

<p><i>In memoriam</i> ELENA DUMITRESCU (Tania Zaharia)</p>	<p>“Cercetări Marine“ Issue no. 48 Pages 187-201</p>	<p>2018</p>
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***In memoriam* ELENA DUMITRESCU
(05.01.1949 - 28.11. 2017)**

Tania Zaharia

We have never thought we would part so early with our colleague and friend, Dr. Elena Dumitrescu! This is the reason why words come hard and we cannot help thinking about how many beautiful things she could have done if death had not come so soon and so unexpectedly!

Elena Dumitrescu was an outstanding researcher who worked at the Romanian Institute for Marine Research Constanta (RMRI) (currently the National Institute for Marine Research and Development "Grigore Antipa"), where she was assigned as of 01.08.1972, after graduating from the Galati Polytechnic Institute, *Fisheries and Fish Technology* "Department.



During **1972-1974**, she worked in the Economics and Development Laboratory, where, after a period of bibliographic documentation on the exploitable resources of the World Ocean, on their geographic distribution and their exploitation by the Romanian ocean fishing fleet, she participated in the elaboration of the reports "*Study aimed at determining the conditions and optimum rhythm for the development of the Romanian ocean fishing fleet*", in 1973, and, in 1974 "*Study for establishing the conditions for the development of the Romanian expeditionary fishing*", as well as the works that were assigned to her from the international fisheries conventions, which our country had joined.

In **1975**, through the abolition of the Economics and Development Laboratory, she moved to the Ocean Resources Laboratory, joining to the ichthyology team, where she worked until 1981, participating together with the other colleagues in the elaboration of the quarterly and annual fishing forecasts and the preparation of the reports summarizing the results of annual survey of the Romanian research in the Atlantic Ocean in the field of fisheries resource assessment. During this period, she learned the methods for evaluating exploitable bioresources.

During the **1975-1977** period, in the framework of the external agreement

concluded between Romania and Libya, evaluating the biological resources and fishing opportunities, she made observations and researches in the laboratory and in the study area (expedition from April to May 1975); she participated in drafting of the final report in 1977. Two aspects of the work carried out in Libya were the subject of two papers: "*The statistical survey of the populations of the main fish species in Libyan waters*" and the "*Qualitative-quantitative composition of the eastern Libyan fish fauna*", elaborated together with colleagues V. Dumitrescu, I. Porumb, M. Iliescu, in October 1977.

Additionally, in 1975, based on data from the literature, at the request of the Ministry of Agriculture and Food Industry, she elaborated the paper "*Assessment of fishing opportunities by the Romanian fleet in the Indian Ocean*" and, together with Dr. Eng. Carmen Ionescu and Eng. Ioan Panait, the paper "*Evaluation of fishing opportunities by our fishing fleet in the Pacific Ocean*".

After 5 years of activity, in September 1977, she participated in RMRI's promotion competition, gaining the position of scientific researcher.

During **1977-1978**, she participated in the joint expedition organized under the Warsaw Maritime Fisheries Agreement, off the coast of Argentina. In this expedition she approached for the first time research on the parasites of the main species of fish and cephalopods in the area, research attributed only to the Romanian side. The results of the researches were included in a paper prepared together with prof. Dumitru Bogatu, from the "Lower Danube" University of Galați, entitled "*Parasites of the main species of fish and squids caught in the southwest Atlantic Ocean*", which was sent to all countries participating in the research survey (USSR, Poland, Bulgaria), and which enjoyed great appreciation. Outside the survey program, she conducted parasitology research on the fish species *Macruronus magellanicus* and *Merluccius* sp. from the Falkland Islands area, following which she developed and published in the *Recherches Marines* Journal, issue no. 12/1979, the paper "*Parasite infestation of the species *Macruronus magellanicus* and *Merluccius* sp. from the Falkland Islands area*", a work that highlights the main parasites of these species and assesses their influence on the quality and the possibility of their transmission to humans. The paper was requested and sent to specialists from countries for which the area was of interest (Chile, Poland, 1982).

During **1979** and **1980**, she continued her activity in the field of fish pathology, dealing especially with the parasitic diseases of the main species of fish caught by the Romanian ocean fishing fleet.

In parallel with the practical activity of identifying oceanic fish parasites, establishing their influence on the quality of fish, she also carried out an intensive documentary activity in the field of ichthyopathology, getting acquainted with the working methods and the state of research in this field in countries advanced at that time as: USSR, GDR, USA, France, England etc., developing a methodology for pathological investigation.

Since **1981**, as a result of some of the Institute's requirements for the development of marine and invertebrate marine rearing technologies with maximum economic efficiency, she focused her pathological research on organisms grown in the marine environment, to develop effective methods of preventing and combating

illnesses and thus eliminating the losses that illnesses can cause.

During **1982-1985**, pathology research in the frame of the research contract "*Research on the prevention and control of diseases in fish and invertebrates reared in the marine environment*" was conducted on experimentally grown fish in marine water: rainbow trout and zander, as well as on invertebrates - mussels, oysters, shrimps. For the first time in RMRI, she organized in the institute a laboratory equipped with a minimum of equipment necessary for the research, and a team of specialists with expertise in: biochemistry, chemistry, bacteriology, parasitology, hematology etc.

Strictly for pathology work (bacteriology, parasitology, hematology), she developed a specific novel technique, non-existent in our country at that time.

