

ANASTASIE FĂTU – FOUNDER OF THE BOTANICAL GARDEN OF IASI

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Remarkable personality, Anastasie Fătu, has organized the medical and social assistance in Moldova. The development of science in the first modern university of Romania and the establishment of the first botanical garden in Iasi (Fig. 1), recommend him as the founder of the school of medicine and natural sciences in the United Principalities.

Academician Emil Pop (1967) considers that Anastasie Fătu “...he is in the history of Romanian medicine as a famous physician of the poor and the main organizer of hospitals in Moldova, tasks that have taken more time and energy, probably most of his professional activity. And yet, we the botanists, consider Fătu as one of us, as an evolved botanist and extremely progressive for its time, which created solid foundations for botanic education at university and which sacrificed on the altar of science with a rare generosity and a strong love for national culture not only his entire working power, but the savings acquired with sorrow. Fătu is, during the cultural renaissance of the young Romania, an extraordinary example of the great private initiatives, on the basis of which he could call the intellectualists of his time for big collective actions for the progress of the delayed scientific research...”

Its scientific work recommend him as a brilliantly representative of advanced social aspirations of his time, being one of the most remarkable figures in the history of medicine, science and culture of Moldova. This spiritual legacy is embodied in approximately 3000 pages, published in more than 40 years of activity [MAFTEI, 1972].

Life and professional development. Anastasie Fătu was born on 2nd of January, 1816 in the Mușata village, the former county Fălciu (now Vaslui). His father Vasile, a priest, and his mother Ana, always wished that their son, who proved outstanding qualities since childhood, to be admitted as a Fellow of the state public schools. He attended primary school in Episcopal School of Huși, and then Vasilian Gymnasium in Iasi.

In 1834, as a distinguished prized of the Vasilian Gymnasium receives a scholarship to study in Vienna, where in 1841 he defended his doctorate in philosophy and law. During his studies understands (as will be noted later by V. A. Urechia in response to reception speech of doctor Anastasie Fătu at the Romanian Academy) that in a “*country widow of freedom, in the land of the whip and unjust privileges*” could not assert his conception of law and freedom, conception learned from books and from the courses followed at the Faculty of Law, University of Vienna.

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Gives up a profitable career, but without clean soul enjoyments, and since 1839, enrolls also in Vienna at the Faculty of Medicine.

Between 1841 and 1846 he continued his medical studies at the Sorbonne University in Paris, where he received his title of doctor in medicine, with the thesis: “*Des signes des maladies du cœur en général fournis par l'auscultation, la percussion, l'inspection et la mensuration*”.

The activity of the physicians, but especially professor and academician Fătu, shows that at the two outstanding universities, was not satisfied with just the acquisition of knowledge necessary for professional career. In the two institutions Fătu closely surveyed cultural phenomena and scientific research results, comparing them to what might represent for his country. During his studies, has acquired principles that could help at organizing public health and promote natural sciences.

Returned home with the firm determination to devote his entire life to initiatives for the establishment of a humanitarian and civilized ordinances in the organization of public health, on 1st of December 1847, requests to Moldovan Health Committee to approve the free practice right to perform as a physician. After a written and oral exam, the Committee concluded that Anastasie Fătu: “...is endowed with science worthy of appreciation and may be consented for free practice as doctor in medicine...”

As a result, from 1848 to 1852 is appointed district physician and later physician of the 2nd Regiment of Militia (1849), becoming as the historian V. A. Urechia will appreciate “...doctor of the poor and consoler of the sufferer...”

As a doctor of the 2nd Regiment of Police, publishes in 1853 a *Project for police organization in Romania*.

In 1852 doctor Fătu is appointed professor and administrator of the *Gregorian Institute* by the prince Grigore Al. Ghica, where he will found a midwife school. Along with doctor Gheorghe Cuciureanu will offer pediatric assistance and will found the first nursery for abandoned children. As a professor he initiate the first official midwives in Moldova, and for preparing them, wrote in 1852 *The manual for midwives* (in Romanian: *Manualul pentru învățătura moașelor*).

Since 1873, after professor Dimitrie Brândză went to the University of Bucharest, he occupied the department of Botany and Zoology from the Faculty of Science at the University of Iasi.

