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G.D. KARPECHENKO — AN OUTSTANDING GENETICIST, “SUNNY MAN”, LEGENDARY FELLOW-COMPATRIOT

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✿ Georgy Dmitrievich Karpechenko was the organizer and the first head of VIR’s Genetics Department (1925–1940) and the first head of the Chair of Plant Genetics at Leningrad University (1932–1940). The charm of the personality of the great scientist is evident not only from his letters to colleagues and relatives: it is seen in his reports at scientific forums, it is preserved in the genetic memory of fellow countrymen from his small homeland in the town of Velsk. Cordiality, love of life, openness, kindness, sense of humor coexisted in him with unbending firmness, integrity, intolerance towards trampling on the scientific truth, towards any untruth, towards pseudoscience. The article presents a series of previously unpublished archival facts, excerpts from his personal correspondence, as well as evidence of the zeal of the inhabitants of Velsk in perpetuating the name of G.D. Karpechenko.

✿ **Keywords:** G.D. Karpechenko; VIR; N.I. Vavilov; department of genetics; distant crosses; Velsk.

Г.Д. КАРПЕЧЕНКО — ВЫДАЮЩИЙСЯ ГЕНЕТИК, «СОЛНЕЧНЫЙ ЧЕЛОВЕК», ЛЕГЕНДАРНЫЙ ЗЕМЛЯК

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✿ Георгий Дмитриевич Карпеченко был организатором и первым заведующим отделом генетики ВИР (1925–1940), первым заведующим кафедрой генетики растений Ленинградского университета (1932–1940). Обаяние личности великого ученого очевидно не только из его писем коллегам и родным, оно видно и в его выступлениях на научных форумах, оно сохранилось в генетической памяти земляков с его малой родины в г. Вельске. Радушие, жизнелюбие, открытость, доброта, чувство юмора уживались в нем с негибкой твердостью, принципиальностью, нетерпимостью к поправлению научной истины, к неправде, к лженауке. В статье приведены ряд ранее не опубликованных архивных данных, отрывков из его личной переписки, а также свидетельства подвижничества жителей г. Вельска в деле увековечения имени Г.Д. Карпеченко.

✿ **Ключевые слова:** Г.Д. Карпеченко; ВИР; Н.И. Вавилов; отдел генетики; отдаленные скрещивания; г. Вельск.

To 120-anniversary of G.D. Karpechenko

INTRODUCTION

Last year, 2019, commemorated two anniversaries valuable for VIR — the 125th anniversary of the founding of the institute and the 120th of G.D. Karpechenko — the first head of the Department of Genetics of the institute. Together with N.I. Vavilov, Karpechenko established the largest center of domestic genetics and breeding in VIR. The VIR Department of Genetics became the national training center for geneticists. The first USSR graduates

of plant genetics were from Leningrad University where G.D. Karpechenko headed the newly established Chair of Plant Genetics in 1932.

G.D. Karpechenko is remembered as a talented scientist known for his works on creation of new plant forms. His works were based on studies of the remote hybridization and examination of cytogenetic processes. He overcame incompatibility in interspecific crossings and carried out pioneer experiments in experimental polyploidy and mutagenesis.

The colleagues of G.D. Karpechenko remember him as a delicate, tactful, ingenious, and very radiant personality who was loved by his colleagues, friends, relatives, and students. He is still remembered as a legend in his homeland the town of Velsk in the district center of Arkhangelsk region. G.D. Karpechenko is loved and respected by the citizens of this small town, who continue to pay tribute to the memory of this outstanding scientist – the son of Velsk.

Here I attempted to present personal qualities of this wonderful man. Despite of the seeming amenity of temper G.D. Karpechenko demonstrated resilient firmness, embodied integrity towards his life's work by being intolerant towards the trampling of scientific truth, any untruth, and pseudoscience and perished for his scientific commitments. I tried to avoid re-writing of the biography and analysis of the research of G.D. Karpechenko, which have already been published [1–8]. Some periods of his life are presented in this volume as required for the article. I am delighted to provide excerpts from unpublished personal correspondence of G.D. Karpechenko that was stored in the family archive and became available to the author thanks to the citizens of Velsk. A number of archive data are published for the first time.

