

**IN MEMORIAM****Dimitar Vlaev**

(05.02.1938 – 27.09.2021)

On 27<sup>th</sup> September 2021, after a short post-stroke ailment, the most eminent Bulgarian botanical illustrator, artist **Dimitar Vlaev**, died.

He was born in the town of Pazardzhik on 5<sup>th</sup> February 1938, in a family of an industrialist sentenced to nationalization by the then People's Court. Vlaev graduated with flying colours from high school in his native town. In 1955, he was accepted to study in the National Academy of Fine Arts, in the specialty Illustration and Books Layout Design under Prof. Iliya Beshkov. In February 1957, he was turned out from the Academy because of the "Hungarian developments" in 1956. In 1958, he resumed his studies in the same specialty and graduated in 1962 with honours and a diploma work on the short stories of the famous Bulgarian writer Yordan Yovkov. In the same year, he was posted to Varna as an arts teacher. He took part in a local arts exhibition there, contributed to the Varna Publishing House and was active in the local group of artists. In 1963, Vlaev settled in Sofia, again as an arts teacher at the 112<sup>th</sup> Stoyan Zaimov General Education School. He took part in various national exhibitions of book illustration, won an award for scientific illustrations and became member of the Union of Bulgarian Artists.

Dimitar Vlaev had engaged in scientific botanical illustrations since 1968. It was then that the Union of Bulgarian Artists, in answer to a request from the Institute of Botany of the Bulgarian Academy of Sciences, offered to artist Alexander Sertev to illustrate the multivolume edition of the *Flora of the People's Republic of Bulgaria* after the death of artist Yordan Filchev, who had illustrated the publications from volume 1 to 4. However, Sertev declined the offer and suggested instead in his place Dimitar Vlaev, who was his good friend and fellow-student. Vlaev's trial illustrations were approved and highly appreciated and he took on the torch after Filchev.

Thus, in the course of more than 50 years, the creative and professional path of that talented artist was bound with an exceptionally fruitful cooperation to the scientific work of the Institute of Botany of BAS.



Thousands of illustrations – in colour and black-and-white – implemented with great precision, sensitivity and high professional touch attracted the interest not only of professional scholars but also of Nature-lovers. Dimitar Vlaev illustrated the major botanical works: nine volumes of the multivolume edition of *Flora of the (People's) Republic of Bulgaria*, highly valued by foreign colleague-botanists, authors of regional editions for the originality and quality of the illustrations. The edition's policy was to supply all species included in the different volumes with illustrations prepared by the artist on the basis of original Bulgarian materials – herbaria or live plants.

Vlaev worked personally with all authors of the different families and genera, who supplied him with the materials. Thus, he had to deal with the specific personalities of various botanists, but never failed to



Fig. 1. Drawings of *Verbascum* species.



Fig. 3. Colour drawing of *Viola delphinantha*.



Fig. 2. Colour drawing of *Amanita rubescens*.

draw and execute the plants in the finest detail. During our joint work, I have watched covertly the perceptive precision and pedantism with which he managed to transfer on the white cardboard various details of the different parts of the plants, and when he had to correct something, he calmly erased what was to be erased and pressed on drawing. Occasionally, after due observation under the binocular magnifier, it was he who drew our attention to some details that had escaped us, manifesting sharp keenness of observation so necessary in our work. Or used to ask questions, which prompted us to rethink some of our decisions.

His drawings, with their high artistic properties and precise rendition of plants or mushrooms, which seemed nearly alive, brought pleasure not only to specialists but to all who saw them.

With his talent and propensity to detect those details in plants which were of particular importance for their differentiation, with the well-presented specificities of the different families and genera, with the precise colour or black-and-white drawings Vlaev had contributed to enhancing the quality of scientific publications of the Institute of Botany.



Fig. 4. Invitation for the anniversary exhibition of the artist.



Fig. 5. The artist D. Vlaev on the day of the exhibition.

