

## UNIVERSITY PROFESSOR DR. SERGIU CĂRĂUȘU (1907-1997). SELF-DENIAL AND DESTINY

Gheorghe MUSTAȚĂ and Victor SURUGIU

“Alexandru Ioan Cuza” University of Iași, Faculty of Biology, Bd. Carol I, 20A, 700507, Iași  
gmustata@uaic.ro; vsurugiu@uaic.ro

Each personality pins down its name to one of his achievements; either we are speaking about the foundering or about the scientific work. Professor Sergiu Căraușu dedicated his life to the Marine Biological Station of Agigea which was founded by his great predecessor, Professor Ioan Borcea. During his 30 years of service at this Station, he also acted as the director of the institution for one term. The scientific world acknowledged him as the most prominent Romanian specialist in the study of amphipods and his didactic work was illuminated by the publication of the unique *Treatise of Ichthyology*, which was, and continues to be, a work of high-standing academic value. Enjoying an impressive longevity, part of his life was spent as a professor smiled upon by fortune, followed by harvesting the fruit of professional labour in the activity of his disciples.

Born on 15<sup>th</sup> February 1907, in the commune Ișnovăț, Orhei district, to a family of intellectuals, Sergiu Căraușu was fortunate to know many of the scientific and cultural personalities of Bessarabia. With obvious pride he told us about his cousin, the renowned poet Alexei Mateevici.

He followed the primary courses in his native village, after which he became a pupil (schoolboy) of “Bogdan Petriceicu-Hașdeu” High school in Chișinău. He completed his schooling at Orhei, where he matriculated in 1926. After matriculation he entered the Michaelian University from Iași. Here he took shape under the guidance of a series of outstanding professors, such as Paul Bujor, Ioan Borcea, Constantin Motaș, Ion Atanasiu etc.

Distinguished by a natural brilliant intelligence, by his passion for the study of nature and diligence, Sergiu Căraușu was appreciated by his professors. Thus, in 1930 professor Paul Bujor retained him as a probationer assistant in the Laboratory of Zoology, while he was still a student. He especially admired professor Ioan Borcea as a model of researcher and teacher. Thus it was that he, and his friend Mihai Băcescu, found themselves at the Agigea Marine Station between 1<sup>st</sup> and 5<sup>th</sup> September 1929, where they studied the fauna of the Black Sea under the direct guidance of professor Ioan Borcea. In 1931 Sergiu Căraușu became titular assistant at the Laboratory of Zoology, thereupon he was transferred to the Marine Zoological Station “King Ferdinand I”, thus becoming the direct follower of the professor Ioan Borcea. The definitive settlement at Agigea Station was determined also by the fact that after his marriage with Aurelia Bosânceanu who was also engaged as researcher at the station.

In 1931 he became a PhD student with the topic fixed by the professor Ioan Borcea, “Amphipods from Romania: Gammarids of Caspian type”. As assistant he participated in the courses of Zoology taught by professor Ioan Borcea. Lectures given by professor Borcea were also attended by students from other faculties. Together with a series of students, Sergiu Căraușu compiled the *Course of Zoology (Invertebrates)*, based on the notes taken during the lectures of the professor Borcea, in 1934.

In 1937, together with Mihai Băcescu, he published a booklet regarding the fauna of the Black Sea (Băcescu & Căraușu, 1937). This is considered the first synthesis of knowledge accumulated as a result of research performed over time on the fauna of the Black Sea.

Professor Borcea knew how to assemble around him the greatest personalities of Romanian biology of that time and to attract of the best students, succeeding to implant in their souls “*the sacred fire*” of scientific knowledge, as he liked to say.

Reading through the Golden Books of the Station you go back in time and its becoming and catch some of the work atmosphere of those times. Professor Borcea wrote down with his resolute handwriting the visits of some personalities of Romanian biology at the Marine Zoological Station “King Ferdinand I”. The first record was made on 27<sup>th</sup> August 1929, on the occasion of the visit of Professor Teodor Bădărașu, the Director of the Boarding High school from Iași, together with his daughters, students of Geography. In September professors Andrei Popovici-Băznoșanu and Dimitrie Călugăreanu from the University of Bucharest, Professor Polinski from the University of Warsaw, as well as professors Mihai Ciurea and Constantin Motaș from the University of Iași with Elena Lupu, lecturer at Animal physiology worked at Agigea.