The results of the research were handed over to the beneficiary, the Constanta Fishery Company, in the form of annual reports. In these papers are presented the diseases that occur in organisms reared in the marine environment, comprising: ethology, pathogenesis, clinical changes, prognosis (severity), factors that favor the occurrence and mass triggering of diseases and especially the most effective prophylactic methods and curative results established following the experiments performed, all of which were new in the field.

Some of the researches carried out were published in papers such as: "*Aspects of pathology in fish acclimated in seawater*", *Recherches Marines* Issue No. 15/1982; "*The bacteria of rainbow trout (*Salmo gairdneri irideus*) reared in marine water*", *Recherches Marines* Issue No. 19/1986. The published work on the pathology of marine organisms were requested and submitted to foreign specialists (France, Bulgaria).

Particular results obtained from the pathological researches carried out on rainbow trout grown in marine water include the creation in laboratory of medicated feeds and an antimicrobial vaccine to combat the bacterial infections produced by *Aeromonas hydrophila* and *Vibrio anguillarum*, both experienced in the institute with good results.

In parallel with the pathological research on fish and invertebrates experimentally reared in marine water, she also effectively participated in research to establish the technology for the cultivation of rainbow trout in the marine environment, along with the team that dealt specifically with these research. She also worked with other contributors on the theme of marine organisms' pathology and research to determine the sanitation of marine organisms, ultimately setting out the months and coastal areas where bacterial contamination with airborne, anaerobic coliforms and the coagulase-positive staphylococcus *Salmonella* etc. reached the highest inadmissible values for human consumption.

During the period **1985-1990**, the pathological researches included in the topic "*Research on the prevention and control of fish and invertebrates diseases at the Romanian Black Sea coast*" she coordinated at the beneficiary's request were carried out on cultured fish of the farms of the Constanta Fishery Company, fish from the coastal lakes and from the Black Sea, as well as fish (plaice) and invertebrates (shrimps, crayfish) experimentally cultivated within RMRI.

- In carp, following the research undertaken, the factors favoring the emergence and triggering of erythrodermatites were determined by establishing,

based on laboratory tests (antibiotics) and experiments carried out directly in ponds, the range of drugs with the highest efficacy in prophylaxis and disease therapy. The influence of abiotic, biotic and food factors on the general state of fish health was also pursued and determined and the manifestations of diseases produced by these factors were identified. Particular laboratory and practical experimentations were performed to determine curative methods for mycotic diseases and mycotoxicinfections.

- In Asian Cyprinid species, the pathogenetic manifestations of embryos and 3-day larvae in the breeding stations were followed and identified, finally establishing the measures for preventing these diseases and increasing the percentages of survival. Parasitic and infectious diseases (septicemia of blood first detected in 1989) in phytoplanktonophagus brood and the evolution of intensities and extent of diseases over time in these acclimatized species in our country were also followed.

- Since 1986 she approached the same topics and research on the use of fish growth stimulators both for accelerating growth and for better protection against illness. Experiments were carried out on carp and planktonophagus fingerlings in the pre-development period, with stimulators commonly used in animal husbandry (6 stimulators), initially in small volumes of water, then in ponds on farms, so that in 1988 and 1989 all nurseries were given growth stimulators. The results of using these stimulators were positive, giving rise to greater growths of over 20% in phytoplanktonophagi and 50-100% in carp, as well as good protection against erythrodermatitis.

- The results of the histopathological research carried out during the period 1985-1990, within theme no. 203, were included in the paper "*Histopathological Guide for Farmers in Constanta County*", elaborated in 1990, which includes both the methods of diagnosing diseases in Dobrogea cultured fish, as well as general measures of hygiene, prophylaxis and therapy of diseases, of great interest to the fisheries sector.

- In addition to the work she undertook within the research theme, she participated, each year, by providing specialized technical assistance, to the spawning of phytoplanktonophagous species in the Limanu-Mangalia breeding station.

- In invertebrates (crayfish, shrimp), pathological research was directed towards detecting the diseases affecting these organisms and establishing effective, prophylactic and curative methods.

- In 1990, for the first time, as a research objective within the theme, a synthesis of the research carried out during 1985-1990 was performed, namely "*Diseases of the Crayfish *Astacus leptodactylus**", which included all the illnesses reported over the years, with the following: etiology, pathogenesis, clinic, prognosis and prophylactic and curative methods resulted from the experiments performed, methods that were not presented in the literature.

During the period **1987-1990**, she was responsible for a second research topic referring to the international collaboration within the Council for Mutual Economic Assistance, in the field of ichthyopathology - "*Research on the diagnosis,*

prophylaxis and therapy of diseases in freshwater culture fish of the Constanta County farms - obligations assumed by RSR in the international collaboration". The annual completion of this theme was done through reports and papers that constituted exchange materials with the collaborating countries (USSR, Bulgaria, Czechoslovakia, Hungary etc.).

- In addition to these two research topics, she was responsible for an objective on infestation and infection of ocean fish in a study dedicated to research into the quality of ocean fish captured by the Romanian fleet. To this end, she conducted research into the detection of pathogens and pathogen bacteria in ocean fish, as well as to determine the changes they make to fish quality. The data on the parasitophytis of oceanic fish in the Eastern and Central Atlantic Atlantic area, of interest to the Romanian fleet, were also included in the *"Practical guide for the detection of ocean fish parasites"*, elaborated in collaboration with the Galati University in 1990, for the Tulcea Ocean Fishing Company.

