

Program	Program NUCLEU PN 09-13 02 03
Project title (ENG):	Monitoring the ecological diversity of aquatic Danube Delta system in terms of spatial-temporal relationship. Study case: South-Eastern area of Danube Delta
Project title (RO):	Monitorizarea diversității ecologice a sistemelor acvatice deltaice pe baza relației spațio-temporale. Studiu de caz-zona de sud-est a Deltei Dunării
Duration	2009-2013
Team Leader	Elena Stanescu
Summary (short description) ENG	The project aimed the monitoring of aquatic systems ecological diversity in the south-east of the Danube Delta in terms of spatial and temporal relationship. In this regard, the quality of abiotic (micropollutants inorganic / organic) and biotic parameters were investigated in accordance with the requirements imposed by national legislation in force. Moreover, the relationship between the driving forces and biological communities was evaluated to emphasize the structural and functional changes of the lower Danube basin ecological systems. In addition, the role of dominant populations in functional evaluation of deltaic system and chemical pollutants bioaccumulation in benthic organisms were quantified. Thus, based on these quality elements, the deltaic aquatic systems was framed in quality states.
Summary (short description) RO	Proiectul a propus monitorizarea diversitatii ecologice a sistemelor acvatice de tip deltaic din zona de sud-est a Deltei Dunarii din prisma relatiei spatio-temporale. Pentru aceasta, s-a urmarit evaluarea calitatii parametrilor abiotici (micropoluanti anorganici / organici) si biotici ai ecosistemelor deltaice investigate in conformitate cu limitele impuse de legislatia nationala in vigoare, relatia factorilor de comanda in evidențierea modificarilor structurale si functionale ale sistemelor ecologice in bazinul inferior al Dunarii, rolul populatiilor dominante in evaluarea functionala a sistemului deltaic si bioacumularea poluantilor chimici in organismele bentonice. Astfel, pe baza acestor elemente de calitate si a abordarii integrate, s-a incadrat sistemul acvatic deltaic investigat in stari de calitate.
PhD Thesis – Title RO, ENG	Catalina Stoica: Evaluarea starii ecologice a ecosistemelor acvatice lotice: compozitia si structura faunei bentale RO Ecological status assessment of lotic aquatic ecosystems: the composition and the structure of benthic fauna ENG
Full-paper ISI	Fokion Vosniakos, Luoana Pascu, Jana Petre, Liliana Cruceru, Gabriela Vasile, Vasile Iancu, Dinu Cristina, Marcela Niculescu, Margareta Nicolau, <i>The temporal and spatial monitoring of water and sediment physical-chemical quality from Saint George branch in the period february 2009 -february 2011</i> , Fresenius Enviromental Bulletin, vol.21(2), pg.233-245, 2012, ISSN 1018-4619 Catalina Stoica, Irina lucaciu, Margareta Nicolau, Fokion Vosniakos, Stefania Gheorghe, Rozalia Grumaz, <i>Monitoring the ecological diversity of aquatic Danube Delta system in terms of spatial-temporal relationship</i> , Journal of Environmental Protection and Ecology, nr vol.13, no.2, 476-486, 2012, ISSN 1311-5065 Catalina Stoica, Elena Stanescu, Irina Lucaciu, Stefania Gheorghe, Margareta Nicolau, <i>Influence of global change on biological assemblages in the Danube Delta</i> , Journal of Environmental Protection and Ecology, vol.14, no.2, p. 468-479, 2013, ISSN 1311-5065. C.Stoica, I.Paun, E.Stanescu, I.Lucaciu, D.Niculescu, <i>Spatial and temporal variation of chlorophyll "a" along Danube River</i> , Journal of Environmental Protection and Ecology, vol.14, nr.3, 864-874, 2013, ISSN 1311-5065