Professors Ion Simionescu, Ion Atanasiu, Paul Bujor, Constantin Motaș, Andrei Popovici-Băznoșanu, Dimitrie Călugăreanu and many other personalities of Romanian biology were permanently associated with professor Ioan Borcea and were reputable guests of the station. You remain affected by how quickly a kernel of young naturalists, which attached itself to Agigea Station and consequently to professor Borcea for different kinds of research, was formed. Mihai Băcescu and Sergiu Căraușu put on “the raiment of oceanography” and became the main followers of that field of research. You also detect the presence of many young people who came to Agigea, either with their professors, or alone, motivated by the desire to do research. Year in year out, Agigea was visited by Olga Necrasov, Adriana Antoniu, Constantin Burduja, Aurelia Bosânceanu, Constantin Bogoescu, Mihai Ionescu, Mihai Constantineanu, Petru Șuster and others. Some of them were entomologists. What did they look for at Agigea? Such questions can only be asked by those who did not know that professor Ioan Borcea was a well known entomologist who had published extremely valuable papers on aphids and zoocercids from 1908-1912. Besides, not only marine research was conducted at Agigea Station, but various other research directions as well. The University of Cluj was strongly linked to Agigea Station. Ion Scriban came away from Iași to the newly established university and felt strongly attached to professor Ioan Borcea and his station. Eugen Pora with his collaborators conducted considerable research in marine physiology.

In order to better understand the importance of this Station to Romanian, as well as world biology, you would do well to refer to the notes made by the eminent Romanian (and international) neurologist Gheorghe Marinescu, inscribed in the Golden Book of the Station on 25<sup>th</sup> August 1935:

*“I have found in the Marine Zoological Station, conducted with an admirable spirit of organization by professor Borcea, an atmosphere of rare cordiality and a filling of solidarity which I have seldom met elsewhere. Grace to professor Borcea, to his collaborators and to young researchers who I have met at the Station, I could fill out my knowledge of cytology and gather very useful material which will facilitate my own research regarding functional mechanisms of the neuron. I regret only that my time didn’t allow me to stay more than 8 days. But I hope, if my age will not be an obstacle, to come back the next year”.*

The evolution of the young Sergiu Căraușu at Agigea was interesting. From August 1935 some visitors began to thank not only the professor Ioan Borcea, the Director of the Station, but also the Căraușu couple. The first record of this kind was made by the

specialists from Poland, Jadwiga Siwakoniga and Eugenjus Grabda, on 31<sup>st</sup> August 1935. Gradually the assistant, Sergiu Căraușu, became the soul of the Station. Together with his wife Aurelia they welcomed guests with open hearts and generously share the secrets of the Black Sea or facilitate different activities, thus harvesting the most sincere and warm thanks.

The Căraușu family became omnipresent. It is true that professor departed to Iași and then they had to watch over the good progression of the Station, but by the fashion of being the Căraușu couple wanted their guests to feel good and that they learn all that they were interested in about the research undertaken and about the mysteries of the Black Sea.

The Marine Zoological Station of Agigea attracted the attention of the scientific world. “*The spirit of Agigea*” introduced by the professor Ioan Borcea attracted the people like a light which sweeps the darkness during the night.

But the lightning of death took away the great founder. Puncturing himself with a scalpel during the dissection of a marine fish, the professor contracted toxemia and died within 48 hours. The world remained as paralysed, but the Station continued to function. Various researchers and professors came at Agigea and worked hard, but no one dared to say anything about the disappearance of the great founder. We felt this stillness as a desert, as a speechless world, as a man with amnesia who doesn't remember anything. It is not the case to name here some of those who worked at the Station in the period when the professor Borcea died and who did not expressed their regrets, who didn't show their appreciation for the great man. Maybe it is not good to comment on those moments. Only the assistant Sergiu Căraușu concludes the denotations of the year 1936 thus:

*“Undersigned Sergiu Căraușu I have stayed at the Station from 20<sup>th</sup> June to 18<sup>th</sup> September 1936, get going the study of the country's amphipods. The Station had registered this year a hard beat by the loss of his first Director and founder. Professor I. Borcea passed away on 30<sup>th</sup> July as a true soul of the science and duty. He wishes not to leave the Station than 4-5 hours before the death.*

*Agigea Station has lost his founder and animator. Notwithstanding, or maybe scarcely because of this, this year at the Station all worked with an unacquainted strenuousness. The pupils of professor Borcea, keeping a pious recollection, come one and all to continue and to strengthen the work created by those who passed away. Only in this way this institution can be kept on, whose scope for always was the honest and disinterested work”.*

The station then came under the guidance of the eminent professor Constantin Motaș. He stayed only until 1940, when he was transferred to the University of Bucharest. He was followed by professor Ioan Botez, the first outstanding Romanian anthropologist. The Station faced difficult times and most destructive ordeals and had survived the war. But this Director didn't survive; professor Ioan Botez, who fall prey to the human pettiness, to the informers who forced their way in the society thus bloodying them. He was arrested in 1949 and taken away to the Danube – Black Sea Canal, from where he never comes back.