In 1990, one particular concern was the use of fish growth biostimulators for the acceleration of growth and better protection against illness. In this respect, she and her team created a biostimulator based on proteolytic and amylyolytic enzymes, as a result of the activity of the *Bacillus subtilis* bacteria, very much needed in fish nutrition, especially during the first days of life, when these bacteria are missing. The experiments carried out on carp fingerings, in farms, in small volumes of water and in ponds, were positive.

Other issues that concerned her were the creation of medicated feeds to be administered at critical times in fish life and stress-related aspects in fish life, the identification of stress factors and the determination of their influence on the physiological state of fish, and of aquatic organisms in general.

In August 1990, she participated in RMRI's promotion competition, occupying the position of senior researcher, grade III.

In October 1990, she passed the doctoral admission examination at the "Lower Danube" University of Galati, with the theme *"Research regarding the sanitation of the fish farms in the Constanta county"*, aiming to develop efficient methods of sanitation of the fish farms in the Constanta county, to protect against fish diseases and to obtain fish for consumption in hygienically appropriate sanitary-veterinary conditions.

Subsequently, she held and passed three exams (Aquaculture, Ichthyology and Aquatic Microbiology) and three report papers (*"Influence of the environment on the health of culture fish"*, *"Intensive growth possibilities of freshwater fish and invertebrates"* and *"Current status and perspectives of the development of fish farming in the Constanta County"*). She defended her thesis in November 1998, becoming a PhD in Fisheries Technique.

During **1991-1994**, she continued her research work under the objective *"Identification of the possibilities and ways of restoring and expanding populations of marine organisms in ecological impasse"*, research theme *"Pathology of marine organisms in ecological impasse. Possibilities to mitigate the negative effects of diseases in the directed recovery actions of the affected populations"*.

As responsible for this topic, she participated each year in: the elaboration of the research program theme, the sampling of the research (water, mollusks, fish),

parasitological and bacteriological analyzes in the laboratory, testing and experiments of prophylaxis and therapy of reported illnesses and the preparation of quarterly, annual and synthesis reports on the results of the research sent to the beneficiary.

Some of the results obtained during this period were the subject of scientific papers presented at scientific communications sessions or published in various specialty journals: "*Diseases reported at Mytilus galloprovincialis Lemarck in the Mamaia Bay - Black Sea Romanian coast*", *Recherches Marines* 24-25/91-92; "*Contributions to the knowledge of the parasites of Pleuronectes flesus luscus (Pallas) and Scopthalmus maeoticus (Pallas) of the Romanian Black Sea*", at the Symposium "*Aquaculture and fisheries of the future*", Galati/375-378: "Tumor formation reported in *Scopthalmus maeoticus* (Pallas) from the Romanian Black Sea coast", Scientific Communications Session of the "Lower Danube" University of Galați, 28-30 October 1993 etc.

Additionally, in 1991, in the frame of the theme "Techirghiol Lake Ecosystems Study", she carried out pathological research on the crustacean *Artemia salina*, following the influence of parasites on crustacean life, which has a special role in the formation of therapeutic mud.

Under another theme in the objective of restoring and expanding marine ecosystems populations, she pursued the quality of the ozone water (bacteriologically) used in marine organisms cultures.

She was also requested by SC PESTOM SA Constanta, both for the diagnosis of fish diseases in the farms of the Constanta County, for prophylactic and curative recommendations, as well as for the provision of specialized technical assistance for breeding Asian cyprinids at the Limanu-Mangalia station (through short-term postings).

During **1995 - 1998**, she worked as follows:

- Collaborator on the theme A.5 "*Environmentally friendly methods for improving the quality of the marine environment and rehabilitating psamobiont bivalve and flatfish populations in the coastal area. Hydrological monitoring and ecological improvement of the Sinoe lagoon complex*", under which she was responsible for four research phases:

- pathological diseases reported in marine organisms and environmental factors favoring the onset and evolution of illnesses;
- the health state of bivalves in Mamaia Bay;
- diagnosis, prophylaxis and therapy of diseases in the organisms subjected to experiments and guided restorations;
- health status of ecologically challenged marine organisms.
Possibilities of prophylaxis and treatments of diseases.

She also worked on four further phases of research on directed fish breeding, psamobiont bivalve restoration, biological productivity obtained by technical means in the polygons for the recovery of the epibiotic biofilter, the creation of barriers for epibiotic biofilters (with aspects of marine bacteria filtering and retention capacity of the marine bivalves, pathological conditions that can endanger the status of populations etc.).

- she was responsible for the research contract concluded in 1996 with SC

PESTOM SA Constanța on *"Intensive growth of crayfish during summer II"*, finalized with a research report that includes data that completed the results previously obtained, of controlled breeding and growth during summer I, thus obtaining the *"Freshwater crayfish growth technology"*;

