SCIENTIFIC ACTIVITY OF ANDREI KRASNOV IN BATUMI

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Abstract. One of the outstanding researchers of the Black Sea region is geographer, botanist, traveler Andrei Nikolayevich Krasnov. He was born in 1862 in St. Petersburg. His teachers were such scientists as V.V. Dokuchaev, A.N. Beketov, I.V. Muskets. After graduating from university, Andrei Nikolayevich took up science. Friendship with Vladimir Ivanovich Vernadsky played a great role in his life. In 1889 A.N. Krasnov was elected extraordinary professor at the Department of Physical Geography and Anthropogeography at Kharkov University.

Working in Kharkov, A.N. Krasnov dreamed of creating a landscape park. However, his plans were not supported by the local administration.

Then in the early 1910s A.N. Krasnov moved to Batumi. Not far from the city, on the shores of the Black Sea in the nearby highlands, he founded a botanical garden. Its design was based on one of the seven wonders of the world – the Gardens of Babylon, i.e. the plants were planted in tiers, descending from the mountain forest to the sea.

A.N. Krasnov wanted to turn swampy Colchis into a flourishing subtropical region, to create a small Japan here. At the same time, the scientist took into account the characteristics of the local climate, landscape, and soil quality.

In 1914, Andrei Nikolayevich Krasnov died. According to his will, he was buried in the Batumi Botanical Garden in a place chosen by him.

Keywords: Andrey Nikolaevich Krasnov, Caucasus, Batumi, Chakva, botanical garden, tropical plants

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ისტორიულ მეცნიერებათა კანდიდატი, ხარკოვის ჰ. ს. სკოვოროდას სახელობის ეროვნული პედაგოგიური უნივერსიტეტის ასოცირებული პროფესორი ელ-ფოსტა: djakova.elena.hnpu@gmail.com ORCID: 0000-0001-7767-0756

აბსტრაქტი. შავი ზღვის რეგიონის ერთ-ერთი გამორჩეული მკვლევარი არის გეოგრაფი, ბო-ტანიკოსი, მოგზაური ანდრეი ნიკოლაევიჩ კრასნოვი. დაიბადა 1862 წელს პეტერბურგში. მისი მასწავლებლები იყვნენ ისეთი მეცნიერები, როგორებიც იყვნენ ვ.ვ. დოკუჩაევი, ა.ნ. ბეკეტოვი, ი.ვ. მუშკეტები. უნივერსიტეტის დამთავრების შემდეგ ანდრეი ნიკოლაევიჩმა მეცნიერება დაიწყო. მის ცხოვრებაში დიდი როლი ითამაშა ვლადიმერ ივანოვიჩ ვერნადსკისთან მეგობრობამ. 1889 წელს ა.ნ. კრასნოვი აირჩიეს ხარკოვის უნივერსიტეტის ფიზიკური გეოგრაფიისა და ანთროპოგეოგრაფიის კათედრის არაჩვეულებრივ პროფესორად.

ხარკოვში მოღვაწე ა.ნ. კრასნოვი ოცნებობდა ლანდშაფტის პარკის შექმნაზე. თუმცა მის გეგმებს ადგილობრივმა ადმინისტრაციამ მხარი არ დაუჭირა. შემდეგ 1910-იანი წლების დასაწყისში ა.ნ. კრასნოვი ბათუმში გადავიდა. ქალაქიდან არცთუ ისე შორს, შავი ზღვის სანაპიროზე, მახლობლად მდებარე მაღალმთიანეთში, მან დააარსა ბოტანიკური ბაღი. მისი დიზაინი ეყრდნობოდა მსოფლიოს შვიდი საოცრებიდან ერთ-ერთს — ბაბილონის ბაღებს, ანუ მცენარეები დარგეს იარუსად, მთის ტყიდან ზღვამდე ეშვებოდა.

ა.ნ. კრასნოვს სურდა ჭაობიანი კოლხეთი აყვავებულ სუბტროპიკულ რეგიონად გადაექცია, აქ პატარა იაპონია შეექმნა. ამავდროულად, მეცნიერმა გაითვალისწინა ადგილობრივი კლიმატის, ლანდშაფტისა და ნიადაგის ხარისხის მახასიათებლები.

1914 წელს გარდაიცვალა ანდრეი ნიკოლაევიჩ კრასნოვი. ანდერძის თანახმად, ბათუმის ბოტანიკურ ბაღში მის მიერ არჩეულ ადგილას დაკრძალეს.