VELSK. BASICS

Georgy Dmitrievich Karpechenko was born on April 21 (May 3 as per the New Style Calendar), 1899 in the county of Velsk of Vologda governorate (currently, the center of Velsk district of Arkhangelsk region). The town is placed in a picturesque place located on the high bank of the River Vaga at the confluence of the Vel River.

His father Dmitry Timofeevich was the land-surveyor and his mother Aleksandra Aleksandrovna was a housewife. Georgy was the next-to-last child of seven siblings. The family was friendly and intelligent. Children studied music and completed their elementary education at home. Every child has his or her own flower and vegetable bed in the garden. In autumn, the family traditionally arranged the merry harvest festival with guests and gifts for successful work [9].

In 1909 Georgy Karpechenko passed exams to enroll at the Vologda governorate gymnasium and

joined the first class (those who had smaller points were enrolled to preliminary class). Georgy lived away from his family starting at 10 years of age. Vacations were a wonderful time for him to connect with his sisters and brothers. The following is an excerpt from the memories about Georgy (Gosha as he was called in the family) by his sister Elena Saltykovskaya-Karpechenko:

“I loved vacations with passion. It was noisy and funny. Gosha played the clarinet then the violoncello, the elder brother – on the violin, sisters played the piano; we arranged concerts and performances. Gosha also played and often sang... I remember our games in the garden – it was so good there, trees, gooseberry bushes, flower bed, hammock, table... starling houses on the trees. Every spring Gosha and father installed them, and then starlings came, redbreast was singing somewhere in the bushes. ...I remember the feeling of coolness of the wet clay path among the high meadow grass, when kicked off sandals we were running to the river to swim. There was clean yellow sand and strips from cockle-shells, and clean blue water reflecting willows. And the forest behind the river, and the sun, and blue sky. It is obvious that Gosha became a biologist; brothers liked hunting and fishing and everything connected with the beauty of nature; and father understood and habituated us to the nature. Everything we gathered we carried home and put in cans and boxes – and it was chattering and quacking in the evenings; and father's canary was singing at the daytime. Gosha had two turtles – Afanasy Ivanovich and Pulkheriya Ivanovna...” [10].

After graduating from gymnasium with a silver medal in 1917, Karpechenko entered the Division of Natural Sciences at the Department of Physics and Mathematics of Perm University. Entering this “Ural Cambridge,” founded a year earlier, was supposedly [6] connected with the fact that the husband of the father's sister, Yu.A. Orlov, was working there. Orlov himself was an outstanding paleontologist and afterwards academician of the USSR AS, winner of the Lenin Prize, and director of the Institute of Paleontology of the USSR AS (Moscow) [11]. However, one year later, in 1918, Georgy Dmitrievich moved to the Agricultural Department of Petrovskaya Agricultural Academy. The

reason for this transfer is unknown but was possible connected with personal problems.

MOSCOW, "PETROVKA." "CROSSBREEDS OF RADISH AND CABBAGE"

The years of studying of G.D. Karpechenko coincided with a time of political crisis and the Civil War. The crisis resulted in disorder and starvation.

"Starvation and absence of money forced study at the academy only from time to time in 1919 and 1920; major part of the time I worked in Velsk – as technician of agriculture, teacher of natural science at rural school, in Vologda – as hygiene instructor at the municipal services, lecturer of botanic at Proletarian University interrupting the work three times a year to go to the academy – to take exams and for practical training. Since 1920, after the decree of returning students to higher schools¹, I settled down at the academy and graduated from it in 1922," he later wrote in his biography².

The records of the town of Velsk show that on July 08, 1919 the 20-year old student at Petrovskaya Agricultural Academy, G.D. Karpechenko, registered at Velsk employment center as unemployed. Almost immediately after that he submitted an application to the Velsk district executive committee for the position of technician of agriculture. His application was accepted and on July 08, 1919 he was employed by the subdepartment of agriculture as a technician with the salary of 1290 rubles. On September 01, 1919 G.D. Karpechenko moved to the department of education [9].