- she was responsible for the theme of scientific collaboration with IFREMER - France, 1997-1998, *"Diagnosis, prophylaxis and therapeutics of cultivated mollusks' diseases at the Romanian coast"*, theme which aimed to establish a unique methodology for the identification of diseases in cultivated mollusks aligned with the European Community, determining the conditions that favor the onset and spread of diseases in mollusks and the development of effective methods of prophylaxis and therapy. In particular, the codified and declared diseases listed in the OIE (International Office of Epizootic Diseases) were particularly studied, as they are serious diseases that can decimate whole populations. Within this theme, she also made a working visit, in December 1997, to the La Tremblade Pathology Laboratory in France;
- she also collaborated on a research contract with the Cernavoda Nuclear Power Plant during 1997-1998, where she worked, after developing the working methodology, to determine the following groups of bacteria present in water and biodiesel from the cooling pipes of the reactors: nitrobacteria, denitrifying bacteria, sulfobacteria, sulphite-reducing clostridias, ferrobacteria, heterotrophic germs etc.
- she was responsible for the *"Environmental Impact Assessment Study"* for SC PESTOM SA Constanta in 1997 and collaborator in 1998 on *"Defining the main physico-chemical and biological parameters, sampling methods and methods of analysis"*, with issues related to diseases that manifest in marine organisms, pathogens involved etc.;
- she was responsible for the Ovidiu Base during 1996-1998, where annual controlled reproduction and intensive growth of crayfish was made in the first summer, following the technology established by the research conducted by a team led by Gabriela Dimoftache until 1995. The juveniles obtained were delivered to various beneficiaries (SC Olimpus SA - Mangalia, SC PESTOM SA Constanta, SC AMBLAC SA - Buzau etc.). *"The crayfish rearing technology"*, finalized by the researches carried out in 1996 (PESTOM contract), was presented at the *"INVENTA '97"* International Technical Novelties Fair, where RMRI Constanta received the Golden Medal.
- Associate Professor (1996-1998) at the Ovidius University - Faculty of Biology - Master Course on Acquaculture Course - Segment: Pathogens of marine organisms, sanitation of aquatic organisms for human consumption, crustacean cultures technologies (lectures and laboratory works). During the school year 1996/1997, she was also scientific advisor for a Master's dissertation on *"Potentially pathogenic bacteria present in coastal marine waters"*.
- She was the deputy head of the Ecological Reconstruction Laboratory, in

which she conducted her entire scientific research activity.

At the request of some fisheries companies, she conducted various analyzes and studies on the quality of water in fish ponds, fish health etc. (PESTOM Constanta, IALPESO Ialomita).

During **1999-2008**, she was responsible for contracts concluded with the Ministry of Environment and Water Management dedicated to the development of quality standards for marine waters for the growth and exploitation of molluscs in accordance with EEC Directive 79/923 (2000) and the delimitation of marine areas for the growth and exploitation of mollusks and the development of quality standards for mollusk waters in line with the provisions of the same Directive (2001).

In 1999, she participated in the promotion contest organized by NIMRD, occupying the position of chief scientific researcher Ist degree. She was the deputy head of the Ecology Department (2000-2001) and head of this department from June 2001 until her retirement.

Since 2003, she coordinated the activity under two projects of the Ministry of Education and Research's Program on the effects of anthropogenic influences on the main components and biotic associations in the coastal zone (2003-2005) and the effects of anthropogenic influences on the state of mollusk populations in Romanian marine waters (2006-2007).

In 2008, she filed for retirement, but remained in activity until 01.01.2009. After that, she responded to NIMRD's requests to solve some point problems such as identifying the causes, circumstances and factors favoring the occurrence of fishing mortality recorded at ELCOMEX AQUA SRL (2014) and scientific expertise on the deterioration of the farm's marine water supply system growth of turbot belonging to SC Elcomex Aqua SRL (2016).

She was a member of the Scientific Council of RMRI Constanta and a member of the NGOs "Association of Romanian Fishermen and Fish Farmers" (APPR), Association of Parasitologists in Romania and the Balkan Environmental Association (B.EN.A.).

Beyond the professional aspects, I can say that I had the privilege of knowing the WOMAN she was: a reliable friend who was next to you in need, a caring and dedicated mother and grandmother, a wife who knew how to support her husband in critical situations, helping him to overcome them...

For everything she has done, for a life lived with dedication to the destiny of the Romanian marine research institution, but also for her family, we wish the one who was Dr. Eng. Elena Dumitrescu eternal peace!

PAPERS PRESENTED AT SCIENTIFIC SESSIONS IN ROMANIA

CARMEN IONESCU, ELENA DUMITRESCU, 1976 - "Current Problems of the Romanian Ocean Fisheries Management", Communications Session - 50 Years of Oceanographic Research - RMRI Constanta, October 1976, p. 7;

ELENA DUMITRESCU, VIOREL DUMITRESCU, 1977 - "Evaluation of fishing opportunities for Antarctic krill by the ocean fishing fleet" - RMRI Constanta Communications Session, October 1977, published in BIF no. 1/1978;

ȘTEFAN PĂRCĂLĂBOIU, NICOLAE PAPADOPOL, VIOREL DUMITRESCU, ELENA DUMITRESCU, IONEL STAICU, CONSTANTIN MAXIM, 1977 - "Current status and prospects for the exploitation of fishery resources in the southwestern Atlantic area" - Scientific Session - Navy Institute "Mircea cel Batran" Constanta, May 1977, published in BIF no. 2/1977, p. 12;

IOAN PORUMB, ELENA DUMITRESCU, VIOREL DUMITRESCU, MARIUS ILIESCU, 1977 - "Qualitative-quantitative composition of the eastern Libyan fish fauna" - Pontica Session, 1977, Constanta, October 1977;

VIOREL DUMITRESCU, ELENA DUMITRESCU, IOAN PORUMB, 1977 - "Statistical survey of the populations of the main fish species in East-Libyan waters", Pontica Session, 1977, Constanta, October 1977;

ELENA DUMITRESCU, DUMITRU BOGATU, 1978 - "Parasites of the main species of fish and squids caught in February-March 1978 in the Southwest Atlantic Ocean", Scientific Communications Session of RMRI Constanta, October 1978, 7 p.;

