

ANALYSIS OF THE ANDRIJA ANDRIĆ HERBARIUM

NEDILJKO ŽEVRNJA¹ & DALIBOR VLADOVIĆ²

¹Natural History Museum, Poljana kneza Trpimira 3, HR-21000 Split

²5th Gymnasium »Vladimir Nazor«, Zagrebačka 2, HR-21000 Split

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Andrić's herbarium was established between 1823 and 1824. It was completed in 1837 and is kept today at two locations. The biggest part of the herbarium is placed in the Natural History Museum in Split, while the class folder of *Diandria* is kept in the Trogir City Museum. Unfortunately, it is not known when the parts of herbarium were stored in these two institutions nor on which occasion the transfer took place.

Today there are 620 herbarium sheets in the two museums, out of which 518 taxa were listed in the register from 1914, while 115 taxa are missing. In addition to the 905 taxa that Andrić collected or registered (according to the list from 1914), there are 24 newly discovered taxa that are found and labelled in the herbaria of the Trogir City Museum and Natural History Museum in Split. Thus, according to the work done on the material so far, the total number of taxa collected or registered by Andrija Andrić for the Trogir flora is 929.

In 2005, Andrić's herbarium at the Natural History Museum in Split was updated, which included replacement and preservation of herbarium sheets and insertion of original labels in the herbarium.

Key words: Herbarium collection, Andrija Andrić, Natural History Museum in Split, Trogir Town Museum

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Andrićev herbar nastao je od 1823.–1824. do 1837. godine, a danas se čuva na dva mjesta. Najveći dio herbara nalazi se u Prirodoslovnom muzeju u Splitu, a mapa razreda *Diandria* u Muzeju grada Trogira. Nije nam poznato kada, niti kojom prigodom su dijelovi herbara završili u navedenim ustanovama.

U oba muzeja čuva se 620 herbarskih listova u kojima se danas nalazi 518 svojti koje su navedene u popisu iz 1914. godine, a 115 svojti nedostaje. Ukupnom broju od 905 svojti koliko ih je Andrić prikupio ili zapisao (prema popisu iz 1914. god.) svakako treba pridodati i 24 nove svojte koje smo pronašli herbarizirane i etiketirane u Muzeju grada Trogira i Prirodoslovnom muzeju u Splitu. Time bi, prema rezultatima dosadašnje obrade materijala, ukupan broj svojti koje je sakupio ili zapisao Andrija Andrić za trogirsku floru iznosio 929.

U dijelu Andrićevog herbara koji se nalazi u Prirodoslovnom muzeju u Splitu zamijenjeni su 2005. godine herbarski listovi, a izvorne su etikete sačuvane i umetnute.

Ključne riječi: Herbarska zbirka Andrije Andrića, Prirodoslovni muzej Split, Muzej grada Trogira

INTRODUCTION

There are two published papers dealing with Andrija Andrić's biography; the first was written by Roko SLADE ŠILOVIĆ in 1914, and the second by Mirko SLADEŠILOVIĆ in 1973 (Fig. 1). Andrija Andrić was born in Trogir, on 31st October 1799, his father being Petar Andrić and mother Vinka Gielpi.



Fig. 1. Andrija Andrić

He completed his education in Trogir during the French rule and continued to work as apprentice in his father's pharmacy. After two-year apprenticeship, Andrija went to Padua, Italy. Besides studying, he collected the first small herbarium. From this first herbarium from Padua, there is only thing left, a list of 185 plant species. During the first year of his study in Padua, Andrić met Robert Visiani, who later on had a significant role in collecting Croatian flora, especially the flora of the Dalma-

tian region. Andrić came back from Padua in 1821. From 1822 up to 1836 he worked as pharmacist in the Nutrizio Family Pharmacy in Trogir. In the period from 1836 to 1857 he had a lease on the Peroević Pharmacy. In 1889 he owned his own pharmacy that he rented to a Mr. Lubina.