საკვანძო სიტყვები: ანდრეი ნიკოლაევიჩ კრასნოვი, კავკასია, ბათუმი, ჩაქვი, ბოტანიკური ბაღი, ტროპიკული მცენარეები

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Introduction. The Batumi Botanical Garden is the Pearl of the Black Sea coast of the Caucasus. Its founder, Andrei Nikolaevich Krasnov, is a geographer, botanist, and traveler who made profound efforts of introducing Asian plants in the Caucasus region.

His life and scientific path are full of endless empirical searches, visiting almost all continents, defending his scientific views, and negative reviews from colleagues.

Methods. The paper aims to highlight the activities of Andrei Nikolaevich Krasnov in creating the Batumi Botanical Garden.

The methodological base of the paper is the principles of historicism, objectivity, and consistency. The paper is also based on the philosophical and special methods of socio-humanitarian and natural science spheres of scientific knowledge.

Results. Andrei Nikolaevich was born in St. Petersburg on October 27, 1862, in the family of the general Nikolai Ivanovich Krasnov. His grandfather, father, and brother were military officers. However, Andrei Nikolaevich was not attracted by the military career. In his childhood, he dreamed of traveling and studying nature.

A. Krasnov had a charismatic personality and was an excellent speaker. His stories about distant countries captivated his colleagues, awakening their imaginations by visiting distant countries and imagining the unique nature of Asia, America, and Australia...

In 1885, Andrei Nikolaevich graduated from St. Petersburg University and started preparing for the professorship.

In 1886, Krasnov went on an expedition to the Tien Shan. This trip resulted in writing a doctoral dissertation, "The Experience of the History of the Development of the Flora in the Southern Part of the Eastern Tien Shan," which was defended in 1888 (Taliev, 1916: 53). Next year the young scientist was appointed an extraordinary professor at the Imperial Kharkov University (Fedorovsky).

At first, A. N. Krasnov wanted to create a landscape park in Kharkov. However, neither university colleagues nor the local government agreed to assist his plans (Taliev, 1916: 45-46). Thus, he began looking for a place to build one and to fulfill his dream.

In the summer of 1890, the scientist first traveled along the Georgian Military Road and visited Svaneti. In winter, he made several presentations at the geographical department of the Society of Nature Lovers with reports on the trip. Andrei Nikolaevich chose the Caucasus region not only for scientific research but also for a place to live. He was so fascinated by this region that regardless of what countries he visited, his only concern was improving this particular region.

After visiting Batumi for the first time in 1892, the geographer described the surrounding territory as follows: "The land is semi-wild, non-cultivated, low productive, abandoned." Regarding this land,

there were "even more hopeless perspectives" (Krasnov, 1896: 903, 916). Nevertheless, he began to hatch a plan to transform this region into a resort area, which would be better than the French Menton or Nice.

The scientist came up with the idea of providing the Russian Empire with its own tea and some exotic fruits, such as lemons, tangerines, and oranges. He made three expeditions to Southeast Asia, where he studied the different tea varieties. Several seedlings were planted in Adjara, where, according to Krasnov, the soil and climatic conditions were the most favorable for growing tea bushes.

In 1899, at the International Geographical Congress in Berlin, A. N. Krasnov give a speech on the topic "The Place of Colchis in the Humid Subtropical Regions of the Globe". By this time, he was already growing tea, tangerines, persimmons, and other tropical plants on an acquired plot of 11 hectares in Khosta, Sochi District. However, due to frost, the danger of malaria, and the illness of his daughter Vera, he had to leave the Khosta land plot and sell it in 1904.

In August 1909, Andrei Nikolaevich was finally convinced of the possibility of creating a botanical garden with subtropical plants on the Batumi coast. During the research, Krasnov found that the climate of this coast is 2 degrees (Celsius) warmer in winter and 2 degrees colder in summer than, for example, places with the same average temperature in Japan. Subtropical plants develop better on the Batumi coast because the maximum frost in Adjara is 6.6 degrees, while in Japan, frosty weather is quite common (Kulish, Prasul, 2020: 124).

Moreover, the Japanese oaks, Italian pines, camphor laurel, North American magnolias, azaleas, and oleanders he planted here earlier have already taken root. Krasnov believed that in just a few years, the Batumi region would be replete with forests of bamboo and eucalyptus.

In August 1910, Andrei Nikolaevich visited the city. He reported on the topics "What Can be Done in the Batumi Climate" and "On the Organization of the Acclimatization of Botanical Garden in the Coastal region of the Batumi region."

