

MEMORIES OF RUDY SCHUSTER  
ВОСПОМИНАНИЯ О РУДИ ШУСТЕРЕ

NADEZHDA A. KONSTANTINOVA<sup>1</sup>

НАДЕЖДА А. КОНСТАНТИНОВА<sup>1</sup>

*With R. M. Schuster in US*

Quite a lot has been written about Rudy Schuster by his friends and his colleagues about the beginning of his scientific activity, his work at Duke and Massachusetts University, his middle age, and his expeditions (Anderson, 1988; Damsholt, 1988; Engel & Hattori, 1988; Engel & Klekowski, 1988; Frenkel & Abbe, 1988; Long, 1015; Qiu *et al.*, 2013; Thiers, 1988). However, little is known about the last years of his life. I was lucky enough to spend some unforgettable weeks in his house in 1992, and then again in 1995. If we omit a small correspondence about Schuster's failed participation in the 7th meeting of European bryologists, my acquaintance with him began in New York in May of 1992, when he came to New York to take me to his home in Hadley. He arrived in the evening and we talked all evening long, or rather, he talked mostly, and I, as they say, listened with my mouth open. I didn't know English well, but Rudy, spoke very clearly, and he was very attentive and if he saw that I didn't understand, he stopped and explained, paraphrasing. He explained to me that he was used to seeing the uncomprehending faces of students, and he saw very well if I didn't understand something like his students. His obvious benevolence and good disposition towards me immediately relieved my tension caused by both my understanding of meeting the famous scientist and poor knowledge of English. I almost immediately had a feeling of mutual understanding and freedom, which accompanied all my further communication with Rudy.

The next day we got up very early. Those who stayed in the rooms of the Botanical Garden in New York in Bronx in the 90<sup>th</sup> know very well what a noisy street the windows are facing, and perhaps they remember the cooing of pigeons starting somewhere around 5-6 o'clock in the morning. Rudy knew all these noises well, and he did not like travelling to New York. On the way to Hadley, he told me that for a long time, while his mother was ill, he visited her in New York every week on weekends, travelling several hundred kilometers. After her death he decided that he would never go to New York again. And then he stressed that he broke this rule for me. This, of course, was very flattering, although I was well aware that his interest was caused by an interest in the country from which I came, and not in my person.

In some travel notes of that time I wrote "An amazing man! It is extremely easy and simple with him. Almost no pauses. Incredible intuition and tact. Understands that it is difficult for me to speak, however, apparently he likes to talk, and he had a lot to tell" (translation from Russian).

During my stay at Schuster's house in Hadley, I got acquainted with his daily routine. It was unchanged regardless of weekend or holidays. Breakfast was around 8.30, then work until 5 o'clock with a short break for lunch. During my stay, it was the execution of drawings of liverworts while classical music was playing. After about 5 pm, he said that "I hate liverworts. I'm ready for a glass of wine". Before dinner, he walked around, enjoying his garden, at that time blooming rhododendrons, and with pleasure showed me various species of plants that he had brought from different places and of which he was very proud. After dinner, there was either listening to music, occasionally interesting programs about travel on TV or animals as well some daily news. I don't remember them watching programs about politics, perhaps in my absence. However, Rudy was very well aware of the ongoing political processes in the US and in the world and had, like on everything else, his own special view. Several times we watched slides, Rudy showed Greenland, Ellesmere, Chile, New Zealand. Rudy was very animated when he talked about his trips, as well as when he talked about liverworts. He had the rosiest ideas about Russia and he often recalled the liner Odessa, on which he and Olga were on a trip around the world. The soviet team on board of Odessa made a very big impression on him. In general, he was very fond of travelling and did not like teaching, which he avoided at the slightest opportunity. He repeated more than once that the rector or dean (I don't remember exactly) of the faculty at which he worked, on his next request for a long expedition, told him that he would gladly buy him a ticket, but only one way. D. Long (2015) has written beautifully about Schuster's travels during his time at the University of Massachusetts. To this I can only add that he told me with pride that he had not spent even a single day at the university after retirement.