The title on the first page of his main catalogue of plants collected in Trogir is in Italian »List of plants collected in Trogir by myself and Mr. Ivan Miotta from 1823/4 up to 1837, that form a herbarium which I had classified by 1841 according to Linnaeus«. Besides the main Andrić catalogue, there is also another one, though of smaller format, which counts 64 pages. In the two catalogues there are 313 genera containing 798 plant species.

In the Andrić paper there is another list of plants, which was lost after being copied by R. SLADE ŠILOVIĆ (1914), entitled »Annex to the names of plants surveyed later in the Trogir area, but not collected for the herbarium«. This Annex contains 107 names and together with other lists makes a total of 905 registered species. In R. SLADE ŠILOVIĆ (1914) the plants are listed from the catalogue and annex, while the herbarium is described as poorly preserved. The printed labels for some species with plant names have fallen out. Some were lost together with the plants during transportation from one building to another.

Andrija Andrić died in his hometown, Trogir, on 21st December 1897 at the age of 98.

RESULTS

Nowadays, the Andrić herbarium is kept at two different locations. The biggest part of the herbarium is placed in Natural History Museum in Split; while one class folder is kept in the Trogir City Museum. Unfortunately, we do not know the precise period in which the parts of herbarium were stored in these two institutions since there are no data in the Natural History Museum in Split about the time when the collection became the part of Museum material or about the occasion for it.

In Trogir City Museum there is a class folder II – *Diandria* – that contains 13 taxa (according to R. Slade Šilović 1914 list), one plant species which is not mentioned in the list, while 5 taxa are missing. According to the list the following taxa are missing: 8 *Veronica pinnata*, 13 *Veronica hederifolia*, 15 *Salvia officinalis*, 16 *Salvia officinalis flore albo* and 21 *Salvia austriaca*. There is one surplus plant species: *Anthoxanthum odoratum*.

The biggest part of Andrić's herbarium is kept in the Natural History Museum in Split containing the folder classes: I, IV, V, VI, VIII, IX, XI, XIV, XV, XVI, XVII, XIX, XX, XXII, XXIII and XXIV.

Class I – *Monandria* – contains 3 registered taxa that comply with names of listed plants.

Class IV – *Tetrandria* – contains 29 taxa that are on the list and 3 plant species which are not mentioned in the list, while 3 taxa are missing. According to the list the following taxa are missing: 62 *Galium silvaticum*, 78 *Plantago coronopus* and 81

Cornus mascula. There are 3 surplus plant species that are not mentioned in the list: *Scabiosa arvensis*, *Scabiosa columbaria* and *Centunculus minimus*.

Class V – *Petandria* – contains 111 taxa that are on the list and 3 plant species not mentioned in the list, while 19 taxa are missing. According to the list the following taxa are missing: 91 *Lycopsis bullata*, 102 *Echium prostratum*, 112 *Anagallis arvensis*, 119 *Convolvulus athaeoides*, 120 *Convolvulus arvensis*, 121 *Convolvulus silvestris*, 122 *Hyoscyamus albus*, 124 *Verbascum lychnitis*, 129 *Capsicum annuum*, 134 *Campanula speculum*, 143 *Thesium alpinum*, 163 *Oenanthe phellandrium*, 167 *Tordylium nodosum*, 186 *Cicuta virosa*, 197 *Herniaria hirsuta*, 202 *Viburnum lantana*, 204 *Sambucus nigra*, 215 *Linum maritimum* and 216 *Linum strictum*. There are 3 surplus plant species: *Hyoscyamus niger*, *Lithospermum incrustatum*, and *Campanula romboidalis*.

Class VI – *Hexandria* – contains 32 taxa that are on the list and one plant species not mentioned in the list, while 8 taxa are missing. According to the list the following taxa are missing: 218 *Ornithogalum minimum*, 220 *Ornithogalum umbellatum*, 222 *Ornithogalum spataceum*, 228 *Alium narcissifolium*, 237 *Hyacinthus romanus* 239 *Hyacinthus botryoides*, 240 *Hyacinthus amethystina* and 252 *Colchicum autumnale*. There is one surplus plant species, *Rumex acutus*.