Elena Saltykovskaya-Karpechenko recalled her brother during his years as a student: "He lived in Likhobory, studied in Petrovskaya Academy, rented a room with his friend Misha Pavlovsky. The life was hard and starving. The lamp was hardly lighting, there was ice in the room corners, the boys went to beds; I put every available bedding on them and ran to the bake of the housekeeper. In the morning Gosha brewed flour from samovar – we ate

that glue. Sometimes we got parcels from home with natural bread, cut it in thin slices and savored it..." [10].

After graduation from academy in 1922 Karpechenko was "kept for three years at the Department of Genetics and Breeding for research training and educational activity".³ As a student he began learning cytological examinations under the mentorship of Aleksandra Gavrilovna Nikolaeva, the first Russian woman cytologist. Later, under the guidance of Sergey Ivanovich Zhegalov, Karpechenko was involved in the study of remote crossings accompanied with cytological control.

There on the experimental plots of the Breeding Station of the Academy where the modest and shy but inquiring student crossed plants of different species he was noticed by the young professor of Saratov University N.I. Vavilov [12].

Studying the number of chromosomes of plants and examining their behavior in meiosis of hybrids through a microscope, G. Karpechenko mastered the science, which would soon become known as "cytogenetics". He worked in a specially equipped laboratory called "microscopic". G. Karpechenko valued A.G. Nikolaeva, and referred to her in the letter to N.I. Vavilov dated November 07, 1925⁴ as his "the only true friend". Karpechenko's reverence for Aleksandra Gavrilovna, who passed away too early⁵, was manifested in another letter to Nikolay Ivanovich: "Please write... Your letters make me feel so good, remind me of the feelings I always had thanks to long letters of Aleksandra Gavrilovna".⁶ He spent many nights and evenings at the "microscopic" laboratory and performed crosses at the experimental plots of Breeding Station of Petrovskaya Academy during the day. The feelings he had at that time are described in his letter to his mother sent on the Easter of April 25, 1923:

"...now that Aleksandra Gavrilovna has passed away, I can hardly suppress the feeling of absolutely loneliness that I have every free minute. I stay

³ *Curriculum vitae* G.D. Karpechenko (Archive of Vavilov VNI-IR, op. 2-1. D. 77 (Personal file of G.D. Karpechenko). Sh. 1-2. Autograph).

⁴ Quoted letters of G.D. Karpechenko to N.I. Vavilov see in [6].

⁵ A.G. Nikolaeva died in 1925 at 41 years old due to incurable disease.

⁶ Letter of G.D. Karpechenko to N.I. Vavilov dated 11.02.1926.

¹ In March 1920 the Council of People's Commissars issued decree of demobilization of students from the Red Army, who served in the army based on the universal military service.

² The autobiography of G.D. Karpechenko (Archive of Vavilov VNIIR, po. 2-1. D. 77. Sh. 44).

here at the station by myself – the microscopic laboratory where I sit is separated from the others and my position of the ‘kept’ is special – everybody serves, and I am ‘free’...

Pryanishnikov proposed to have practical trainings with students in summer in cereal crops and clovers – I agreed though I wanted to go somewhere on an expedition – I want to go the hell with pies (sorry for this vulgarity).

As you may know I am working with hybrids, crossbreeds of raddish and cabbage, and I study their features in detail, in particular, I examined their infertility...

I would like to have my bicycle here – it would be the only delight of my lonely monotonous life – it would make me leave the laboratory, go to fresh air and would be indispensable for fields visiting. But probably Lenya (brother – M.V.) needs it for summer; he liked to ride a bicycle?”

These letters demonstrates the delicate psyche, vulnerability, and sensitivity of the author. And someone from the outside would consider: also not too strong in spirit...