IONIȚĂ REVEICA, DUMITRESCU ELENA, LUCIA POPA, ELENA GHÎȚESCU, 1982 - "New research on the cultivation of rainbow trout in saline water", Scientific Communications Session of RMRI Constanta, April 1982, 5 p.;

ELENA DUMITRESCU, IRINA VOICU, 1983 - "Nematodosis in rainbow trout reared in marine water" - Scientific Communication Session RMRI Constanta, May 1983, 5 p.;

ELENA DUMITRESCU, IRINA VOICU, 1983 - "Parasitic diseases in rainbow trout reared in marine water", Symposium "Prevention and control of parasitic diseases in animals", Veterinary Medicine Session, Bucharest, December 1983, 5 p.;

IRINA VOICU, ELENA DUMITRESCU, 1984 - "Aspects regarding sanitation in shrimps and mussels in culture conditions", RMRI Scientific Session Constanta, May 1984, 4 p.;

ANGELA PINTILIE, MIRCEA CRĂȘMARU, LILIANA ILIESCU, ELENA DUMITRESCU, GHEORGHE MUNTEANU, 1984 - "Preliminary data on the conservation of catches at the coast of the R.I. Mauritania, May-October 1983", RMRI Scientific Session Constanta, May 1984;

REVEICA IONIȚĂ, ELENA CSERNOCK, ELENA GHÎȚESCU, TANIA ZAHARIA, ELENA DUMITRESCU, 1985 - "Physiological and biochemical aspects of the nutrition of rainbow trout (*Salmo gairdneri irideus*) grown in marine water at the Romanian Black Sea coast", RMRI Scientific Communications Session, Constanta, May 1985, 6 p.;

ELENA DUMITRESCU, 1987 - "Epizootiological condition of fish at the Romanian Black Sea coast", RMRI Scientific Session Constanta, June 24, 1987, 5

p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1988 - "Contributions regarding the diseases that occur in the phytoplanktonophagous species at the Romanian Black Sea coast", RMRI Scientific Session Constanta, May 1988, 8 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1989 - "Epizootological condition of fish at the Romanian Black Sea coast", RMRI Scientific Communications Session Constanta, May 1989, 6 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, ELENA GHÎȚESCU, VICTORIA SMOCOV, 1989 - "The influence of abiotic, biotic and food factors on the health of culture fish", RMRI Scientific Session Constanta, May 1989, 10 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1990 - "Pathological ailments reported in phytoplanktonophagous fish during the reproduction period: causes, prophylactic and curative measures", Session of Scientific Papers and Communications, RMRI Constanta, September 1990, 5 p.;

TANIA ZAHARIA, ELENA DUMITRESCU, 1990 - "Parasitofauna of cyprinids reared under conditions of polyculture in the farms of Constanta county", Scientific Session and Scientific Communications, RMRI Constanta, September 1990, 4 p.;

ELENA DUMITRESCU, 1991 - "Data on the parasite fauna of the main marine fish species at the Romanian coast", Symposium "Protection of ecosystems and integrated pest and disease control", Constanta, 6-8 June 1991, 3 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1991 - "Epizootiological condition of fish in coastal lakes", Symposium "Protection of ecosystems and integrated pest and disease control", Constanta, 6-8 June 1991, 5 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1992 - "Data on parasites in fish in coastal lakes", 3rd National Symposium on Parasitology on "Diagnosis of parasites and parasitic fauna in humans, animals and plants in Romania", Slatina, Romania, 2 p.;

ELENA DUMITRESCU, GABRIELA DIMOFTACHE, 1993 - "Data on the diseases of the crayfish - *Astacus leptodactylus*", 45th Anniversary Communications Session of the "Lower Danube" University, October 28-30, Galati;

ELENA DUMITRESCU, 1993 - "Tumor formation reported in *Scophthalmus maeoticus* Pallas from the Romanian Black Sea coast", 45th Anniversary Communications Session of the "Lower Danube" University, October 28-30, Galati;

GEORGE VASILESCU, ELENA DUMITRESCU, 1993 - "Opportunities to enhance the exploitation of the bio-productive potential of coastal lakes", 45th Anniversary Communications Session of the "Lower Danube" University, October 28-30, Galati;

ADRIAN TELEMBICI, MARIANA POPA, ELENA DUMITRESCU, 1994 - "Preliminary data on the efficiency of filtration of microphyte algae and bacteria by *Mytilus galloprovincialis*", RMRI Communications Session Constanta, 10 p.

GEORGE VASILESCU, ELENA DUMITRESCU, 1994 - "The influence of the environment on the health of culture fish in the Constanta County", ICPDD Communications Session, May 1994, Tulcea, 10 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1994 - "Health status of the

flounder *Pleuronectes flesus luscus* and turbot *Scophthalmus maeoticus* in experimental cultures”, ICPDD Communications Session, May 1994, poster;

ELENA DUMITRESCU, GEORGE VASILESCU, 1995 - ”Epizootological state of fish in Constanta county farms”, Symposium ACVAROM '95, Galați, 10 p.;

ELENA DUMITRESCU, 1995 - ”Vibriosis in flounder (*Pleuronectes flesus luscus*) and turbot (*Scophthalmus maeoticus*) from the Romanian coast”. ACVAROM '95 Symposium, Galati, September 1995, poster;

ELENA DUMITRESCU, ADRIAN TELEMBICI, 1996 - ”Preliminary data on the spread area of diseases in *Mytilus galloprovincialis* Lmk. in the southern part of the Romanian coast”, RMRI Communications Session Constanta, poster;

ELENA DUMITRESCU, 1996 - ”Contributions to the knowledge of the mycoses affecting *Astacus leptodactylus* Esch.”, ICPDD Tulcea Communications Session, poster;

TANIA ZAHARIA, ELENA DUMITRESCU, 1997 - ”Pathological diseases reported in flounder (*Pleuronectes flesus luscus*) and turbot (*Scophthalmus maeoticus*) embryos and larvae”, Communications Session ICPDD Tulcea, poster;

SIMION NICOLAEV, ADRIAN TELEMBICI, ELENA DUMITRESCU, 1998 - ”Current state and perspectives of crayfish culture development in Romania”, ACVAROM '98 Symposium, Galati, 12 p.

