uploads/2016/11/Regimul-juridical-ANP-aspecte-practice_Antoanela.pdf Romanian.
12. Government Emergency Ordinance no. 57/2007 regarding the regime of protected natural areas, conservation of natural habitats, of wild flora and fauna, Official Gazette no. 442/2007. Available:https://aliantasportnatura.wordpress.com/legea-ariilor-protejate
13. Tudor Gh, Chiricheș C, Mermeze Gh. Catalog of Romanian postage stamps 1990-2017 (LP #1233-2135), Editura AXA, București; 2017. Romanian.
14. Scăiceanu C. Catalog of layout designers of Romanian postage stamps, Oscar Print Publishing House, Bucharest. 2018. Romanian.
15. Available:www.delcampe.net/en_US/collectibles/postcards/romania/512-romania-roumanie-rumania-vilcea-valcea-valea-oltului-masivul-cozia-362551554.html
16. Available:www.delcampe.net/en_US/collectibles/postcards/romania/a716-roumanie-romania-baile-calimanesti-monastirea-cozia-recto-verso-614458462.html
17. Available:www.delcampe.net/en_US/collectibles/postcards/romania/calimanesti-roumanie-valea-oltului-si-cozia-993116132.html
18. Available:www.delcampe.net/en_US/collectibles/postcards/romania/86117-olt-river-at-cozia-monastery-961325324.html
19. Available:www.delcampe.net/en_US/collectibles/postcards/romania/86810-olt-river-at-cozia-976071197.html
20. Available:www.ramnic.ro/articole/muntele-cozia-si-sfinxul-bucegilornbsp-pe-plicuri-filatelice-emisenbsp-cu-ocazia-conferintei-internationalenbsp-pe-teme-montane-48415/2012-09-27
21. Available:www.delcampe.net/en_US/collectibles/stamps/environment-climate-protection/cov-56-1402-mountain-cozia-romania-cover-used-2012-1049523814.html
22. Available:http://romfilatelia.ro/magazin/produs/colectii-anuale/florile-muntilor-muntele-cozia
23. Available:www.delcampe.net/en_US/collectibles/stamps/plants/other/romania-2019-the-mountains-flowers-mount-cozia-set-2-fdc-826988465.html
24. Available:www.delcampe.net/en_US/collectibles/stamps/romania-1948-republics/unused-stamps-6/ref-621497-mnh-romania-2019-las-flores-de-la-montana-monte-cozia-981847970.html
25. Available:www.delcampe.net/en_US/collectibles/stamps/romania-1948-republics/unused-stamps-6/ref-621497-new-romania-2019-las-flores-de-la-montana-monte-cozia-961120463.html
26. Available:https://colnect.com/ro/stamps/list/country/177-Rom%C3%A2nia/series/345632-Mountain_Flowers_2019/year/2019

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