Sincerity of letters to relatives was typical for G.D. Karpechenko. He always found words of consolation and was a support for his family – mother, sisters. In 1934 he wrote a letter of condolence to Zoya, wife of his brother Leonid, due to the death of her father:

“Dear Zoya, do not grieve, that is the life, death is watching each of us, you know that... It is said that a person get so tired by the old age that he wants to die, he reconciles with the thought of death... Of course it is very difficult to understand the necessity of this end for all of us but it is inevitable... I often think about it even at the most viable moments.”

“Even... a pessimist,” – someone from the outside would consider. But it was not so. F. Dobrzhansky who admired the optimism of G.D. Karpechenko and his belief in science at the beginning of 1930s, wrote: “But this optimism was not a naive failure to understand the horror of the period. It was the highest optimism of the overcome pessimism” [10]. Georgy Dmitrievich was certainly an optimist; he was a gay and cheerful person.

Many years later the whole world would realize the undanding character, integrity and strong

spirit of the man, whose great service to the mankind started with “crossbreeds of raddish and cabbage.”

LENINGRAD, VIR. WORLDWIDE FAME

In 1925 G.D. Karpechenko, upon the invitation of N.I. Vavilov, headed Department of Genetics in his Institute. It was based at the central experimental station of genetics and breeding in Detskoye Selo.

The work at the Institute of N.I. Vavilov well-known all over the world as VIR was the most pleasant and fruitful for G.D. Karpechenko. He established the Laboratory of Genetics. N.I. Vavilov considered the laboratory key to the institute, and it became the actual source of geneticists training for the whole country and center of gravity for geneticists and cytogeneticists in the world. By the middle of 1930s genetics penetrated the investigations of all major crops at the institute [8]. Georgy Dmitrievich himself did not immediately understand the ways of direct involving genetic methods in the practice of breeding. When he came to the institute in 1925, Karpechenko did not know how to arrange the study of specific genetics of crops, supporting deep study of genetic mechanisms such as remote crossings and had many disputes with Vavilov [7]. Ten years later he was sure of the necessity of genetics as the theoretical basis of breeding: “...genetics has special position as laboratories have to have genetics, it is not the issue of increasing the staff, we need to teach experts in breeding to study and resolve genetic issues”⁷.

In 1929 Karpechenko, who was already well-known internationally, got a scholarship from the Rockefeller Foundation for training at the laboratory of T. Morgan at the Technological Institute in Pasadena (California, USA). The Rockefeller Foundation, established in 1913, was the first philanthropic agency with specific global vision and a structure capable to manage assets to achieving sizable goals. The Rockefeller Foundation’s aim was, and still is, in a support of human wellbeing around the world. This mission has resulted in

⁷ Verbatim report of the meeting of the scientific council of the institute on the report of academician N.I. Vavilov about reconstruction of researches of the institute work. July 29, 1935. TsGANTD. Fund 318. D. 828. Sh. 46.

providing scholarships to talented scientists and grants for implementation of breakthrough solutions and goals [13].

The scholarship was granted to Karpechenko for research activity in genetics within a year at the best genetic centers of America. News of his scholarship award was published in the central massmedia journal "Ogonek" dated 22 September 1929 [14].

In the Pasadena laboratory of T. Morgan, G.D. Karpechenko became close with the Russian geneticist Theodosius Dobzhansky, who was also studying there under the Rockefeller Foundation scholarship [15]. In his memoirs, F.D. Dobzhansky wrote that arrival of Karpechenko to Pasadena "...was a real happiness for us, he was a soulmate" [16]. Karpechenko became friend with the employees of Morgan, who themselves were outstanding geneticists K. Bridges, A. Sturtevant, and H. Müller. For openness, cordiality, his smile, and optimism Georgy Dmitrievich was called there the "sunny man."

He came back to the USSR in summer 1930.

"... THERE IS NOTHING ELSE TO US BUT TO BE BURNT AT THE STAKE FOR THESE 3 : 1"

At the beginning of 1930s G.D. Karpechenko became professor of genetics at the Botanical Division of the Department of Physics and Mathematics of Leningrad State University (LSU) named after A.S. Bubnov. He was assigned a member of the presidium to the All-Union conference on the planning of studies in genetics and breeding for five-year plan. In 1932 he became the head of the Chair of Plant Genetics at LSU and the head of the laboratory of plant genetics and breeding of Peterhof Biological Institute of the same university. These years became the point of no return for his opposition to T.D. Lysenko, which occurred for him earlier than for many other geneticists in the USSR [6].