Several days during my stay at the Schuster house were devoted to various trips, including to Cambridge, where we visited the herbarium and the library. In Am-

<sup>1</sup> – Polar-Alpine Botanical Garden, Kola Science Centre, Russian Academy of Sciences; Apatity, Murmansk Province, Russia; e-mail: nadya50@list.ru



Fig. 1 Rudy Schuster and his first wife Olga Schuster in the country house in Conway, 1992.

on the radio and listened to the classical music channel. His knowledge and comments of composers and performers showed his deep understanding and broad musical horizons. No less interesting were his notes about the vegetation, landscapes, flora and the history of flora formation of the places we passed.

It is difficult for me to believe in the widespread opinion about Rudy's rudeness and inhospitality, which, of course, he himself had heard about. Obviously, this hurted him a little, because he tried to explain it to me. He told me a story about how a lady from somewhere in Europe suddenly came to him with a request to help in identifying her collection and to which he rather sharply told that he did not have time to do this and did not communicate with her in spite she told that she came specially to visit him. Explaining was obvious enough; he didn't have much time left to live and he didn't have time to complete what no one else will do, so he couldn't waste time identifying some obscure collections. I never forget this, his rather obvious explanation as well as one of his oft-repeated expressions: "one has to choose!"

There is a popular opinion that Schuster had no students. His only official PhD student was Barbara Tiers. I want to debunk this completely incorrect idea. I believe that most modern hepaticologists are more or less his students, since any scientist engaged in the study of regional flora in North America, Europe or Russia on a serious level cannot do without his six-volume the Hepaticae and Anthocerotae of North America east of the hundredth meridian. For the Southern Hemisphere, his numerous works on liverworts of this hemisphere are no less significant, including three volumes of the unfinished series of books Austral Hepaticae with the third volume came out after his death at the end of 2021 thanks

herst, Rudy showed me his former office and the concert hall. And in Conway, at his dacha (Fig. 1) he showed me sites well known to me from his "The Hepaticae and Anthocerotae of North America east of the hundredth meridian", in which the lists of studied specimens contain a lot from Conway. I have managed to collect many species, in the habitats indicated in these famous books and in particular, I have collected Schuster's *Pellia megaspora* in the type locality. This year we sequenced that specimen, which is well preserved. It really differs molecularly from *Pellia endivifolia*.

During several trips in Massachusetts, Rudy showed me typical New England houses (photo by Schuster), told about architecture and the history and formation of the US, which he knew perfectly. In the car, during long journeys, he always turned

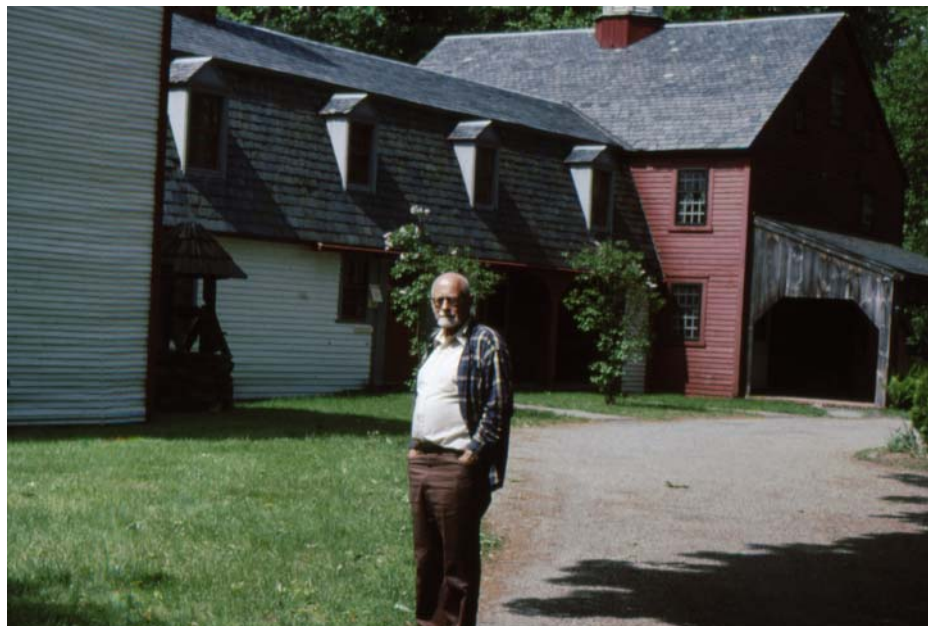


Fig. 2 Rudy Schuster in New England, 1992.