Class VIII – *Octandria* – contains 9 taxa that are on the list and 2 plant species not mentioned in the list, while 4 taxa are missing. According to the list the following taxa are missing: 260 *Acer monspessulanum*, 261 *Acer campestre*, 265 *Populus alba* and 266 *Populus pyramidalis*. Two surplus plant species that are not mentioned in the list are: *Polygonum antinodium* and *Cuscuta pronovii* (written on a piece of paper but without a label).

Class IX – *Enneandria* – contains one taxon that is on the list and one plant species not mentioned in the list, while one taxon is missing. According to the list the missing taxon is: 271 *Mercurialis annua*. One surplus plant species that is not mentioned in the list is *Mercurialis perennis*.

Class XI – *Dodecandria* – contains 4 taxa that are on the list, while one taxon is missing. According to the list the missing taxon is 314 *Reseda phyteuma*.

Class XIV – *Didynamia* – contains 60 taxa that are on the list and 2 plant species not mentioned in the list, while 7 taxa are missing. According to the list the following taxa are missing: 396 *Mentha piperita*, 397 *Mentha crispa*, 406 *Stachys germanica*, 408 *Stachys arvensis*, 410 *Stachys lanata*, 430 *Antirrhinum* and 435 *Orobancha levis*. There are 2 plant species that are surplus: *Linaria purpurea* and *Origanum onites*.

Class XV – *Tetradynamia* – contains 34 taxa that are on the list and one plant species which is not mentioned in the list, while 11 taxa are missing. According to the list the following taxa are missing: 442 *Biscutella auriculata*, 447 *Alyssum incanum*, 449 *Lepidium latifolium*, 455 *Cochlearia coronopus*, 456 *Cochlearia danica*, 462 *Thlaspi campestre*, 466 *Cardamine greca*, 470 *Turritis ochroleuca*, 471 *Turritis glabra*, 474 *Hesperis alliaria* and 476 *Sisymbrium asperum*. There is one surplus plant species: *Biscutella hirsuta*.

Class XVI – *Monadelphia* – contains 19 taxa that are on the list, while 4 taxa are missing. According to the list the following taxa are missing: 482 *Erodium cicutarium*, 493 *Geranium rotundifolium*, 494 *Geranium columbinum* and 495 *Geranium dissectum*.

Class XVII – *Diadelphia* – contains 98 taxa that are on the list and 3 plant species not mentioned in the list, while 22 taxa are missing. According to the list the following taxa are missing: 511 *Ononis reclinata*, 515 *Anthyllis vulneraria* flore purpur., 519 *Onobrychis communis*, 523 *Melilotus messanensis*, 533 *Trifolium saxatile*, 558 *Lathyrus angulatus*, 559 *Lathyrus pratensis*, 560 *Lathyrus coccineus*, 561 *Lathyrus climenus*, 564 *Vicia cracca* flore albo, 571 *Vicia sepium*, 575 *Vicia monantha*, 577 *Vicia acaulis* filiformis, 579 *Ervum ervilia*, 584 *Lotus canovariegatus*, 594 *Medicago interjecta*, 595 *Medicago rigidula*, 606 *Medicago minima*, 608 *Astragalus falcatus*, 611 *Astragalus cicer*, 612 *Astragalus montanus* and 623 *Scorpiurus vermiculata*. There are 3 plant species as surplus: *Astragalus argenteus*, *Medicago falcata*, and *Lotus emeroides*.