The climax of the struggle was reached at the middle of 1930s. G.D. Karpechenko and employees of VIR Department of Genetics spent a lot of time for checking "theories" of T.D. Lysenko and his school.

Here is a small documentary evidence of G.D. Karpechenko attitude to the "successes" of

T.D. Lysenko who was the supervisor of the All-Union Institute of breeding and genetics in Odessa. In summer 1935 Georgy Dmitrievich visited Odessa as a member of the commission of the Lenin All-Union academy of agricultural sciences (VASHNIL). The outreach session of the academy was devoted to the assessment of new varieties of the spring wheat created according to the promise of Lysenko at the shortest period. Leading breeders of the country criticized the new varieties in particular, Lutescens-1163. However, in the discussion between Vavilov and Lysenko of about inzucht-hybrids of corn, Lysenko took the upper hand for many years ahead [17]. In the postcard sent to his wife on 7 July 1935, N.I. Vavilov wrote, "Going back from Odessa. It was very unpleasant. People are not well educated. Criticized genetics. Karpechenko was hurt to the quick." [18]

But Lysenko's threat to Soviet science at that time did not seem to Georgy Dmitrievich so desperate. The results of the session in Odessa continued to be discussed at December 1936, at the fourth session of VASHNIL in Moscow. Even there and then G.D. Karpechenko had enough will to joke and be ironic regarding the theory of Lysenko.

"Academician T.D. Lysenko reported to us about the reconstruction of the plant nature, that the changes in the plant soma are caused by the external conditions that result in appropriate changes in the germinal cells and therefore are transferred to offsprings. Academician Lysenko said "what I have is not Lamarckism because Lamarckians have never managed to get anything but I managed to get." It should be recalled, however, that Lamarckians have always got something and only later it became clear that they had not managed to get anything or managed to get due to absolutely different reasons..." [19, p. 282].

One month before the session of VASHNIL, on November 19, 1936, a discussion of genetics took place at VIR at the meeting of the scientific council of the institute. G.D. Karpechenko, the leading geneticist of the institute, was authorized to analyze and express his opinion of two articles of T.D. Lysenko. One article was published in 1936 in the journal "Socialist reconstruction of agriculture" (No. 10) and the other in the newspaper "Socialist farming" (March 6, No. 54).

At the beginning of his circumstantial report, Georgy Dmitrievich attempted to demonstrate his attitude to the subject of analysis as having the unscientific character. He was sincerely sure in the lack of seriousness of the discussion in unfolded the country “...Recently a lot of opinions have appeared, absolutely different, mutually exclusive concepts, while the wide range of people involved in the discussion, are unfortunately not competent in the issues of genetics. My task is to review the two last articles of academician Lysenko from the point of view of the modern theory of inheritance. And thus to become included in the discussion.” He ended his report with the following words: “Like I said, Trofim Denisovich has assimilated nothing from the modern theory of inheritance. His theory, I underline once more demonstrates its complete invalidity if getting to knowledge of the fundamental genetic facts. On this I will end”⁸ In his report he also harshly with sarcasm condemned, actually called names despite the titles and ranks of the colleagues manipulating the concepts and attempting to shrug off genetics.