In 1879, along with doctors Gheorghe Cuciureanu and Nicolae Negură, he contributed to the foundation of the Faculty of Medicine of the University of Iasi.

Anastasie Fătu died in Iasi, 130 year ago, on 3rd of March 1886, resting at the Eternitatea Cemetery [MITITIUC & TONIUC, 2006].

The personality of the great erudite was evoked in volumes [AIFTINCĂ, 2014; BOTNARIUC, 1961; BUDA, 2013; MITITIUC & TONIUC, 2006; POP, 1967; MAFTEI, 1972; POP & CODREANU, 1975; TOMA, 1986; TOMA, 2015], dictionaries [anonymous, 1982; NECULA, 2001], specialized journals [ANGELESCU & DIMA, 2006; BURDUJA & al., 1960; BURDUJA & TOMA, 1979; CONSTANTINESCU, 2009; LEOCOV, 1979, 1982; PAPP, BURDUJA & DOBRESCU, 1955; RESMERIȚĂ, 1982; TOMA, 1974, 1975, 1987, 1996], or within scientific meetings (1981, to commemorate 125 years since the establishment in Iasi of the first botanical garden, was unveiled, in the roundabout in front of the administrative building, the bust of doctor Anastasie Fătu, accomplished and donated by the sculptor Eftimie Bârleanu; in 1986, at the third Symposium of the Botanic Garden,

Mandache Leocov, Gheorghe Zamfir, Petru Jitaru and Constantin Toma evoked the personality of Anastasie Fătu.

The name of the great erudite is kept with gratitude at the Secondary School in commune Berezeni (Vaslui County) and in the dendrological park realized in mixed style.

Founder of the botanical garden. 160 years ago, in 1856, Doctor Anastasie Fătu became renown by founding oneself the first botanical garden from Romania in Iasi, with his own financial resources, this action being considered in society as a remarkable cultural event.

Like the Natural History Museum, established in Iasi in 1834, the Botanical Garden of Anastasie Fătu will contribute significantly to the natural sciences development [MITITIUC & TONIUC, 2006], the cultivated plants being used also to illustrate the botanic lessons taught in different schools and at the Academia Mihaileană, founded in 1835.

This achievements constitutes favorable premises for the establishment in Iasi in 1860, of the first modern University in Romania. Science domain was based from the beginning on the two previously established prestigious institutions: Natural History Museum and the Botanical Garden, whose scientific and educational activity in training youth was coordinated by Professor Anastasie Fătu.

In the period when Anastasie Fătu was attended the botanical garden development, he was collaborating with prestigious botanists known at that period: Dimitrie Brândză, Dimitrie Grecescu and Florian Porcius.

Moreover, Dimitrie Brândză presented to the students of the university, at the courses of botany, the plants from “Fătu’s garden”.

This garden organized on his property, was situated on a hillside, located near the Criminalu Palace, and near the historical monument *Râpa Galbenă*, delimited by Butucului street (nowadays Anastasie Fătu street), Begiului Street (nowadays Florilor Street) and the road that connected with Bohotineului Street (nowadays Arcu Street).

The mission of the botanical garden was remarked by some of his contemporaries and some institutions. Thereby, Neculai Istrati, director of the Ministry of Public Instructions (Education) donated his salary for three months, and then proposed to depose an annual subvention from the public fund (exchequer). Afterward, the Town Hall of Iasi offered a subvention to the botanical garden, but those initiatives stopped in 1872, and the garden was close down under the pretext that it would block the urban development of the area [PAPP & al. 1955].

Like professor Fătu was mentioning, the purpose of this enterprise was “...to improve sanitation in the city of Iasi and to induce young people studying plant biology and to give natural sciences lovers, the occasion to contemplate, in their resting moments, at the natural beauties...” [POP, 1967].

In the press of the time, Gheorghe Asachi – the organizer of national schools in Moldova- acclaims the initiative and the activity of Anastasie Fătu to support instruction and education of youth, but also the Romanian patriotism of those who sustained by various means the maintenance and development of different institutions established in Iasi, after the model of most renown education and scientific institutions of Europe.

In the catalogue published, who contains more than 2500 of plant species cultivated in his garden, one may find that apart from the native species, which are growing spontaneous, the presence of some exotic gymnosperms, but also some species belonging to *Ficus*, *Acacia* and *Mesembryanthemum* genera.