Full-paper BDI	<p>Catalina Stoica, Stefania Gheorghe, Iuliana Paun, Elena Stanescu, Cristina Dinu, Jana Petre, Irina Lucaciu, <i>Long term biological changes along Danube Delta systems after industrialization period</i>, Romaqua 91 (1), 14-21, 2014.</p> <p>C.Stoica, E. Stanescu, I. Lucaciu, S. Gheorghe, M. Nicolau, <i>Influence of driving forces on biotic communities in lotic aquatic systems (South-Eastern of Danube Delta)</i>, Water resources and wetlands, P. Gastescu, W. Lewis Jr., P. Bretcan (Eds.), ISBN: 978-606-605-038-8, 2012.</p>
Book, book chapters	<p>Vosniakos, F., Vasile, G., Albanis, T., Petre, J., Cruceru, L., Nicolau, M., Cruceru, I., Stanescu, E., Kochubovski, M., Gjorgjev, D., Nikolaou, K., Golumbeanu, M., Vosniakos, K., Vasilikiotis, G., <i>Comparison study of physicochemical parameters evaluation between Danube River Delta and Axios-Vardar River Valley (2003-2009)</i>, NATO Science for Peace and Security Series C-Environmental Security. Environmental Heavy Metal Pollution and Effects on Child Mental Development. Risk Assessment and Prevention Strategies, ISBN: 978-94-007-0255-4, 2010, Springer, Olanda, 257 - 286 pp, WOS: 000292940200016</p> <p>Elena Stanescu, Catalina Stoica, Gabriela Vasile, Jana Petre, Stefania Gheorghe, Iuliana Paun, Irina Lucaciu, Margareta Nicolau, Fokion Vosniakos, Konstantinos Vosniakos, Mariana Golumbeanu, <i>Structural changes of biological compartments in Danube Delta systems due to persistent organic pollutants and toxic metals</i>, Chapter 21 in Book Environmental Security Assessment and Management of Obsolete Pesticides in South-East Europe, Published by Springer Science +Business Media Dordrecht, 2013, pp.229-248, DOI 10.1007/978-94-007-6461-3; chapter 21- DOI 10.1007/978-94-007-6461-3_21, 2013, ISBN 978-94-007-6460-6(HB); ISBN 978-94-007-6461-3 (e-book).</p> <p>S. Gheorghe, C. Stoica, G. G.Vasile, M. Nita-Lazar, E. Stanescu, I. Lucaciu, <i>Metals toxic effects in aquatic ecosystems: modulators of water quality</i>, Book Chapter 4, In: Water Quality, InTech, Hlanganani Tutu(Ed.), ISBN 978-953-51-2882-3, DOI: 10.5772/65744, 2017.</p>
Conferences (platform, poster, abstract / full-paper)	<p>Luoana Pascu, Jana Petre, Gabriela Vasile, Iancu Vasile, Dumitru Staniloaie, Dinu Cristina, Elena Nastac, Liliana Cruceru, Margareta Nicolau, <i>Evaluation of physical-chemical quality characteristics of surface water and sediments from the Danube Delta in period April 2006-August 2009</i>, EstFalia, vol.II, pag. 315-321, 2009, ISSN 1843-5831.</p>
	<p>Luoana Pascu, Jana Petre, Liliana Cruceru, Gabriela Vasile, Iancu Vasile, Dinu Cristina, Marcela Niculescu, Margareta Nicolau, <i>Investigation of physical and chemical quality of surface water and sediment in seven locations from Danube Delta, in the period 2009-2011</i>, EstFalia, vol.II, pag. 255-263, 2011, ISSN 1843-5831</p>
	<p>Catalina Stoica, Luoana Pascu, Stefania Gheorghe, <i>Spatio-temporal evolution of Danube Delta ecosystem in Fall 2009-Spring 2010 campaigns</i>, NEWSLETTER NR. 10 April 2011, Project SOMEDIU, POSDRU/79/1.4/S/53587, 2011, www.unimed.ro</p>
	<p>Catalina Stoica, Stefania Gheorghe, Iuliana Paun, Elena Stanescu, Cristina Dinu, Jana Petre, Irina Lucaciu, <i>Long term biological changes along Danube Delta systems after industrialization period</i>, EstFalia, vol.II, pag. 157-166, 2013, ISSN 1843-5831</p>
	<p>Gheorghe Stefania, Catalina Stoica, Stanescu Elena, Alina Catrangiu, Paun Iuliana, Lucaciu Irina, <i>Hazard classification of Danube –Danube – Danube Delta (water and sediment) based on organisms sensitivity</i>, EstFalia, vol.II, pag. 140-149, 2013, ISSN 1843-5831</p>