This was in 1936 and in 1939 he said his well-known everlasting bitter words:

“I belong to those who are called with many terrible words, I am a geneticist. Our position is desperate... Extremely terrifying... I have tempered in fight. However, it is very hard morally... I have the feeling that I am not a researcher but a member of a sect. I mean how we have to actually work... We hear that Mendel is a pseudoscience. Nikolay Ivanovich said that the one who knows the material cannot agree with this, and there is nothing else to us but to be burnt at the stake for these 3 : 1.”⁹

The leading geneticist of VIR, head of the Chair of Plant Genetics of LSU, highly valued at home and abroad, perfectly educated, favorite lecturer of biology students at the university was one of the chosen ones targeted for harassment by T. Lysenko and I. Present. Both the Department of Genetics at VIR and the Chair of Plant Genetics of the uni-

versity were subject to accusations. It is symbolic that after arrest of G.D. Karpechenko the wife of I. Present, B.G. Potashnikova, became the acting head of the Chair of Plant Genetics of LSU. She was a faithful associate of her husband in the struggle against N.I. Vavilov and G.D. Karpechenko. She stated that the views of N.I. Vavilov and G.D. Karpechenko prevented the All-Union Institute of Plant Industry (VIR) to approach the socialist construction [20].

Georgy Dmitrievich was arrested on February 15, 1941. The following is known from the personal communication with his daughter Valentina Georgievna. At first the search was conducted at the apartment of G.D. Karpechenko in the town of Pushkin, which lasted from 2:30 p.m. to 1:30 a.m., according to the report. After the search of apartment they moved to his office at the main building of VIR homestead in Detskoye Selo. The arrested Georgy Dmitrievich was moved there too. His wife, Galina Sergeevna, and daughter stood outside in the snow till 6 o'clock in the morning under the lighted windows of his office. In the morning he left the building, walked on the mezzanine encircling the double-story hall, and went down the stairs from the building where he had worked for 16 years.

Georgy Dmitrievich's daughter kept a list of confiscated documents, books, manuscripts, and invaluable autographs. His last words to his wife, Galina Sergeevna, when he was taken from the house, were about their daughter: “Galya, take care that Valya enters the university.” Valya was 6 years old at that time.

MEMORY ABOUT THE GREAT COUNTRYMAN AT HIS SMALL HOMETOWN

Population of Velsk is not more than 26,000 people, which is surprising for a town with reputable educational and cultural institutions. The town contains a local lore museum with branches, district cultural center, community center with dozens of hobby groups and workshops, a youth center, school of music, several of colleges, and a library – this is not the full list. Different festivals and competitions, forums, days of the town, and ecological community cleanup days, etc. are conducted in the town. Refinement and benevolence

⁸ Verbatim records of the meeting of the scientific council of the institute on discussion of genetics dated November 19, 1936. TsGANTD. Fund 318. D. 1133.

⁹ Verbatim records of VIR (outreach session) dated 15 March 1939 at the regional meeting of the Section of researchers // Personal archive of Yu.N. Vavilov.

were spread in the air of this county town in the old days. However, its main difference from all cities in the world is availability of the street named after the scientist, the “The Karpechenko’s House.”, and the only monument to the scientist.

The history of commemoration of G.D. Karpechenko in Velsk is stated in the photo album “In memory of the great fellow” published in 2014 [21]. It started in 1980s. The initiators were the local history expert A.S.Kuzmin, who opened the name of G.D. Karpechenko to Velsk and the teacher of geography of Velsk school, T.G. Shubina, with her graduation class (team “Siverko-3”). Velsk initiatives were strongly supported by I.A. Zakharov-Gezekhus, who currently heads the Commission for Keeping and Development of the Scientific Heritage of N.I. Vavilov in RAS. In 1989, to the 90-anniversary of G.D. Karpechenko, the daughter of Karpechenko, Valentina Georgievna, his students, and followers came to Velsk from Moscow and Leningrad to a ceremony of laying the stone for the monument of the outstanding geneticist (Fig. 1).