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Anastasiu Fătu states about this garden that “...*the distribution of the plants was made after the natural method...the nomenclature is the Latin, adopted by the masters of Science, which enrolled people known Romanian words ...*” [POP, 1967].

In his manuscript entitled *Catalogus herbarii vivi et seminum ex horto 1870*, plants cultivated in the garden are listed as follows: in the first part the species are listed in alphabetic order, on two columns on each page, one with acclimatized native plants and one with exotic species. In the second part of the catalogue there are registered some groups of ornamental plants, vegetables, herbs and fruit trees. Thereby, Professor Anastasiu Fătu gives the first contribution to the knowledge of flora in the Romanian, especially Moldovan territory.

The endemic plant species were obtained with the help of the botanist Iosif Szabó, and the exotic species came from Vienna or by exchanges with botanical gardens from Germany and from Chişinău. He built in his garden two greenhouses, one for the tropical species and one for the temperate ones. At that time, with his garden, Fătu achieves a true experimental field for exotic species acclimatization.

The university rector, professor Nicolae Leon stated: “...*the garden had a nice look, the ground was injured; we were descending into on a scale from Florilor Street, we were passing under the Fătu's window, from where we were arriving immediately in front of the greenhouses. Indescribable pleasure for us was to meet the pleasant botanic professor in the garden – and we found him very often among the tablets that indicates genera and species names. With a great pleasure he was putting himself at our disposal, he was carrying out a clasp knife and a pocket lens and started, I can hear him: this plant, gentleman, takes part of the family..., then showing us how the carpels meet each other, how ovules are inserted, different types of placentation etc.*”

Since October 1996, the Botanical Garden of Iasi, in carrying the name of the founder Anastasiu Fătu, which is mentioned on the commemorative plaque on the façade of the administrative building.

Medical activity. Between 1863-1885, Anastasiu Fătu will became physician at Sfântu Spiridon Hospital, trustee at Sfântu Spiridon House (1877 and 1880) and professor of popular medicine at the Theological Seminary “Veniamin Costachi” from Socola (1872), where he elaborated the *Popular medicine manual* (in Romanian: *Manual de medicină populară*), and on the inside cover is inserted immediately beneath his name the following mention: “...*Dr. in medicine and laws, substitute teacher at the Seminary of Socola, actual member of the Romanian Academy and several local or foreign scientific societies...*”

He mentioned in the preface of this work, that when he wrote it he was thinking: “...*in the absence of doctors in villages, priests to advice people. Priests must know the diseases causes and symptoms, to beware of them but also to teach the people...*” [LEOCOV, 1979].

Because he was convinced of the necessity to establish hospitals for children in Moldova, Anastasiu Fătu was considered to be the first pediatric physician in Moldova, and with this attribute he found the first pediatric section and assesses some scientific criteria in forensic medicine in Romania.

On 1st of November 1876, Anastasiu Fătu gives Sfântu Spiridon House, 17.000 “franci”, necessary for the maintenance of five beds for sick children under the age of 10 years.

Doctor Fătu elaborated also rules (which unfortunately have not been preserved) for receiving children in this hospital, who worked in the building on the Paşcanu Street.

In this perspective, he printed at Iasi, in 1863, a *Project for organization of health and public hygiene police in Romania*, that could be considered a truly sanitary code, in which were mentioned all of the rules and medical regulations in that period.

In collaboration with Iacob Felix, coordinated the medical commission that elaborated the law for organization of health service, which was approved by the Senate in March 1872 and then, in May 1872 by the Chamber of Deputies. This first sanitary law of Romania highlighted the dependency of the administration of public health on the interior ministry [BUDA, 2013].

Academic and social activity. He was an excellent professor and patriot devoted to national progress of culture. Professor Fătu and the agronomist Ion Ionescu de la Brad had the initiative of founding in 1855, the *Society for encouraging Romanian youth to study abroad*, having the obligation to specialize in applied sciences, in domains such as chemistry, physics, agronomy or engineering.

As a result of financial support given by Anastasie Fătu, some young students, among them the future philosopher Vasile Conta, had the opportunity of studying at renowned universities from Europe [AIFTINCA, 2014].