In no other European *Flora* are there originally drawn illustrations (Fig. 1) of almost all species. That fact is noted by our colleague-botanists from other countries in their reviews and particularly appreciated. In 2001, at the Tenth Symposium of the *Organization for the Phyto-Taxonomic Investigation of Mediterranean Area – OPTIMA* in Palermo, Sicily, the Bulgarian edition received the prestigious award of the *Pro Herbario Mediterraneo* Fund (plaquette), and in 2014, volume 11 of the same edition got the first prize in the Biodiversity, Bioresources and Ecology division of the High Scientific Achievements Contest,

organized on the occasion of the 145<sup>th</sup> anniversary of the Bulgarian Academy of Sciences. For these prizes, credit undoubtedly goes also to artist Dimitar Vlaev and his original illustrations of high scientific and artistic value. Many plants, mushrooms and mosses, especially the endemic ones for the country, were drawn for the first time by him.

We have been so much accustomed to his high professionalism, exceptional tolerance and accuracy across the years, that it was difficult to imagine publication of any of our books without his illustrations. He was an invaluable contributor and friend, a person be-

longing to the botany ranks: he knew so many plants with their Latin names, let alone mushrooms. Unfortunately, he lacked such a trifle of time to finish the last illustrations for the last, 12<sup>th</sup> volume of the *Flora*. And now we have to get to terms with the fact that he is not here anymore and to get used to it!

Besides the multivolume *Flora*, Vlaev had illustrated all botanical editions of that period, namely: *Mushrooms of Bulgaria* (1978, Fig. 2), *Atlas of Medicinal Plants of Bulgaria* (1982), *Herbs and Herb Gathering* (1983), *Red Data Book of PR Bulgaria*, vol. 1. *Plants* (1984), *Key to the Higher Plants in Bulgaria* (1992), the multivolume *Mushrooms in Bulgaria* (1991-2001), *Atlas of the Endemic Plants to Bulgaria* (1992), *Chorological Atlas of the Medicinal Plants in Bulgaria* (1995), *Edible and Poisonous Mushrooms in Bulgaria* (1998), *How to Identify Bulgarian Plants in Nature* (2000), *Atlas of Bulgarian Endemic Plants* (2006), *Red Data Book of R Bulgaria*, vol. 1. *Plants* (2015, Fig. 3), *Endemic, Rare and Protected Plant Species and Mushrooms on the Territory of the Rhodopes* (2001-2002) within the Bulgarian-Swiss Biodiversity Conservation Program, as well as some other publications such as *Helminths and Insectivorous Mammals and Rodents in Bulgaria* (1984), *What Do We Know about the Continents* (1987), *Keys to the Trematoda* (fam. *Clinostomidae*, fam. *Cyclocoelidae*), vol.1, CAB International and Natural History Museum, London (2002), *Agricultural Encyclopedia*, vol. 1 (1984), vol. 2 (1987, the panels with subtropical cultures), study books for the first course, calendars, posters popularizing the conservation of rare and protected plants, etc.

Denied the material incentives of many other artists, shut down between the covers of our academic books: that was his destiny, not very enviable for such a great talent. But he enjoyed the privilege of getting in touch with the most beautiful creations of Nature in

Bulgaria, of contributing to their popularization and, certainly, to their conservation.

In February of 2003, on the occasion of his 65<sup>th</sup> anniversary and in sign of respect for his work and his contribution to the design of scientific publications on a modern high scientific level, the Institute of Botany organized a jubilee exhibition of his works (Figs 4, 5). Twenty-six panels with original drawings of plants and mushrooms, as well as the books illustrated by the artist were put out on display. Thus, we had an opportunity to show some of his artistic works to the general public, in order to express gratitude, respect and acknowledgement of the long years of our cooperation, which has given us so much and has enriched us across the years. Appraising highly the artist's contribution to the Bulgarian botanical science, the Managing Council of BAS had conferred on him the badge of honour *For Services to BAS*.

In 2007, on the occasion of the 300<sup>th</sup> anniversary of Carl Linnaeus, the managing body of the University Botanical Gardens, jointly with the Institute of Botany, organized another exhibition of Vlaev's works in the Botanical Garden of the town of Balchik.