Class XIX – *Syngenesia* – contains 70 taxa that are on the list and 5 plant species which are not mentioned in the list, while 17 taxa are missing. According to the list the following taxa are missing: 627 *Carduus chrysacanthus*, 628 *Carduus rivularis*, 629 *Carduus lanceolatus*, 632 *Serratula arvensis*, 662 *Chrysanthemum cinerariaefolium*, 664 *Anthemis cota*, 672 *Cyanus cyanus*, 678 *Calcitrapa galactitis*, 684 *Crepis stricta*, 685 *Crepis alpina*, 688 *Hieracium sylvaticum*, 691 *Hieracium amplexicaule*, 693 *Sonchus oleraceus*, 695 *Sonchus asper*, 707 *Lampsana communis*, 708 *Lampsana stellata* and 709 *Lampsana zacynta*. There are 5 surplus plant species: *Crepis melanensis*, *Crocodylium venatum*, *Chironicum centaarium*, *Anthemis cotula* and *Carlina corymbosus*.

Class XX – *Gynandria* – contains 11 taxa that are on the list and one plant species not mentioned in the list, while 1 taxon is missing. According to the list the missing taxon is 722 *Arisolochia clematitis*.

Class XXII – *Dioegia* – contains 4 taxa that are on the list, while one taxon is missing. According to the list the missing taxon is 766 *Juniperus phoenicea*.

Class XXIII – *Poligamia* – contains 5 taxa that are on the list and 1 plant species which is not mentioned in the list, while 2 taxa are missing. According to the list the following taxa are missing: 768 *Parietaria diffusa* and 769 *Parietaria officinalis*. The surplus plant species is *Atriplex hastata*.

Class XXIV – *Cryptogamia* – contains 16 taxa that are on the list, while 9 taxa are missing. According to the list, these taxa are: 777 *Asplenium ceterach*, 779 *Pteris aquilina*, 783 *Lichen pixidatula*, 784 *Lichen butigenus*, 785 *Lichen uncialis*, 786 *Lichen cociferus*, 789 *Fucus nodosus*, 792 *Conferva bulosa* and 793 *Conferva rivularis*.

DISCUSSION

In the Natural History Museum in Split and Trogir City Museum there are 620 herbarium sheets, out of which 518 taxa were listed in a register by R. Slade Šilović, 1914, while 115 taxa in the Andrić herbarium are missing. However, at first exami-

nation it was established that some of the plants were not properly determined. As the author himself said, the herbarium was formed according to the Linnaeus systematization, which is considered outdated. Revision of herbarium material and coordination of plant names with contemporary names will be considered in another paper. To the total of 905 plants which Andrić collected or registered (according to the list from 1914) we should add 24 newly discovered taxa that are found and labelled in the herbaria of the Trogir City Museum and the Natural History Museum in Split. These are the following: *Anthemis cotula*, *Anthoxanthum odoratum*, *Astragalus argenteus*, *Atriplex hastata*, *Biscutella hirsuta*, *Campanula hybrida*, *Campanula romboldalis*, *Carlina corymbosus*, *Centunculus minimus*, *Chronicum centaurium*, *Crepis melanensis*, *Crocodylium venatum*, *Cuscuta pronovii*, *Hyoscyamus niger*, *Linaria purpurea*, *Lithospermum incrustatum*, *Lotus emeroides*, *Medicago falcata*, *Mercurialis perenis*, *Origanum onites*, *Polygonum antinodium*, *Rumex acutus*, *Scabiosa arvensis* and *Scabiosa columbaria*. Thus the total number of plants collected or registered by Andrija Andrić for the Trogir flora is 929. Recently, Andrić's herbarium at the Natural History Museum in Split has been updated, which included replacement and preservation of herbarium sheets and the insertion of the original labels in the herbarium (Figs. 2. a,b). All archival material was stored in the original folders with changed new ribbons. This is one of the ways of preserving the herbarium collection from further deterioration. Some herbarium material was ruined and in some folders the original labels were damaged.