In the work *The list of plant species cultivated in the Botanical Garden up to the year 1870* (*Enumeraţiunea speciilor de plante cultivate în Grădina Botanică din Iassy până în anul 1870*, Fig. 2), Anastasie Fătu implement the use of a proper nomenclature, consisting of neologisms borrowed from Latin language and various words used in popular language. In this sense, he includes a many of well-defined terms which are kept in the scientific literature, thereby contributing to the creation of botanical Romanian language.

After four years of didactic activity, Fătu completed in 1877 the manuscript for the first Romanian manual of botany for universities, entitled *Botanic notions* (in Romanian: *Elemente de botanică*, Fig. 3). The first part of the manual, which is 482 pages large, will be published at Iasi in 1880, containing the cytology, histology, organography and plant physiology. The second part which contains aspects referring to taxonomy, phytography and plant geography will remain as manuscript since 1920, at the Romanian Academy Bibliotheca. In addition with the original publication in medical domain, this manual recommends Anastasie Fătu as an erudite knower of the plant biology.

This manual will open new perspectives and research directions less known in plant biology domain and for the last two decades of 19th century will represent the principal source for training students from the natural sciences faculties, medicine and agriculture.

Professor Fătu appreciated in the manual preface that “...the main wish I had in the publication of this work was to spare, as possible, the precious time of students that is lost by copying the manuscripts...” [POP, 1967].

Concurrently is the first work in which are popularized aspects regarding the Romanian nomenclature used in plant biology. In this manual, Fătu is giving a great attention on *Plant Physiology*, subject which does not had previous tackling [POP, 1967]. In carrying out this work he used the most famous branch treatises of the time (Jean Baptiste Payer, Achille Richard, Pierre Étienne Simon Duchartre, Julius von Sachs) but also the work of Dimitrie Brândză – *Elementary course of natural history*, in three parts, Iasi, 1873 – and the figures were reproduced from plates purchased from the universal exhibition in Vienna, organized in 1873.

Academician Emil Pop appreciate Fătu's work as epochal, as it opens new perspectives of the Romanian academic literature, in a specialization of biological sciences which will contribute especially in forming of entire generations of students from faculties

of sciences, medicine, agronomy, from last decades of 19th century. In this work Anastasie Fătu popularized the Romanian nomenclature in the botanical domain, some of the terms being still valid.

Manual content include the following divisions: Part I – *General Anatomy and Plant histology*: cytology, fiber tissues, vascular tissues, about epidermis, about chemical composition of plants; Part II – *Descriptive anatomy or Plant organography*: Section I A – *Cotyledon plants* (seeding plants); *Reproduction organs* (flower, inflorescence and their parts, fecundation, fruit and seed, fruit classification, seeds germination); Section II B – *Sporophytes and Cryptogams*; Part III – *Plant physiology* (absorption, sap circulation, transpiration, respiration, assimilation, growth, germination).

This manual highlights an issue considered topical in the botanical domain, an excellent documentation and especially an evolved scientific conception of Professor Fătu, in a period in which *vitalism* was getting biological shades, and its philosophy was contrary with “teaching about the vital force”, seen supernatural in organisms. Fătu considered the plant as the unit, and the functions independent.

Some of the terms are present in the specialty literature today: referring on roots: vivacious; for strain: articulated, cladodes, tight, axillar tendrils, fastigated, geniculate, pricks, hispid, axillary, floral, mixed, terminal buds, soiled, clocks, patents, proliferating, nauseating; for leaves: alternate, acuminate, cuspidate, caduceus, crenate, cordiform, emersed, ensiform, fidate, filodii, hastate, devolve, ligules, mucrone, mesophilic, obcordate, obovate, ochree, orbiculare, petioles, peltate, pinnate, palmate, partite, reniform recurved, runcinate, sagittal, sessile, spatulate, stipele, subulate, truncate, vaginule; the flowers - epigine, hypogyne, inflorescence, involucre, corymb, perigyne, raceme; on fruit: hesperides, sorozat, sicon.

Permanently preoccupied of social aspects, he studied also the curative role of mineral waters, publishing in 1851 the work *Description and use of simple water and mineral waters in Moldova* (Fig. 4), work translated in Russian in 1854 of Doctor Isidor Copeniki (Fig. 5) [MITITIUC & TONIUC, 2006].