No matter how much could be said about that talented artist, his illustrations for our botanical books are most eloquent on the subject. He shall stay alive in the memory of all those who knew him, who had the pleasure to work with him, who came in touch with his creative work and, undoubtedly, all who will use in the future the books illustrated by him, which will keep forever their place in the Bulgarian scientific botanical literature.

Rest in peace and let perpetual light shine upon you, **Maestro Vlaev!** ■

Ana Petrova

Institute of Biodiversity and Ecosystem Research,  
Bulgarian Academy of Sciences

**IN MEMORIAM****Horst Kretzschmar**

(1950–2021)

Horst Kretzschmar was born on 8 November 1950 in Eschwege (northeastern Hesse, Germany), the eldest of six children. He completed his A-levels (Abitur) at the Eschwege Grammar school in 1969 and studied pharmacy until 1971, followed by an internship at the local Schloß-Apotheke. This laid the foundation for his later interest in nature, especially botany. He began medical studies in 1974, obtaining in 1981 his doctorate from the University of Göttingen, defending a thesis on the effect of tetanus toxins. His clinical training was carried out at the University Clinic for Psychiatry in Göttingen, the rural hospital in Moringen (Lower Saxony) and the hospital in Bad Driburg (North Rhine-Westphalia). In 1988, he moved to Bad Hersfeld specializing in neurology and psychiatry and quickly achieved eminence as a distinguished psychiatrist, voted the best in his field. His office at Dudenstraße 22 was like a second home, so dedicated was him. For health reasons he ceased private practice in 2009 but continued until 2012 as director of a medical centre he had co-founded in Bad Hersfeld.

Kretzschmar would be familiar to many as a famous orchid specialist but he was also an outstanding naturalist and photographer in many scientific fields including mycology and ornithology. His systematic recording of orchids on the Greek islands (Crete, Rhodes, Kasos, Karpathos, etc.) is admirable. He searched for, and noted orchid occurrences within each UTM quadrant using GPS devices shortly after the latter were functional. He continued this work for decades, not only in the Mediterranean region but also most of Europe and especially Germany. Vast amounts of data thus accumulated on his computers. To process the data he created INKA together with Volker Sahlfrank. INKA (INternationale KArtierung = International Mapping) was a special mapping programme for flora and fauna which could be extended indefinitely.

It was first developed as a DOS programme for pure data management, graphic functions were later added. It was then not only possible to record and store locality data but also to create simple distribution maps. WINKA was created for Windows 95 and



made available to all interested parties free of charge. The German AHO (Arbeitskreise Heimische Orchideen) in particular, used it for many years to manage their data. Most of the raster distribution maps published in numerous German regional floras was created with the help of WINKA. The maps in *Flora of Samothraki* (Biel & Kit Tan 2014) were also prepared using the programme. Later version of Windows did not support WINKA. Burkhard Biel had worked with Kretzschmar since 1993, developing and refining the mapping programme for the whole of Europe.

Horst Kretzschmar wrote a series of notable “orchid field guides”. His first was for the island of Rhodes (2001) soon followed by one on the islands of Crete, Kasos and Karpathos (2002). The latter was awarded the OPTIMA Silver Medal in 2004 as “the best work on the phytotaxonomy of the Mediterranean published in 2002”. Additional publications followed such

as the field guide to the orchid flora of the Dodecanese (2004) in English, translated to Greek. *Die Orchideen Deutschlands. Finden und Bestimmen* is among the best and was reprinted in three editions (2008–2018). More recently, he prepared a series of “Nature Travel Guides to the Mediterranean”, planning a total of 16 titles. He was fortunately able to complete three of them.