GEORGE VASILESCU, ELENA DUMITRESCU, 1998 - ”Rearing Asian cyprinids in the coastal farms and lakes in the Constanta County”, ACVAROM '98 Symposium, Galati, poster;

GEORGE VASILESCU, ELENA DUMITRESCU, 1998 - ”Data on the spreading and evolution of diseases in cultured fish in the Constanta county”, ACVAROM '98 Symposium, Galati, poster;

ELENA DUMITRESCU, GEORGE VASILESCU, 1998 - ”The impact of diseases on embryonic and larval development in Asian cyprinids”, ACVAROM '98 Symposium, Galati, poster;

ELENA DUMITRESCU, ADRIAN TELEMBICI, TANIA ZAHARIA, 1998 - ”Pathology of marine organisms of interest for the development of mariculture at the Romanian coast”, ACVAROM '98 Symposium, Galati, poster;

ELENA DUMITRESCU, 1998 - ”Researches on the parasite fauna of the main marine fish species at the Romanian coast”, 7th National Symposium on Parasitology, Craiova, 4 p.;

ELENA DUMITRESCU, 1998 - ”The presence of potentially pathogenic bacteria in the marine environment of the Mamaia Bay coastal area”, RMRI Communications Session Constanta, October 1998;

ELENA DUMITRESCU, ADRIAN TELEMBICI, AURELIA LAZĂR, 1998 - ”The health status of bivalve mollusks from the Baia Mamaia”. RMRI Communications Session Constanta, October 1998.

SCIENTIFIC PAPERS PUBLISHED IN ROMANIA

ȘTEFAN PÂRCĂLĂBOIU, NICOLAE PAPADOPOL, VIOREL DUMITRESCU, ELENA DUMITRESCU, IONEL STAICU, CONSTANTIN MAXIM, 1977 - ”Current status and prospects for exploitation of fishery resources in the South-Western Atlantic area” - Scientific Session - Navy Institute ”Mircea cel

Batran” - Constanta, May 1977, published in PIC no. 2/1977, 12 p.;

ȘTEFAN PÂRCĂLĂBOIU, ELENA DUMITRESCU, VIOREL DUMITRESCU, CONSTANTIN MAXIM, CORNELIA MAXIM, IOAN PANAIT, NICOLAE PAPADOPOL, IONEL STAIKU, CONSTANȚA GROZAVU, 1977 - ”Biological Resources of the Eastern Central Atlantic Ocean”, RMRI, BIP, no. 4/1977, 6 p.;

ELENA DUMITRESCU, 1979 - ”Parasites of *Macruronus magellanicus* and *Merluccius* sp. from the Falkland Islands area”, Recherches Marines, RMRI, Issue no. 12/1979, pp. 223-238;

ELENA DUMITRESCU, IRINA VOICU, 1982 - ”Aspects of pathology in fish acclimated in seawater”, Recherches Marines, RMRI, Issue no. 15/1982, pp. 245-251;

REVEICA IONIȚĂ, TANIA ZAHARIA, ELENA DUMITRESCU, LAURA ALEXANDROV, 1983 - ”Preliminary data on the artificial breeding of rainbow trout (*Salmo gairdneri irideus*) reared in marine pontic water”, Recherches Marines, RMRI, Issue no. 16/1983, p. 217-226;

ELENA DUMITRESCU, IRINA VOICU, 1985 - ”Bacteria infections of rainbow trout reared in marine water”, Recherches Marines, RMRI, Issue no. 17/1984, pp. 243-250;

ELENA DUMITRESCU, VICTORIA SMOCOV, IRINA VOICU, ELENA GHÎȚESCU, 1985 - ”Data on the influence of some environmental factors on the health status of rainbow trout (*Salmo gairdneri irideus*) reared in marine waters”, Recherches Marines, RMRI, Issue no. 18/1985, pp. 233-219;

IRINA VOICU, ELENA DUMITRESCU, 1986 - ”Data on the sanitation of organisms reared in the marine environment”, Mariculture Issues, Constanta, 1986, p. 157-162;

ELENA DUMITRESCU, 1991 - ”Researches regarding the health protection of the fish from the farms of Constanta county”, „Fisheries and fishing and the market economy”, The First Symposium, Galati, p. 90-94;

TANIA ZAHARIA ELENA DUMITRESCU, 1992 - ”Contributions to the knowledge of the parasites of flounder *Pleuronectes flesus luscus* (Pallas) and turbot *Scophthalmus maeoticus* (Pallas)”, Symposium ”Aquaculture and fishing of the future”, organized with FAO Cooperation, Galati, 1992, p. 375-378;

ELENA DUMITRESCU, TANIA ZAHARIA, 1992 - ”Data on the diseases of Asian cyprinids at the Romanian coastal area”, Symposium „Aquaculture and fishing of the future”, organized with FAO Cooperation, Galati, 1992, p. 367-370;