Also he collaborated by publishing some articles with medical interest in *Gazeta de Moldavia* and other periodicals.

In the year 1857, Anastasie Fătu published in the *Journal of Agriculture*, edited by Ion Ionescu de la Brad, a series of articles that highlighted his concern regarding the good organization of the Greogorian Institute and the public hygiene.

Doctor Anastasie Fătu started his political activity since the unionist period, being elected deputy of Iasi in the ad-hoc Divan of Moldavia (Fig. 6), which proposed the unification of Romanian Principalities. He was part of the Elective Assembly of Moldavia, which chooses Alexandru Ioan Cuza as Domnitor (prince) on 5th of January 1859. In 1868 was elected president of the Assembly of Deputies and senator in 1869.

Recognition of scientific activity. On 11th of September 1871, Doctor Anastasie Fătu was elected for his rich activity as “actual” member (titular) of the Romanian Academic Society (originally Romanian Literary Society – on 1st of April 1866, became the Romanian Academy in 1879), at Natural Sciences section, recent constituted by choosing two days earlier along with Petrache Poenaru, mathematician (inventor of the frame tank) of the physician Nicolae Kretzulescu and the economist Petre S. Aurelian.

We have noticed the assessments of the economist Petre S. Aurelian, member of Romanian Academy, in the answer to the request of the erudite of Iasi, to publish in 1871 the first *Catalogue of the Botanical Garden*: “...how fast would go the development of science

in Romania, how quickly would be studied the natural history of our country when all of those who have had interests of science, have occupied important positions at a university department, would imitate the tireless Anastasie Fătu, but, what can we say! Many are called, few are chosen..." Petre S. Aurelian acclaimed [TOMA, 1987].

In *The speech of reception* sustained in the front of the members of the Society *Attempts to developments of natural sciences in Romania* (in Romanian: *Încercările pentru desvoltarea științelor naturale în România*, Fig. 7) [FĂTU, 1873]. he presented the situation of sciences in Romania and the contributions on fields (geology, mineral waters, flora and fauna of Romania), of the "*illustrious men who take active part to the propagation of natural sciences*", treatises and periodic publications elaborated by them, the public and private means which contributes at the evolution of Romanian sciences, and proposes the realization of a "*scientific map of the country*" [CONSTANTINESCU, 2009].

This speech presented in the meeting on 27th of August 1872 dignify the cultural dimension of the personality of the great erudite and can be considered a document with exceptional history and scientific values [CONSTANTINESCU, 2009]. In speech' text, written on 22 pages, Fătu realizes an argued diagnoses regarding the scientific research at the time. The document is accompanied by documented appendices elaborated on 150 pages, where are mentioned historical and statistic details related to all of the scientific societies, periodicals and the bibliography in natural sciences, the situation of museums and educational institution of all levels.

The speech highlighted the remarkable education of the grand erudite, but also the special interest and preoccupation of the patriot regarding the Romanian research perspectives. Noticing the relevant analysis of the dissemination of scientific results, he insists on the directions for a fast development of them. The great culture man appreciated that the prosperity of people and the progress of national civilization are not possible without the substantial input of science and culture [AIFTINCĂ, 2014].

Professor Fătu eulogize the activity and the important role of some personalities and private associations in the development of natural sciences, but considers that this initiative must be sustained by the state. This idea is emphasized by the fact that "*...if the private initiative is a commendable thing for those who undertake scientific investigations, it does not have sufficient financial resources to make them give all the fruits that enlightened people are expecting from the science prosperity. The role of the state has a great significance in this situation. This role and the responsibility are even greater as it dispose of the society collective means and as it can use powerful resources that neither the individual and even voluntary associations can ever have....*"

The vision of great erudite on the present and future of Romanian society are remarkable through next directions: scientific activity of the researchers; private associations; public instruction for forming young specialists in areas that are considered to be lean.