	<p>Stoica Catalina, Irina Lucaciu, Margareta Nicolau, Fokion Vosniakos, Stefania Gheorghe, Rozalia Grumaz, <i>Monitoring the ecological diversity of aquatic Danube Delta systems in terms of spatial-temporal relationship</i>, WORKSHOP</p>

Conferences (platform, poster, abstract / full- paper)	<p>International B.EN.A. "GLOREP 2010", 26-28.11. 2010, Timisoara,</p>
	<p>Pascu L., Petre J., Vasile G., Iancu, Staniloae. D., Dinu C., Niculescu, M., Nastac E., Cruceru L., Nicolau M., <i>Monitoring of water and sediment physical-chemical quality from Sfantu Gheorghe Branch in the period august 2009 to august 2010</i>, A-XXXI-A Conferinta Nationala de Chimie, 06-08 octombrie 2010, RAMNICU-VALCEA, ROMANIA, PREZENTARE ORALA.</p>
	<p>Stoica,C., Lucaciu, I., Nicolau, M., <i>Biodiversity assessment of benthic community in the south eastern Danube Delta</i>, 1 st Danube – Black Sea Regional Young Professionals Conference,14-15 iunie 2011, BUCURESTI, ROMANIA-POSTER.</p>
	<p>Catalina Stoica, Luoana Pascu, Gabriela Vasile, Irina Lucaciu, Stefania Gheorghe, <i>Monitoring the ecological diversity of aquatic systems based on spatial-temporal relationship. Case study: South-Eastern of the Danube Delta</i>, Interntional Symposium „The Environment and Industry” – SIMI 16-18 noiembrie 2011, Bucuresti, POSTER.</p>
	<p>Stoica, C, Pascu, L.. <i>Monitorizarea diversității ecologice a sistemelor acvatice deltaice pe baza relației spațio-temporale. Studiu de caz – zona de sud-est a Deltei Dunării</i>, Expoziție Romexpo Dunărea &Delta, 23-26-06.2011,BUCURESTI, ROMANIA, PREZENTARE ORALA.</p>
	<p>Elena Stanescu, Catalina Stoica, Irina Lucaciu, Alina Catrangiu, Margareta Nicolau, Stefania Gheorghe, <i>Structural Changes Of Bacterial Community In Deltaic Ecosystems</i>, Conferinta Internationala “Water Resources and Wetlands”, 14-16 septembrie2012, Tulcea, Romania, PREENTARE ORALA.</p>
	<p>Catalina Stoica, Elena Stanescu, Irina Lucaciu, Stefania Gheorghe, Margareta Nicolau, <i>Influence of Driving Forces On Biotic Communities In Lotic Aquatic Systems (South-Eastern Of Danube Delta)</i>, Conferinta Internationala “Water Resources and Wetlands”, 14-16 septembrie 2012, Tulcea, Romania, PREZENTARE ORALA.</p>
	<p>Irina Lucaciu, Liliana Cruceru, Alina Catrangiu, Cristiana Cosma, Margareta Nicolau, <i>Dunarea utilizata ca sursa de apa potabila</i>, a XIII-a Conferinta Nationala de Chimie, 3-5 Octombrie, 2012, Rm.Valcea PREENTARE ORALA si publicare CD.</p>
	<p>C.Stoica, I.Paun, E.Stanescu, I.Lucaciu, D.Niculescu, <i>Spatial and temporal variation of chlorophyll "a" along Danube River</i>, International Conference UAB-BENA Environmental Engineering and Sustainable Development, 23-25 mai 2013, Alba-Iulia Romania, PREZENTARE ORALA.</p>
	<p>Elena Stanescu, Catalina Stoica, Irina Lucaciu, Iuliana Paun, Stefania Gheorghe, Alina Catrangiu, <i>The role of the benthic oligochaetes populations for ecological systems assessment. Case study: Danube Delta</i>, International Conference » New Tools for Sustainable Management of Aquatic Living Resources » AQUALIRES, Bucuresti, 17-18ianuarie 2014, POSTER.</p>
	<p>Catalina Stoica, Elena Stanescu, Irina Lucaciu, Stefania Gheorghe, Margareta Nicolau, <i>Influence Of Global Change On Biological Assemblages In The Danube Delta</i>, International BENA Conference, Sustainable landscape planning and Safe Environment, 21 -24.06.2012, Istanbul, Turcia, PREZENTARE ORALA.</p>
	<p>Catalina Stoica, Elena Stanescu, Stefania Gheorghe, Daniela Niculescu, Irina Lucaciu, <i>Tools for assessing Danube Delta systems with macro invertebrates</i>, 7th International Conference on Environmental Engineering and Management, Viena, 18-21 septembrie 2013, POSTER.</p>