ELENA DUMITRESCU, TANIA ZAHARIA, 1992 - ”Research on enhancing growth in cultured fish”, Symposium ”Aquaculture and fishing of the future”, organized with FAO Cooperation, Galati, 1992, p. 143-148;

ELENA DUMITRESCU, TANIA ZAHARIA, 1992 - ”Diseases reported at *Mytilus galloprovincialis* Lamark in the Mamaia Bay, Romanian Black Sea coast”, Recherches Marines, RMRI, Issue no. 24-25 / 1991-1992;

TANIA ZAHARIA ELENA DUMITRESCU, 1992 - ”Contributions to the knowledge of fish parasites in the Sinoe Lake”, Recherches Marines, RMRI, Issue no. 24-25 / 1991-1992;

MIRCEA DOROGAN, TANIA ZAHARIA, ELENA DUMITRESCU, 1992

- "Data on marine water ozone treatment", Recherches Marines, RMRI, Issue no. 24-25 / 1991-1992;

ELENA DUMITRESCU, TANIA ZAHARIA, 1993 - "Diseases reported at *Mytilus galloprovincialis* Lmk. in the Mamaia Bay, Romanian Black Sea coast", Recherches Marines, RMRI, Issue no. 26, pp. 143-150;

ELENA DUMITRESCU, 1993 - "Tumor reported at the turbot *Scophthalmus maeoticus* at the Romanian Black Sea coast", Recherches Marines, RMRI, Issue no. 26, pp. 139-142;

MIRCEA DOROGAN, ADRIAN MOISE, ELENA DUMITRESCU, 1993 - "Concerns on filtering and sterilization of seawater at aquaculture breeding stations", Recherches Marines, RMRI, Issue no. 26, pp. 157-161;

GEORGE VASILESCU, ELENA DUMITRESCU, 1994 - "Opportunities to enhance the exploitation of the bioproductive potential of coastal lakes", "Lower Danube" Univ., Galati / 1995, pp. 120-128;

GEORGE VASILESCU, ELENA DUMITRESCU, 1995 - "Environmental influence on the health of the culture fish in the Constanta County", ICPDD Annals, vol. IV/2;

ELENA DUMITRESCU, 1995 - "Vibriosis in flounder *Pleuronectes flesus* and turbot *Scophthalmus maeoticus* from the Romanian coast, ACVAROM '95, Galati, 358-362;

ELENA DUMITRESCU, GEORGE VASILESCU, 1995 - "Epizootological state of fish in the farms of Constanta county" - ACVAROM, Galati, September 1995, pp. 306-311;

ELENA DUMITRESCU, TANIA ZAHARIA, 1995 - "Health status of the flounder *Pleuronectes flesus luscus* and turbot *Scophthalmus maeoticus* in experimental cultures" - ICPDD Annals, vol. IV / 2, p. 73-76;

ELENA DUMITRESCU, ADRIAN TELEMBICI, 1995 - "The brown ring disease reported in the mollusk *Tapes decussatus* (Linnaeus) cultivated at the Romanian coast", Recherches Marines, RMRI, Issue no. 27-28, pp. 369-371;

ELENA DUMITRESCU, ADRIAN TELEMBICI, 1995 - "Bacterial contamination of the mussel *Mytilus galloprovincialis* Lmk. from Mamaia Bay", Recherches Marines, RMRI, Issue no. 27-28, pp. 365-368;

ELENA DUMITRESCU, ADRIAN TELEMBICI, 1996 - "Preliminary data on the spreading of diseases in the mollusk *Mytilus galloprovincialis* Lamarck in the southern part of the Romanian coast", Recherches Marines, RMRI, Issue no. 29, pp.;

ELENA DUMITRESCU, 1996 - "Contributions to the knowledge of micoses affecting the crayfish *Astacus leptodactylus* Esch.", ICPDD Annals, Vol. V/1996, pp. 329-333;

TANIA ZAHARIA, ELENA DUMITRESCU, 1998 - "Pathological ailments reported in *Platichthys flesus luscus* (Pallas) and *Psetta maeotica* (Pallas) embryos and larvae" - ICPDD Annals, vol. VI / 2, p. 313-317;

SIMION NICOLAEV, ADRIAN TELEMBICI, ELENA DUMITRESCU, 1998 - "Current state and perspectives of crayfish culture development in Romania", International Symposium ACVAROM '98, pp. 190-192;

GEORGE VASILESCU, ELENA DUMITRESCU, 1998 - "Rearing Asian

cyprinids in farms and coastal lakes in the Constanta County”, International Symposium ACVAROM '98, pp. 252-254;

GEORGE VASILESCU, ELENA DUMITRESCU, 1998 - ”Data on the spreading and evolution of diseases in culture fish in the Constanta County”, ACVAROM '98, pp. 291-293;

ELENA DUMITRESCU, GEORGE VASILESCU, 1998 - ”Impact of diseases on embryonic and larval development of Asian Cyprinids”, ACVAROM '98, pp. 297-299;

ELENA DUMITRESCU, ADRIAN TELEMBICI, TANIA ZAHARIA, 1998 - ”Pathology of marine organisms of interest for the development of mariculture at the Romanian coast”, ACVAROM '98, pp. 313-315;

ELENA DUMITRESCU, 1998 - ”Researches on the parasite fauna of the main marine species at the Romanian coast”, Romanian Journal of Parasitology, Issue no. 2/1998.