Also he considers that the scientific research must be "national", pretending that the results obtained may be applied for a good evolution and economic development of Romania. In this regard, he appreciated the importance of practical application of the researches in natural sciences domain and the realization of "*...a complete scientific map of the country which comprehends all the braches of our geological, zoological, botanical and agricultural wealth; in it to indicate the different climatic zones with the characteristic plants and meteorological observations for each county. It must also contain the statistical notices on the population and the agriculture product of each region. From this study we gain an accurate knowledge of our*

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ore, of all species of plants, of animals and our agricultural development by regions and the influence of climate in plant's and animal life..." [POP, 1967].

Because all of his life denoted, beside a great character, that is an action man, in the final of his speech mentioned "...to assert how deep I am convinced of the necessity and the usefulness of the scientific map of our country, from the modest resources that I have accumulated working for 25 years, I will deposit as fund the amount of ten thousand «franci»..." [POP, 1967].

In that period the amount was equivalent with the state support for one year, the money will be used by the Natural Science Section for the subvention of the project [AIFTINCĂ, 2014].

Regarding the Academy, this institution had the mission of "regulator" and "propeller" for the scientific movement. Also he considers that "...shall be the headquarters of all the procedures for the scientific development..." [AIFTINCĂ, 2014].

In his speech in the chapter dedicated "Private means for science popularization" exhibited alongside with the *Society of Physicians and Naturalists* of Iasi, *Society of Natural Sciences* of Bucharest, the *Romanian Academic Society*, the *Society for encouraging Romanian youth to study abroad* and *Junimea Society*.

He considers that "...The objectives of the Junimea Society are to knowing the truth trough open discussions that "mutually enlightens" the members and illustrates with some of the themes that were touched within the meetings regarding issues with national character. Their reach is to find the truth, and for these all of the opinions must be respected, for from their meeting and counteracting one to be able to separate..."

The historian V.A. Urechia stated in the response, according to the academic usance, that "...here is a fountain filled with precious notes regarding the development between the Romanians of natural sciences, notably in the current century. There is nothing left to say for a specialists, for me not even as much, to this speech..." [POP, 1967] Further, the founder of the Romanian Academy made the following greeting to the great erudite and patriot Anastasie Fătu: "...live long Mr. Doctor, because you have proved that your years are the country and Romanian science's years!..." [POP, 1967].

From 1872 till 1886, Anastasie Fătu was the president of the *Society of Physicians and Naturalists* of Iasi, organizing it in sections: medicine, natural sciences and agronomy.

In the year 1872 he contributed to the organization of a small botanic garden in the yard of the *Society of Physicians and Naturalists* of Iasi. For this purpose, some species from the old garden were planted and with the help of the botanist Iosif Szabó brings in seeds from different parts of the country.

Furthermore he was corresponding member of the *Medico-Surgical Society of Bucharest*, president of the department from Iasi of the *Society for encouraging Romanian youth to study abroad*. Because he was known abroad, he was named member of the *Society of Natural Sciences of Frankfurt* and *Silesian Society for science development*.

Contemporaneous personalities surrounded with unanimous respect and with high appreciation for the physician, doctor and erudite professor, who devoted his life for the common weal.