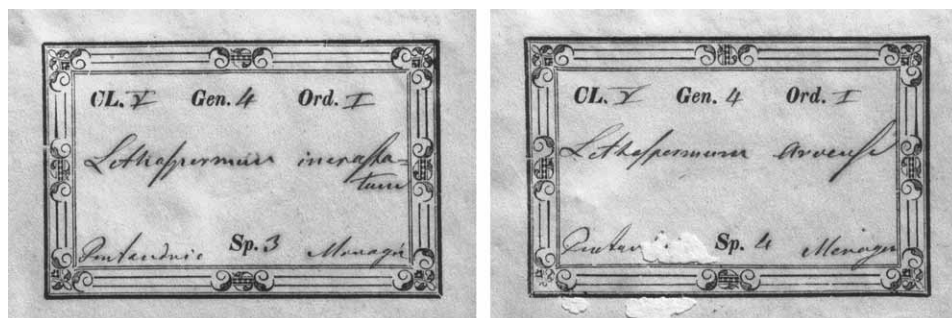


Fig. 2.a. Original labels from the Andrić herbarium (undamaged)

Fig. 2.b. Original labels from the Andrić herbarium (damaged)

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REFERENCES

- SLADE-ŠILOVIĆ, M., 1973: Život i rad trogirskog ljekarnika Andrije Andrića i njegov herbar. Radovi međunarodnog simpozija održanog prigodom proslave 700. obljetnice spomena ljekarne u Trogiru, Trogir 27. X – 1. XI 1971., Zagreb
- SLADE ŠILOVIĆ, R., 1914: Herbar Andrije Andrića Trogirana sa životopisom istoga. Leonova tiskara, Spljet.

SAŽETAK

Analiza herbara Andrije Andrića

N. Ževrnja & D. Vladović

Prema dostupnom materijalu, danas u Andrićevom herbaru (koji je nastao od 1823.–1824. do 1837. godine) nalazimo 620 herbarskih listova. Prema popisu iz 1914. godine u pojedinim svescima koji se čuvaju u Muzeju grada Trogira i Prirodoslovnom muzeju u Splitu na 518 herbarskih listova nalaze se otprije poznate svojte. Od 102 nova herbarska lista, 24 ih je određeno do ranga vrste i time bi ukupan broj biljaka koje je za trogirsku floru sakupio ili zapisao Andrija Andrić iznosio 929. Prema prikupljenim podacima nedostaju ili su zagubljena dva sveska i to: razred XII – *Icosandria* sa 17 herbarskih listova i razred XIII – *Polyandria* s 36 herbarskih listova, dok su ostali razredi, III – *Triandria*, VII – *Heptandria*, X – *Decandria* i XXI – *Monoecia* u obradi i predmet su drugog rada.

Nedavno smo u dijelu Andrićevog herbara koji se nalazi u Prirodoslovnom muzeju u Splitu zamijenili herbarske listove, a izvorne su etikete sačuvane i umetnute zajedno s herbarskim listovima u papirnate košuljice. Sve zajedno je stavljeno u originalne sveske kojima su prepravljene vrpce za vezivanje. Time se nastoji spasiti od daljnjeg propadanja ovaj dio herbarske zbirke koji je vremenom bio zapušten.

SUMMARY

Analysis of the Andrija Andrić herbarium

N. Ževrnja & D. Vladović

According to the available material, there are 620 herbarium sheets in the Andrić herbarium (established from 1823–1824 up to 1837) today. According to the registration list from 1914 in some folders kept in the Trogir City Museum and in the Natural History Museum in Split there are 518 herbarium sheets with taxa known from before. Of 102 new herbarium sheets, 24 have been determined as species, and the total number of plants collected or registered by Andrija Andrić for Trogir flora amounts to 929. The collected data show that there are two folders missing; class XII – *Icosandria* – with 17 herbarium sheets and class XIII – *Polyandria* with 36 herbarium sheets. Other classes: III – *Triandria*, VII – *Heptandria*, X – *Decandria* and XXI – *Monoecia* are in the process of being studied and will be the object of another paper.

Recently, the Andrić herbarium at the Natural History Museum in Split has been updated, which included replacement and preservation of herbarium sheets and insertion of original labels in the herbarium and paper sacks. All archival material was stored in original folders with changed new ribbons. This is one of the ways of preserving the herbarium collection from the further deterioration.