Heinrich Blatt and Horst Kretzschmar published a basic work on the orchids of Germany in 2005. Horst was the initiator, organizer, coordinator, text author and photographer for most of the pictures in this work. He was also responsible for the design, layout and typesetting. When a publisher withdrew because the work was delayed, he persuaded AHO to set up a printing house in which the work was eventually published. The collaboration with the printer and the approval of every single printed sheet rested on him. Only those closest to him during the years of preparation of this exemplary work could have realized the immense workload he had to bear for the project. His personal sacrifices were many. It is worth noting that almost every participating group in the project had gone its own way in collecting the data. Thus it was subsequently necessary to standardize and merge more than 400,000 data records into a single harmonious database so that distribution maps of all orchid species in Germany could be prepared. The distribution maps created by Blatt and himself were an absolute novelty for Germany at that time.

Notwithstanding the great effort expended on the “Deutschland-Buch”, the indefatigable Horst envisaged the milestone preparation of an “integrated genus monograph”, the first such for orchids. He was fortunate to secure Helga Dietrich and Wolfgang Eccarius as co-authors. The separation of the two genera *Anacamptis* and *Neotinea* from *Orchis* was carried out far beyond taxonomic and nomenclatural expectations. It was beautifully and comprehensively illustrated in typical Kretzschmar-style. Published by Echinomedia in 2007, it received high international acclaim.

In the 1980s, Horst Kretzschmar was one of the founders of AHO (Arbeitskreise Heimische Orchideen) in West Germany. He was leader of AHO Lower Saxony from 1983 till 1990 and published numerous contributions for the periodical “Berichte aus den Arbeitskreisen Heimische Orchideen” (Reports from

the Native Orchid Working Groups). In central Germany he made more than 100 excursions a year recording and photographing. Burkhard Biel and others often sent him photos in exchange. His images were beautiful, innovative and technically excellent. Being a perfectionist he realized early on that in photography, “happiness is not about wanting what you get but getting what you want”. We waited expectantly each year for his treasured greeting cards.

Fortunately, his loyal assistant and devoted companion in all endeavours was his wife Gisela, née Unger, whom he had met when both were pre-pharmaceutical students. She shared his interests and love of botany and accompanied him on all excursions throughout Europe and Turkey. In particular they loved Greece and the Greek islands where they went at least twice a year. Gisela assisted him in photography, discussed texts and corrected them, read and proof-read pages, and took care of all travel problems, great and small.

Horst was the most generous of souls. A Greek botanist asked him for his data on the orchids of Greece in order to make a publication with distribution maps. Horst realized that he himself, because of his health, would not be able to accomplish a similar work in his lifetime. He therefore kindly provided his complete data including 160,000 locality records. It saddened and affected him greatly that the book was published without any reference to his data or thanks to him. The botanist sent him a complimentary copy. Horst said it was the first time in his life he neither replied a letter nor acknowledged a gift. Perhaps the botanist had assumed Horst would not live to see the publication. Unexpectedly, Horst survived blood cancer for 14 years, a testimonial for the botanist’s embarrassment.

The rare blood disease which developed in 2006 grew worse. Horst tried to counter it with his own medical treatment and underwent several serious operations including blood transfusions every four weeks. He remained optimistic, corresponding regularly with his friends. He planned a botanical excursion to Greece, travelling also with his daughter, and hoping to stay at Poulithra in SE Peloponnese at the low eastern foothills of the Parnon mountains, an area that he liked. The trip was cancelled, it was not to be.

Documentation by Horst on the orchids of Central Europe and the Mediterranean region began in 1991.

It ended 30 years later when he passed away on 2 January 2021. He left a hallmark legacy of lasting scientific research. Some of his publications on orchids can be found in <http://www.orchideen-kartierung.de/Publicat.html> and in the latest 2021 issue of AHO (vol. 38, 1) which also carries an obituary by Wolfgang Eccarius and Volker Kögler to whom our thanks for information on Horst are tendered. An unusual publication in connection with his interest in toxins is "The Biter Bit" as published in *Advanced Science Letters* 2(1): 10-13 (2009) [<https://www.ingentaconnect.com/contentone/asp/asl/2009/00000002/00000001/art00002>].

Among his letters to Kit is one giving support and encouragement. Horst has allowed its sharing.