References

- AIFTINCĂ M. 2014. *Timp și valoare. Studii de istorie a culturii și filosofiei românești*. Colecția Opera Omnia, Cartea de Filozofie. Edit. Tipo Moldova, Iași: 146-149.
- ANGELESCU N. & DIMA A. 2006. Personalități chirurgicale ieșene. *Jurnalul de Chirurgie*, Iași. **II**(4): 424.
- BOTNARIUC N. 1961. *Din istoria biologiei generale*. Edit. Ști. București: 466-467.
- BUDA O. 2013. Școala de medicină legală la Iași, Anastasie Fătu și George Bogdan. In: *Identitate națională și medicină socială. Antropologie culturală, psihiatrie și eugenism în România, 1800–1945*. Edit. Muzeului Național al Literaturii Române, Colecția Aula Magna, București: 102-108.
- BURDUJA C., FILIPESCU G. & LAZĂR M. 1960. Contribuții la cunoașterea evoluției terminologiei botanice românești. *Analele Științifice ale Universității "Alexandru Ioan Cuza" din Iași (serie nouă), Secțiunea II. (Științe Naturale)*. **VI**(2): 449-458.
- BURDUJA C. & TOMA C. 1979. Opera botanică a doctorului Anastasie Fătu (1816-1886). *Culegere de Studii și Articole de Biologie*, Grădina Botanică Iași, **1**: 21-30.
- CONSTANTINESCU R. 2009. Doctorul Anastasie Fătu – despre Societatea Junimea. *Revista Română*. Iași. **1**(55): 31-32.
- FĂTU A. 1873. *Încercările pentru dezvoltarea științelor naturale în România*. Discurs de recepțiune (27.08.1872). Soc. Acad. Rom., Imprimeria Statului, București.
- LEOCOV M. 1979. 120 de ani de la înființarea la Iași a primei Grădini Botanice din țară. *Culegere de Studii și Articole de Biologie*, Grădina Botanică Iași, **1**: 5-14.
- LEOCOV M. 1982. Dr. Anastasie Fătu – ctitorul primei grădini botanice din România. *Culegere de Studii și Articole de Biologie*, Grădina Botanică Iași, **2**: 20-27.
- LEON N. 1903. Istoria naturală medicală a poporului român. *Analele Academiei Române*, seria II, **XXV**: București.
- LEON N. 1922, 1927. *Amintiri*. Edit. Viața Românească. **1, 3**, Iași.
- MAFTEI I. 1972. *Fătu, Anastasie (1816-1886). Medic și naturalist*. In: *Personalități ieșene*. vol. I, Omagiu, Comitetul de Cultură și Educație Socialistă a Județului Iași: 251-253.
- MITITIU M. & TONIUC A. 2006. *Grădina Botanică "Anastasie Fătu" Iași. File de istorie*. Edit. Univ. "Alexandru Ioan Cuza" din Iași: 8-21; 82-84.
- NECULA P. 2001. *Dicționarul personalităților vasiluene*. Edit. Cutia Pandorei.
- PAPP C., BURDUJA C. & DOBRESCU C. 1955. Din istoricul cercetărilor de botanică în cadrul Societății de Medici și Naturaliști din Iași. *Analele Științifice ale Universității "Alexandru Ioan Cuza" din Iași (serie nouă), Secțiunea II. (Științe Naturale)*. **IV**(1-2): 235-244.
- POP E. 1967. *Anastasie Fătu (1816-1886)*. In: *Figuri de botaniști români*. Edit. Ști. București: 36-43.
- POP E. & CODREANU R. 1975. *Istoria științelor în România*. Edit. Acad. Rom., București.
- RESMERIȚĂ I. 1982. Retrospectivă din viața botaniștilor care au condus destinele Grădini Botanice din Iași. *Culegere de Studii și Articole de Biologie*, Grădina Botanică Iași, **2**: 28-33.
- TOMA C. 1974. Din activitatea Grădini Botanice a Universității ieșene. *Cercetări Agronomice în Moldova*, Iași, **3**: 157-160.
- TOMA C. 1975. Der Botanische Garden der Universität Iași. In: *Zu Problemen Botanischer Garden. Wissenschaftliche Beiträge*, Halle. **6**: 23-25.
- TOMA C. 1986. Anastasie Fătu (1816-1886). In: *Universitatea din Iași (1860-1985), Dezvoltarea științei*. Iași: 298-299.
- TOMA C. 1987. Profesor dr. Antasie Fătu – activitatea sa didactică. *Culegere de Studii și Articole de Biologie*, Grădina Botanică Iași, **2**: 19-24.
- TOMA C. 1986. Anastasie Fătu (1816-1886). *Revista Academica*, București. **6-8**: 44.
- TOMA C. 2015. *Biologi de altă dată și de azi*. Edit. Univ. "Alexandru Ioan Cuza" din Iași: 149-155.
- *** 1982. *Fătu, Anastasie*. In: *Personalități românești ale științelor naturii și tehnicii* (dicționar). Edit. Șt. Encicl., București: 149-150.