Fig. 3 Diana Horton, Rudy Schuster and Terry O'Brien in Alaska, 1992.



to efforts of editorial board including Matt von Konrat, Anders Hagborg, David Glenny and John Engel. Especially great is his role in the formation of modern hepaticology in Russia. The founder of the modern school of Russian hepaticologists, R.N. Schljakov, was greatly influenced by his works, although he revised and changed Schuster's system, mainly in relation to the volume of taxa, understanding many of them in a narrow sense.

As for me, along with Schuster's books, at least some parts of which I knew close to the text, the direct communication with Rudy had a huge impact on my work. One of his principles seems to me to deserve special mention. He repeated many times that fast identification of specimens without detailed study under microscope leads to incorrect identifications and does not allow "understanding and feeling" the species. Only a thorough study of the entire specimen, including drawing details, makes it possible to correctly identify the species, and a detailed study and description of many specimens of the species leads to understanding of its variability and gives the "feeling" of the species. The great value of his works lies precisely in the descriptions of single specimens especially that "do not fit well" in the description of species. He repeated many times with pride that, unlike many other researchers, it is difficult to find his incorrect identifications in herbaria. And indeed it is. Naturally, he did not avoid mistakes either, but he had them many times less than others.

Another feature characteristic for the specimens identified by him is that he identified all or almost all species in multi-species specimens, what is rarely seen in herbariums.

#### ***R. M. Schuster in Russia***

The seventh meeting of bryologists of Eastern Europe was decided to be held in Kirovsk (Murmansk region, Russia) at the suggestion of R. Grolle. The meet-

ing was to be held in August 1990. I sent invitations to bryologists not only from Eastern but Western Europe as well as America, including an invitation to Schuster, but I didn't expect to get an answer from him. It's hard to describe how excited I was when I got a response from Rudy that he would like to come. Moreover, Schuster sent an abstract called "Rates of evolution and times of differentiation of Arctic Hepaticae: some speculations" (Schuster, 1990), which was published in the Abstracts of that meeting. However, later he wrote to me that he unfortunately would not be able to come, although he really wanted to visit Russia. It happened four years later, in 1994, when he was able to come to Russia. On this trip he visited Moscow, St. Petersburg and, of course, Murmansk Province. He often mentioned in our conversations during my stay in his house in Massachusetts that he was very interested in learning the customs and peculiarities of the countries he visited. And on this trip to Russia, he managed to see and understand a lot about Russia. In his letter to me, along with his inherent humour, he thanks me for being for him "unpaid Intourist Guide" and that "looking at the Kodachromes, I am impressed, each time, what a strange and wonderful land Russia is: being there, after some days, it all become "normal" – but, at this distance, I realize it is very different". And later: "indeed, the "evil empire" is a very nice place."

I actually tried to show Schuster Russia as it was at that time, not through the eyes of an "intourist". He felt it immediately upon arrival to Moscow at Sheremetyevo airport. I don't remember why we decided to go to my apartment by bus and subway but not by taxi. It was most likely his wish, because he was very interested in how people live in the country. It was terribly hot in Moscow and the bus was full of people and because of the repair of the road, the trip to the subway took an incredibly long time. But Rudy, standing in a crowd of

people, joked, recalling his experience of being in different countries.

The most memorable moments of Rudy's stay in Moscow and St. Petersburg were several. Rudy loved and was a connoisseur not only of music, which is well known, but also of literature, painting and architecture. Therefore, in Moscow and St. Petersburg, he wanted to see the most famous architectural attractions. Most of all, he was struck by the Cathedral Square of the Kremlin, which, according to his expression, he can only compare with the Vatican in Rome in terms of its impact on him.