"It is a difficult situation for me, and surely a lot depends on attitude and a personal way of life. Being a medical doctor fully specialized in psychiatry and neurology it is also my profession to treat such problems. My illness is a special one of the bone marrow, termed myelodysplastic syndrome, which itself comprises a group of different disorders.

When diagnosis in 2007 was confirmed, naturally I checked the statistics of the illness - probably at best, I can expect about 4 years' survival. It was rather a shock as at that time I was working full-time in my own medical practice. It was fortunate that a medical company was interested to buy my practice and they also offered me the chance to continue as director of a new medical centre. So I was glad to be able to close my private practice without great financial loss to me and my employees. I continued working as director at the centre until 2012 and at the same time I re-organized my life, sold my sports car, tidied personal matters in case I should die. As my blood values grew worse and worse, I decided to try a special treatment at the University of Hannover. This did not work out, my body could not tolerate the medications, my kidneys stopped functioning after a week. I lost consciousness for another week. And still the blood values became worse than before with further deterioration. I had to fully isolate due to the high risk of infections. Treatment started in January/February 2012, I returned home at the end of April. However, throughout my life I had always been a very active person, I could not stay at home all the time. So I started to go outside again, searching for some special, rare plants

I had never seen before. The first was *Myosurus minimus*, I remember very well the thrill the discovery brought. I must confess it was physically difficult. I had always been very strong, now the muscles were reduced, I felt myself very weak. But each day outside, my body worked a little better, even though blood values remained low. I tried to work again, managed nearly 2 months in July and August, but it was not possible to continue. Sitting down at a computer to work with only half the amount of normal erythrocyte values was impossible. I often fell asleep, so I decided to retire, and did so in autumn.

In October/November I made a journey to the Peloponnese looking for crocuses and other autumn flowering geophytes. This stimulated me very much. In early spring the following year I made a trip to northern Cyprus; it was very nice even though I needed blood transfusions before flying. So this is now the rule, every 2-3 weeks I have transfusions of two portions of erythrocytes, because only with transfusions I can have enough oxygen to be able to walk far enough to look for plants. Many other problems occurred related to my illness. My immune system could not work correctly, it killed off nearly all newly produced blood cells. So the bone marrow tries to produce more and more new blood and to be able to do this, it has spread into all bones, leading to a reduction of the spine bone mass, which becomes unstable, about 3 vertebrae in the lumbar area have been destroyed. Only my back muscles hold them in place. Both my hips are in pain for the same reason. Besides low values for the red blood cells the thrombocyte values are also extremely low, leading to pain all over the body even with minimal pressure. Due to the pain I have to take a lot of pain killers every day. You see, the situation is really not good. In addition, so many transfusions cause an overload of iron to the body so every day I also have to take a high dose of a chelator to eliminate the iron load.

But on the other hand, it is very strange that I'm still alive. Statistically, I should be dead 5 years ago. For the last four years I have visited a haematology ambulance to receive blood, and during that time I have seen a lot of other patients with the same disorder, also receiving transfusions and some medication, but they have all since died.

For me, considering the situation not as a medical doctor but as a patient I have concluded, that it is most important, to have some aims to reach. And if

you have reached them, you should define new aims for yourself. By this I am able to have the energy to overcome the long stress of my great illnesses. And I have developed some fatalism. What shall happen with me, when I make so many journeys to the south Mediterranean? In the worst case I can die. If I were to stay at home I can also die. Then I think it is better to die in a very nice place than at home, if this should happen.

Considering the situation as a psychiatrist, of course there are some possible treatments, with medication as well as psychological. But all in all, I think

that when the situation worsens and hope seems less it is important to find a good way to accept one's personal situation and from there obtain the strength and attitude to overcome".

Farewell, brave Horst. Memories of you will always remain. May you roam the Elysian Fields filled with orchids forever. ■

**Kit Tan<sup>1</sup> and Burkhard Biel<sup>2</sup>**

<sup>1</sup> Institute of Biology, University of Copenhagen, Universitetsparken 15, DK-2100 Copenhagen Ø, Denmark

<sup>2</sup> Am Judengarten 3, D-97204 Höchberg, Germany