ANASTASIE FĂTU - FOUNDER OF THE BOTANICAL GARDEN OF IASI



Fig. 1. Place of the Fătu's Botanical Garden in city plan made by engineer Fred Peytavin in 1857 (National Archives of Iasi, section Plans and Maps, no. 522)

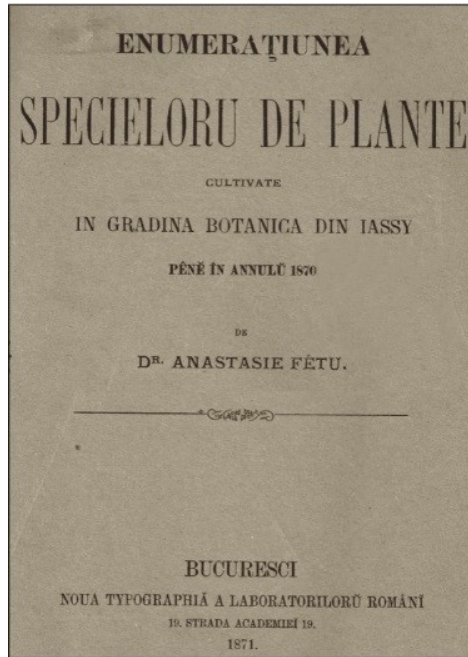


Fig. 2

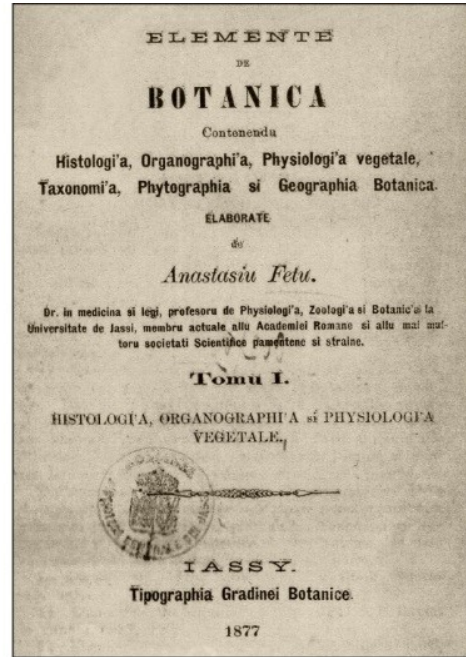


Fig. 3

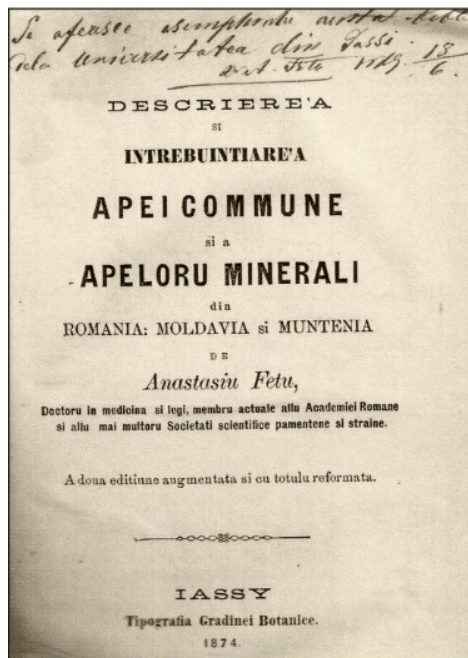


Fig. 4

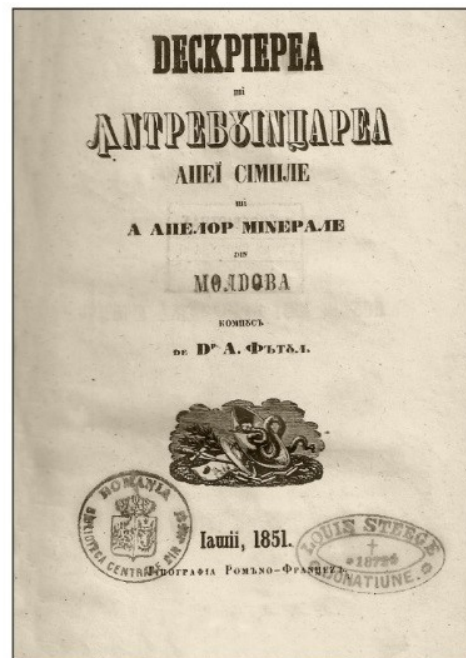


Fig. 5

ANASTASIE FĂTU - FOUNDER OF THE BOTANICAL GARDEN OF IASI



Fig. 6. Anastasie Fătu, deputy in Ad-hoc Divan of Moldova (1858)