In St. Petersburg we went to a good classical ballet, for which I managed to buy cheap tickets, somewhere on a balcony or an amphitheatre, I don't remember. However, being a big fan of the theatre myself, and often visiting theatres, I knew that there are almost always empty seats in the front rows of the stalls, even in a crowded hall. I explained this to Rudy and offered to try, to which he eagerly agreed. We guessed surprisingly accurately and watched the whole performance, sitting in the central seats in the first row. It is difficult to describe the joy of Rudy, who admired everything, that almost with the cheapest tickets, we sat on the most expensive seats. I do not know what he enjoyed more – the ballet or watching it from one of the on the most expensive seats, having almost the cheapest ticket.

Having arrived to the Murmansk region in 1994, Rudy said that he would not collect liverworts, since he would not have time to identify even previously collected specimens. But he really wanted to see the landscapes and vegetation and see the habitats of liverworts in the Murmansk region. Being already nearly 73 years old, he calmly overcame a rather difficult route through the Yuksporlak pass, where on the pass he could not resist collecting a number of Arctic-montane species and where he found *Peltolepis quadrata*, which had not been previously recorded for Khibiny Mts. But you should have seen his burning eyes at the sight of huge populations of *Hygrobiella laxifolia* along the bank of a stream flowing rapidly from the mountains and to hear his exclamations of "What a good material! I should collect!" And I heard similar exclamations many more times during our trips around the Murmansk Province. As a result, Rudy left Russia with a large number of collected specimens.

After several excursions to the Khibiny Mts, we went to the White Sea coast. The first place we visited was the Turiy Peninsula. I still remember with horror, very steep cliffs along the coast, on which we climbed in search of interesting species. But Rudy did not pay attention to the danger of falling off the cliff, but when we began to descend from the cliffs, I was terrified, and only prayed to God that he would descend safely. Then we continued our trip along the coast of the White Sea towards the ancient village of Varzuga, stopping in the places that interested us the most. We had to spend the night in tents and decided to stay in some pleasant place. However, when we

stopped at a picturesque place near the village of Olenitsa, it turned out that there were so many mosquitoes, that we had dinner very quickly and decided to go straight to Varzuga, which was still about a hundred kilometers off-road, but, however, there was the house where we could spend the night. We travelled in a large crossover van with a high cross-country ability. The windows in the back were very small, and there was only one passenger seat in the cab. Naturally, I suggested this place to Rudy, because there was a good view of the area from there. However, there was practically no road to Varzuga, in the sense that this word means in Europe. Moreover, part of the way layed on the sand of the tidal strip. In this case, the biggest danger was getting stuck in the sand in the tidal lane, which had happened to the car we met, which we tried to pull out with our powerful crossover, but could not, and whose driver got into our car, leaving his car to the waves. After a while, Rudy said that he'd better move to the back because he could not look at what was called a "road" without horror. On the way back, which took place in the afternoon the next day, we stopped in a small canyon with a small river, the banks of which were made of red Tersk sandstone. Here Rudy collected one species from the genus *Lophozia*, which he wanted to describe as new. He made a description of the species, and almost completely prepared the article with several tables of drawings to it. The description of the species and xerox copies of two plates of drawings he sent to me. However, due to some problems with xerox copying, the third plate was not sent. In the letter to me Rudy wrote: "I finally had to study a schizotype of *L. murmanica*, and made a plate of thus; it is not *L. schljakoviana* (the new species, my addition). I drew two plates of this: it is not a *Protolophozia*, but does not fit well into subg. *Lophozia*; but it is surely new." Unfortunately I never received the third plate and the paper was not finished.

Upon returning to Kirovsk, Rudy asked me to give a few dollars to the driver so that he could buy more musical CDs for himself, since the driver listened all the time to the same disc during the trip. It should be clarified that drivers in Russia often listen to music recordings, perhaps in order not to fall asleep on the road. Basically, it is diverse and often quite vulgar pop music. And only then I did realize what a test it was for Rudy, a great connoisseur and lover of classical music, to listen to repetitive pop music for several hours.