The ceremony was very simple and modest, but it was preceded by a lot of efforts including visits of the Communist party and Komsomol authorities,

and numerous applications and approvals. That time was difficult for the country and for science. The stepping-stone was idle for a while. Only in 2007 within the frame of the project “My beloved city” the Council of the Women of Velsk headed by N.M. Toropova initiated establishing the research and educational cultural center, “The Karpechenko’s House.” They also made established the monument to the scientist and arranged the festive jubilee events on the 110 anniversary of the great countryman. The administration of the district and the town supported the enthusiasts, as well as the head of the municipal entity “Velskoe,” V.G. Sheryagin. On May 26, 2009, Georgy Dmitrievich Karpechenko was awarded with the honorary title “Honorary Citizen of Velsk”, and on June 19, 2009 the portrait sculpture of the scientist by sculptor P.I. Gil (Saint Petersburg) was presented in the square yard of his home, where formerly the garden was (Fig. 2). Enthusiasts applied to the Rockefeller Foundation that provided financial support of the scientific conference “Born by the Russian land...” and gave grants to the supporters of commemoration of the former Rockefeller scholarship holder. The conference was converted into the festival of science and education “Born by the Russian land.. “



Fig. 1. Ceremony of laying the monument to G.D. Karpechenko. Velsk, 1989. From left to right: M.E. Ramenskaya (secretary of the Vavilov’s commission, MSU, Moscow), T.K. Lissan (VIR, Leningrad), I.A. Zakharov (IOGEN RAS, Moscow), A.S. Kuzmin (Velsk), R.H. Makasheva (VIR, Leningrad), N.A. Chuksanova (BIN RAS, Leningrad), V.G. Karpechenko (Moscow); at the background: Yu.L. Goroshchenko (LSU, Leningrad), ... V.G. Smirnov (LSU). To the right of the pedestal in the first row: N.N. Orpova (MSU), G.G. Shubina (Velsk); in the second row: M.M. Aslanyan (MSU), ... B.V. Simarov, N.A. Provorov (VNIISHM, Leningrad)



Fig. 2. Portrait sculpture of G.D. Karpechenko installed on June 19, 2009 in the square in the yard of his house in Velsk by the grateful citizens



Fig. 3. New plaque with the street name after renaming. June, 2011, Velsk

The author of this paper was the eyewitness of these and many consequent events.

In 2011 the memorial room of the Karpechenko family home was opened in the research and educational cultural center the Karpechenko's House with the assistance of Velsk local lore museum, which further added the exhibition called "Scientific activity of G.D. Karpechenko." The part of Komsomolskaya street where the Karpechenko's House is placed was renamed after Karpechenko street (Fig. 3).

School children were always among the enthusiasts as they studied the history of the family, they made genealogies, looked for unknown facts of the life of Karpechenko, and participated in the hobby group "Young geneticist." Scientists from Moscow participated in the traditional anniversary events in Velsk: I.A. Zakharov-Gezekhus, T.B. Avrutskaya (Institute of General Genetics of RAS); and from Saint Petersburg: S.G. Inge-Vechtomov, E.I. Mikhailova (Saint Petersburg State University), M.A. Vishnyakova (VIR), A.V. Rodionov, M.A. Rautian (Komarov Botanical Institute of the RAS), A.I. Ermolaev (Saint Petersburg branch of S.I. Vavilov Institute of History of Science and Technique RAS) and others. In their turn, almost all of them welcomed school children from Velsk in Moscow and Saint-Petersburg.

Velsk welcomed relatives of G.D. Karpechenko. His niece N.A. Saltykovskaya (Saint Petersburg State University) visited Velsk several times, as had his grandniece T.A. Alekseeva (Moscow) and granddaughter Marina Karpechenko, principal

singer of Moscow music theater "Gelikon-opera." Valentina Georgievna Karpechenko who celebrated her 85 anniversary on December 22, 2019 also visited the homeland of her father. The Karpechenko's House is always crowded. Different tours, tournaments, competitions, olympiads, meet-the-artist-sessions, meetings with veterans, workshops, infoclasses are conducted here. Visitors are cordially met and offered tea.

In 2012 The Karpechenko' House became the winner of the competition for the best tourist destination in the Arkhangelsk region.

The Karpechenko's House initiates such events as opening of the research and education laboratory "Agroclub" that took place on December 25, 2019 in the school No. 1 of Velsk, and getting an educational grant by the local agricultural college.

The name of the outstanding scientist awarded worthy memory in his hometown and became the incentive for new knowledge. His memory has helped to maintain the historical heritage and nature of his native land, and has served as a symbol that unites people for noble objectives.

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