During these two leaderships the Căraușu couple remained the pylons of the Station. They hosted the visitors, took care that they have everything they needed, showed them the Station and his Museum of Marine Zoology, and helped the researchers when they got stuck in the mud. They were the ideal hosts. In the Golden Book we have found at many thanks to the Căraușu, proving that they were the soul of the Station.

Research by the assistant Sergiu Căraușu focussed on amphipods, not only on marine species, but also on freshwater species. The first papers were published in *Annales Scientifiques de l'Univeristé de Jassy* (Căraușu, 1936a, 1936b) and in *Compte Rendu de l'Academie de Sciences de Roumanie* (Căraușu, 1936c). In 1942 he published a paper on

amphipods derived from dredgings performed at the Romanian Black Sea coast together with Aurelia Cãrãușu (Cãrãușu & Cãrãușu, 1942).

In 1939 he successfully obtained his doctoral degree, having as jury a commission formed by Constantin Motaș, Ion Atanasiu and Ioan Botez.

Becoming an acknowledged specialist in the study of amphipods, he published his slightly modified doctoral thesis in 1943 (Cãrãușu, 1943). In this monograph he described 3 new species (*Niphargoides sfinicaudata*, *Niphargoides motasi* and *Gammarus chablensis*) and 4 new subspecies (*Gmelina costata aestuarica*, *Niphargoides borodini intermedius*, *Chaetogammarus tenellus major*, and *Pontogammarus abbreviatus borceae*). He also identified 4 species not recorded previously in the Ponto-Azov basin, one new species for the Black Sea and 6 more that were new to the Romanian fauna.

In 1955 he publishes an introduction to the monograph of the Amphipoda from Romanian littoral of the Black Sea (Cãrãușu, 1955). Research regarding the amphipods from Romania were summarised in the same year in the publication of the *Fauna of Romania* series dedicated to the brackish-water and freshwater amphipods (Cãrãușu *et al.*, 1955).

Besides his research activity, he started teaching at the Faculty of Fishery and Pisciculture in Constanța in 1941, where he occupied the position of senior lecturer in Ichthyology.

In 1953 he was promoted to director of Marine Biological Station of Agigea and as the titular professor, the chair of the department and thereupon the Dean of the Faculty of Fishery and Pisciculture.

His didactic activity was wreathed by a work of great scientific value - *Treatise of Ichthyology* - published in 1952. For this treatise he received the State Award of Romania. It is an unequalled work in Romanian scientific literature and must be reedited because even today it hasn't lost its scientific value.

After the transfer of the Faculty of Fishery and Pisciculture to Galați, he continued his didactic activity and from 1964 he became PhD supervisor in the domain of Fishery and Fish farming. In 1960 he becomes titular professor at the Faculty of Biology-Geography of the "Alexandru Ioan Cuza" University of Iași, where he taught Hydrobiology, Ecology and Zoogeography.

Having a biological culture covering a large spectrum as well as rich research experience in the domain of Hydrobiology, Ecology, Zoogeography, Marine biology and Fish rearing and being endowed with an exceptional didactic talent, professor Sergiu Cãrãușu quickly conquered students. He fascinated with his aspect of "sea wolf", by his academic setup, by the modulation of his tone during his lectures and by fluency and logic, and coloured with unprecedented elements from his own scientific research presentations.

As a director of the Marine Biological Station from Agigea, Professor Sergiu Cãrãușu had some important achievements. First of all he removed the terraces of the main building and bricked the second row of rooms which were oriented towards the sea. Thus the building became more functional and it was also assured the protection of old rooms, which no longer opened directly outside. A very good mock-up of the Black Sea was also produced. This mock-up has a particular didactic value because it facilitates the perfect presentation of some physic, geographical and hydrological features of the Black Sea basin.