In conclusion, a few words about Rudy's apparently last major expedition to New Zealand, which I only know about from his letter which gives a vivid idea of how Rudy worked. In the letter to me (November 1, 1994) written immediately after returning from New Zealand, he wrote: "I am still tired from the long flight – and two months of intensive travel + research – all day collecting, usually in the mountains, and 4-6 hours every evening at the microscope. I am getting too old for such a stupid schedual". And a little further in the same letter: "While

in N.Z. (New Zealand, my note) on Ruapehu (3000 m volcano) I took a fall, hit head, hip and broke finger: I am OK, except I cannot type, because broken finger is still not totally OK – so you must read very bad typing. I brought back more than 2000 collections – and made about 80-85 cell drawings with oil bodies. Now I need, very much, vacation from all hepatics” (Schuster’s spelling and punctuations).

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A few additional touches to the portrait of R. Schuster were sent to me by Prof. Dr. Jakob Schneller and Dr. A. Potemkin.

From Prof. Dr. Jakob Schneller

In 1983 I could spend my sabbatical at Amherst Massachusetts in the United States. Due to my friends acquittance I became quickly also in contact to the famous bryologist Rudy Schuster who was at that time teaching Botany at the University. Because of my interest in the diversity of mainly flowering plants I could join a few field excursions with Rudy and his students studying the spring flora. I have learned a lot of new plants species but was also surprised to know at least many of the occurring genera. And Rudy has made a nice compliment to me that I seem to know much more about the spring flora of their region than his students. Of course, he could show me also a lot of his beloved mosses. One day I was invited in his office. So, I became aware what was behind the really extraordinary quality of his illustrations in his famous books. To my surprise the original drawing was made on a white cardboard of the size of about 2 x 1 m. My wife and me also were invited by Rudy and his wife Olga to their home and one day also to their weekend house in a quite open place within the forest of the Berkshire hills. Rudy has also kindly loaned us a radio receiver for our flat during our stay. We had so many opportunities to speak about his work, his plans, about classical music, he liked much, and about travelling. Rudy’s charming, intelligent, open and modest personality has impressed us and we have spent many lucky hours with him and his wife.

From Dr. A. Potemkin

Hot July 1994. Center of St. Petersburg, Nevsky Prospect near Kazansky Cathedral. “Rio Negro,” – one of the first phrases I heard from Schuster after our first meeting. Before I met him, he was for me, Rudolf Mathias

Schuster. He introduced himself as Rudy. I was obliged to follow. Rudy named me Alyosha, despite it was difficult for him to pronounce my nickname.

Despite very hot weather, Rudy intended to “absorb” the atmosphere and culture of St. Petersburg. Meanwhile, he always tried to avoid common extra fees for foreigners. He agreed to go to museums as a Russian. He kept quiet and fluently listen to my Russian. However, when we were leaving the Peterhoff Palace, he breathed out: “net”, i.e. “no” in Russian.

Sunday, July 1995, Airport Kennedy, New York. Nadya and I could not find a person from New York Botanical Garden, who should meet us. We took a taxi to New York Botanical Garden in the Bronx and hoped to solve a problem there. However, we could not solve our problem with the guards of NYBG. Nadya remembered the way to the guest apartment where she stayed in 1992 and we drove there. Along the way there I saw Rudy who walked by the street. He came from Massachusetts and waited for us.

After coming to Amherst, Massachusetts, he invited us to his summer house in Conway and made with us a brilliant trip through New England to Vermont showing us his collecting places. Moreover, he made the necessary arrangements for our further trips through North America.

We spent ten days with Rudy and Olga. Much talk, music, seeing together “Burnt by sun” in a small movie house in Amherst.

I remember Olga’s waving us when we left for the New England trip: Take care. ...

Rudy was very selective about people and colleagues. It was probably a matter of his internal feeling. He can’t hide his criticism and it was a part of his nature. When I asked him why he has no students, he answered that he wrote the books. He strictly followed his destination and reached very much. Schuster’s activity influenced, directly and indirectly, the development of bryology.