PAPERS PRESENTED AND PUBLISHED AT INTERNATIONAL EVENTS

ELENA DUMITRESCU, ANGELA PINTILIE, 1978 - ”Improving the methods of processing and packaging of ocean fish on Romanian trawler vessels”, Symposium ”Processing of fishery resources”, Varna, Bulgaria, September 1978, 116 p.

ELENA DUMITRESCU, IRINA VOICU, 1984 - ”Diagnosis, prophylaxis and treatment of bacterial diseases in rainbow trout grown in marine water”, Symposium on Marine Animals Disease, Rostock, DRG, October 1984, 4 p.;

ELENA DUMITRESCU, IRINA VOICU, VICTORIA SMOCOV, ELENA GHITESCU, 1984 - ”The influence of abiotic, biotic and dietary factors on the health of rainbow trout reared in marine water”, Symposium on Marine Animals Disease, Rostock, DRG, October 1984, 4 p.;

TANIA ZAHARIA, ELENA DUMITRESCU, 1984 - ”Data on the growth and health of trout grown in pontic marine waters”, Symposium on Marine Animals Disease, Rostock, DRG, October 1984, 3 p.

ELENA DUMITRESCU, TANIA ZAHARIA, 1989 - ”Epizootological state of fish at the Romanian Black Sea coast” - Symposium on Mariculture Issues, Amapa, USSR;

TANIA ZAHARIA, DRAGOS MICU, SANZIANA MICU, LAURA ALEXANDROV, ELENA DUMITRESCU, 2006 - ”Experiments for breeding of autochthonous shrimps at the Romanian littoral, aiming to the treatment of resulted effluents”, Recherches Marines, RMRI, Issue no. 36, pp. 145-160;

NICOLAEV S., N.C. PAPADOPOL, A.S. BOLOGA, ADRIANA COCIASU, ELENA DUMITRESCU, TANIA ZAHARIA, V. PATRASCU, 2008 - ”Needs for sustainable development of the Romanian Black sea coast, Recherches Marines”, RMRI, Issue no. 35, pp. 7-24;

ZAHARIA TANIA, E. DUMITRESCU, 2010 - ”Diseases registered at sturgeons experimentally bread in fresh and marine water”, Recherches Marines, RMRI, Issue no. 39, pp. 293-306;

TANIA ZAHARIA, ELENA DUMITRESCU, MAXIMOV VALODIA, POPESCU GABRIEL MIHAI, 2010 - "Diseases - limitative factors of the Black Sea turbot *Psetta maxima maeotica* population on the Romanian littoral" - International workshop "GLOBAL and REGIONAL in ENVIRONMENTAL PROTECTION" GLOREP 2010, 26-28 November, 2010, Timisoara - ROMANIA: v2: 53-56, ISBN 978-606-554-210-5;

TANIA ZAHARIA, ELENA DUMITRESCU, VALODIA MAXIMOV, MADALINA CRISTEA, MAGDA NENCIU, A. TOTOIU, 2012 - "Considerations on parasite influence on fish conservation status in the Romanian marine Natura 2000 sites", Recherches Marines, RMRI, Issue no. 42, pp. 173-184;

TOTOIU AURELIA, ZAHARIA TANIA, ELENA DUMITRESCU, MAXIMOV VALODIA, NENCIU MAGDA, CRISTEA MADALINA, 2013, "Assessing the nematode infestation degree of commercial clupeids at the Romanian Coast", in Cercetari Marine (Recherches Marines), Issue 43/2013, ISSN 0250-3069, p. 241-248.

BOOKS, MONOGRAPHS, DETERMINATORS ETC.

ELENA DUMITRESCU, VIOREL DUMITRESCU, MARIUS ILIESCU, GEZA MÜLLER, IOAN PORUMB (authors are in alphabetical order) - 1977 - FINAL REPORT - concerning the results of the fisheries - oceanographic survey carried out by the Romanian researcher teams on board of the vessels "DELTA DUNARII" and „GILORTUL" in the eastern territorial waters of the BIBYAN ARAP REPUBLIC between Ras Azzaz and Karkura May 1975 - August 1976, CONTRASIMEX, IRCM-CNST, vol. II, 538 p.;

ȘTEFAN PÂRCĂLĂBOIU, VIORICA BOGHICI, ELENA DUMITRESCU, VIOREL DUMITRESCU, GABRIEL CIOCHINĂ, G. ENASESCU, CORNELIA MAXIM, CONSTANTIN MAXIM, SIMION NICOLAEV, TĂNASE SOARE, 1978 - "Study of fishery resources off the Southwest Atlantic Ocean", CNST-IRCM, 1978, vol. I - 178 p., Vol. II - 162 p.

SOARE STĂNCIOIU, GEORGE RAZLOG, N. CELAC (Univ. Galati), ELENA DUMITRESCU, ANGELA PINTILIE (RMRI Constanta), ZAMFIR VASILESCU (IPO Tulcea), 1990 - "Practical guide for the detection of ocean fish parasites", Galati Univ., RMRI Constanta, 200 p.;

ELENA DUMITRESCU, TANIA ZAHARIA, 1990 - "Ichthyopathological guide for the use of farmers in the Constanta County", RMRI Constanta, 120 p.;

SIMION NICOLAEV, ELENA DUMITRESCU, 1998 - "Rearing the crayfish (*Astacus leptodactylus*)";

Book chapter in ZAHARIA T., V. NITA, M.NENCIU, 2017: Romanian aquaculture bases, CD Press Publishing, ISBN 978-606-528-393-0, 120 pp.