The number of laboratories was increased to 12, and a classroom for practical works by students, a reference library and a refectory were inaugurated. A small museum of Marine biology, which was opened to the public, was also developed. The library of the station, which stemmed from the personal library of the professor Ioan Borcea and donated by his wife Lucia Borcea, contained more than 10,000 volumes and almost 300

scientific journals from all over the world. The researchers employed at this station, Sergiu and Aurelia Cărăușu, Ioan and Florica Porumb, Maria Celan and Victorian Șerbănescu, as well as dons from the Universities of Iași, Bucharest and Cluj, worked in the laboratories of the station.

To celebrate the 30<sup>th</sup> anniversary of the Marine Biological Station, and to commemorate the 20<sup>th</sup> anniversary of the death of its founder, a national scientific session with international participation was organized. Among the guests from abroad were Professor Robert Mertens and Drs. Wolfgang Klausewitz, A. Zilch and Joachim Steinbacher from Senckenberg Research Institute at Frankfurt am Maine. Lucia Borcea also participated.

At this scientific session, organized between 15<sup>th</sup> and 17<sup>th</sup> September 1956 by Professor Radu Codreanu from University of Bucharest, it was proposed that the Marine Biological Station of Agigea should bear the name of his founder, professor Ioan Borcea.

The chronicle of the scientific session was made by the eminent biologist, Professor Constantin Motaș, who, in conclusion, wrote: “*In this very time, outside is run riot a storm of unusual violence, which throws on the beach steely blades of the sea, became true weltered ocean, as the temper itself of Ioan Borcea*”.

At Iași Professor Sergiu Cărăușu took over the leadership of the chair of Zoology, thus becoming the successor of Professor Ioan Borcea not only at the Marine Biological Station of Agigea, but also at the chair established by his forerunner.

At the age of 90 he was honoured with the title of *Professor Emeritus* of the “Alexandru Ioan Cuza” University of Iași. Surrounded by friends, who came from afar to honour him, and by some of his disciples, Professor affected the Senate of the University by the lucidity of mind and by the joy he radiated. 77 days later the professor passed away. He left us an imperishable work achieved with a lot of self-denial. He has a long existence, marked by abnegation in labour and a destiny which placed him among the outstanding professors of the “Alexandru Ioan Cuza” University of Iași.

#### References

- Băcescu, M., Cărăușu, S., 1937. *Fauna Mării Negre*. Cunoștințe folositoare, Seria A, Știință pentru toți, **45-46**, Ed. Cartea Românească, 64 p.
- Cărăușu, S., 1936a. Trois Gammaridés du type caspien, nouveaux pour le basin Azovo-pontique. *Ann. Sci. Univ. Jassy*, **23**(1-4): 46-49.
- Cărăușu, S., 1936b. Étude sur le *Pontogammarus maeoticus* (Sow.) Mart., *Ann. Sci. Univ. Jassy*, **23**(1-4): 133-156.
- Cărăușu, S., 1936c. Les amphipodes trouvés dans les limans littoraux et fluviaux de Roumanie. *C. R. Acad. Sc. Roum.*, **1**(1): 34-35.
- Cărăușu, S., Cărăușu, A., 1942. Amphipodes provenant des dragages effectués dans les eaux roumaines de la mer Noire (23 août – 1 septembre 1935). *Ann. Sci. Univ. Jassy*, **28**(2): 18.
- Cărăușu, S., 1943. *Amphipodes de Roumanie. I. Gammaridés de type caspien*. Monografiile Inst. Cerc. Pisc. Rom., Mon. №1, 293 p.
- Cărăușu, S., 1952. *Tratat de ihtiologie*. Ed. Acad. R.P.R., București, 802 p.
- Cărăușu, S., 1955. Introducere la monografia amfipodelor Mării Negre (litoralul românesc). *An. Șt. Univ. Iași*, **2**(1): 127-183.
- Cărăușu, S., Dobreanu, Ecaterina, Manolache, C., 1955. *Fauna R.P.R. Crustacea. Amphipoda. Forme salmastre și de apă dulce*. **IV**, 4, Ed. Acad. R.P.R., București, 407 pp.
- Motaș, C., 1959. Cronica Sesiunii Științifice de la Stațiunea Zoologică Marină de la Agigea. In *Lucrările Sesiunii Științifice (15-17 septembrie 1956) a Stațiunii Zoologice Marine “Prof. dr. Ioan Borcea”*, Agigea, 601-607.