In April 1911, A. N. Krasnov, speaking at a meeting of the Council of the Batumi Society of Agriculture, outlined his plan to create the Botanical Garden.

He decided to build the Garden not far from the city, on the shores of the Black Sea in the nearby highlands. Andrei Nikolaevich was allocated the territory next to two existing gardens: the first was created in 1881 by the local aristocrat Mikheil d'Alphonse, and the second one was created by the geographer Pavel Tatarinov in 1892. Later, these gardens merged with the Botanical Garden, becoming the lower and upper parks.

A. N. Krasnov was allocated 71 hectares of land of the former Chakvinsky appanage estate near the sea coast. Andrei Nikolaevich carried out active organizational work. The garden was based on one of the seven wonders of the world – the Gardens of Babylon, depicting the scenery of descending plants in tiers from the mountain forest to the sea. According to the garden employee Maya Timofeevna Mazurenko, the allocated territory was "a seaside hill stretching from (the village] Cape Verde to the village of Chakva," covered with virgin forest (Mazurenko). Significant changes were made in the territory, from cutting down the trees, clearing the clearings, diverting water to laying roads and determining the planting sites for plants that were brought from different parts of the planet. While creating the botanical garden, the local climate, landscape, and soil quality peculiarities were also considered. The territory consisted of the "Natural areas" exhibiting the plants of Japan, India, the Far East, North and South America, Australia, and New Zealand.

Furthermore, A. N. Krasnov supposed that ordinary people could also visit the garden for relaxation. The construction plans included laying a railway, building a hotel, and organizing service for visitors with carriages drawn by mules, horses, donkeys, or rickshaws.

Krasnov even devotes one of the published scientific articles to subtropical cooking to raise interest in exotic plants among the local population. He describes many strange dishes he saw and ate while traveling in the tropics. For instance, lemon leaves can be used instead of parsley, and dishes can be made from chrysanthemum leaves and petals.

In the spring of 1911, Krasnov agreed on the garden project at the Council of the Batumi Society of Rural Businessmen. On December 15, A. N. Krasnov presented to the director of the Department of Agriculture of the Russian Empire the project for organizing the Batumi Botanical Garden and the attached experimental station.

In the spring of 1912, the scientist and his family finally moved to Batumi, to the country house in Cape Verde (Milkov, 1955: 25-26).

Due to Krasnov and the efforts of his supporters, the region became known not only for growing tea but also for tangerines, lemons, persimmons, feijoas, eucalyptus trees, New Zealand flax, and many other exotic plants from which various products were made (medicines, textiles, etc.).

However, Krasnov's hard work and constant travel resulted in illnesses. The climate of Batumi was unsuitable for the scientist, but the desire to fulfill his dream prevailed over his ailments. The only thing Andrei Nikolaevich worried about was the fear of not having enough time to make his plans come true.

On November 3, 1912, there was the grand opening of the Botanical Garden

(Beilin, Parnes, 1968: 189). In September of the following year, Krasnov wrote an article, "The Batumi Botanical Garden: one year since its opening," and participated in the "Russian Riviera" exhibition in St. Petersburg.

Further deterioration of the scientist's health resulted in going to France for treatment. However, the First World War outbreak immediately forced him to return to his homeland.

Realizing the unsuitability of the Batumi climate for his health, A. N. Krasnov moved to Tiflis, where he finished compiling the guide map of the Batumi Botanical Garden.

But the scientists' health condition worsened daily. On December 19, 1914, Andrei Nikolaevich Krasnov passed away. According to his will, he was buried in the Batumi Botanical Garden in a place he chose. In his will, he declared: "Make a clearing from my grave for me to see Chakva with the surrounding snowy mountains and the seaside; that is the place where I started working; a piece of me belongs to that place..." (Quotation from: Beilin, Parnes, 1968: 208).

Conclusions. By analyzing the collected material, the following conclusion can be drawn. The love for tropical nature prompted A. N. Krasnov to conduct the acclimatization of some species of tropical flora within the Russian Empire. The search for the necessary climatic, landscape, and soil conditions for adapting tropical plants in a new place led to the opening of a recreational area – a botanical garden with the possibility of a pleasant pastime for the vacationing public. At the same time, this garden became an important research center for studying the adaptation of plants to new, unusual climatic and soil conditions.

Nowadays, the botanical garden created by Andrei Nikolaevich Krasnov is an attraction for Batumi, Georgia, and the entire Black Sea region.

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