
Curriculum vitae

Name: Rui Pedro Gonçalves Pereira

Local and date of birth: Vila Real, 1st of October, 1975

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I - Academic Qualification

1997 – Degree in Biology, Scientific specialization, by the University of Porto, Portugal. Finished with a classification of 15 (out of 20).

2004 – PhD in Biology from the Science Faculty of the University of Porto. Thesis “Studies on the ecophysiology and biochemistry of *Porphyra dioica* Brodie et Irvine in culture”, under supervision of Prof. Isabel Sousa Pinto (University of Porto) and Prof. Charles Yarish (University of Connecticut, USA).

II - Complementary Education

- May 2004 – Training Workshop: “Analysis of Multivariate Data From Ecology and Environmental Science, using PRIMER v5 and v6 (beta)”. University of Porto.
- June 2003 – Workshop “Project Design and evaluation”, by the National Oceanic and Atmospheric Administration (NOAA Coastal Services Centre).
- June 2003 – Workshop “Managing Visitor Use in Coastal and Marine Protected Areas”, by NOAA Coastal Services Centre,
- July 1999 - "Recent advances in plant biology: from stress and oxygen radicals to programmed cell death and senescence". International advanced courses - Gulbenkian Biology and Medicine Ph.D. Program. IBMC, Univ. Porto, Portugal.
- May 1999- Worked in Polytech, Area Science Park, Trieste, Italy, under the orientation of Prof. Erminio Murano. Extraction and analysis of polysaccharides from *Gelidium pulchellum*, in the context of the project “Study of the ecophysiology and agar production from Portuguese agarophytes in culture” (PBICT/MAR/2250/05).
- June 1998 - "Dynamic Simulations in Biology". Post-graduate course organized by Prof. R. Macey from the University of California, Berkeley, conducted at the Institute for Molecular and Cell Biology, University of Porto.
- Fevereiro 1998 – Internship at the University of Malaga, Spain, under supervision of Prof. Felix Lopez Figueroa.

III - Research activities

- 2004 – present – collaboration on the project of monitorization of two populations of the invasive seaweed *Grateloupia turuturu* in Portugal.
- 2004 - 2005 - Evaluation of the potential economic exploitation of the moliço from Ria de Aveiro: Biodiesel, Biogas, Biofertilization. Work carried out by the consortium CIMAR, ESB-UCP e NECTON, on request of the company MARTIFER Energia, S.A.
- 2001- 2004 - "SEAPURA - Species diversification and improvement of aquatic production in seaweeds purifying effluents from integrated fish farms". Funded by the European Union.
- 2001- 2004 – “Distribution, use and conservation of the botanical heritage of the northern coast of Portugal: a sustainable developmental approach for a

(future) Natura 2000 site". Funded by FCT (PNAT/1999/BIA/15204) for 2001-2003.

1997 - 2000 - "Characterisation of the Rocky Intertidal Communities of Portugal." PRAXIS XXI Funded for 1998-2001.

September 1997 / August 1999- research assistant on the project: "Effects of increased UV radiation and temperature on the photosynthesis and biomass of *Gelidium*" – Cooperation Luso-Spanish- Funded for 1998-1999.

September 1997/May 1998 - Research assistant on the project: "Study of the ecophysiology and agar production from Portuguese agarophytes in culture". JNICT Funded for 1995-1998.

IV - Other activities

Member of the Phycological Society of America (PSA).

Member of the Portuguese Society for Applied Phycology (APAA).

Collaboration on the report of the "task force" for evaluation of the impacts of the Prestige oil spill.

Co-organisation of the I APPA National Meeting sponsored by APAA. Vairão, Portugal, September 1998.

V - Present position

Post-doctoral grant from FCT (ref. SFRH/BPD/14840/2003). Studies on the physiology of *Porphyra dioica* (Bangiales, Rhodophyta) oriented for land-based integrated aquaculture systems. Work to be developed in the Coastal Biodiversity Laboratory of CIMAR and in the Marine Biotechnology Laboratory (UCONN, Stamford).

VI - Grants and awards

January 2000 – December 2003 - PhD grant BD21792/99 from FCT, PRAXIS XXI, "Studies on the ecophysiology and biochemistry of *Porphyra dioica* Irvine et Brodie in culture" under the supervision of Prof. Isabel Sousa Pinto (University of Porto, Portugal) and Prof. Charles Yarish (University of Connecticut, USA).

June 2003 – Hoshaw Travel Award, by the Phycological Society of America.

June 2001 – Hoshaw Travel Award, by the Phycological Society of America.

September 2000- January 2001 - Scholarship from IMAR and FLAD (Luso-American Foundation for Development) to work at the University of Connecticut under the supervision of Dr. Charles Yarish.

September 1997/99 - Scholarship from FCT to work on the project "Study of the population dynamics of intertidal algae species from the North Coast of Portugal" (PCNA/P/BIA/116/96) supervisor: Prof. Isabel Sousa Pinto, Department of Botany/FCUP.

VII - Area of specialization

Marine phycology. Physiology and biochemistry of seaweed and seaweed aquaculture.

VIII - Other areas of knowledge

Ecology, taxonomy and biogeography of marine macroalgae. Environmental and scientific education.

IX - Main research interests

Development of new technologies for removal of nutrients from aquaculture (Integrated Aquaculture). Ecology of seaweeds with potential economic values.

X - Other areas of research and interest

Teaching Biology and Phycology, environmental and scientific education. Ecology, taxonomy and distribution of marine macroalgae and especially of the invasive species.

XI - Teaching experience

June 1998- Participation in the environmental education project "Oceanos, fonte de recursos: os sargaços, um recurso natural" (Ocean's exploitation: seaweeds as natural resources), funded by the Portuguese Institute of Environmental Promotion (IPAMB).

School year 1999/2000 – Escola Secundária de Baltar (high school), Classes of Natural Sciences (7th grade) and Geology Practical Laboratory (11th and 12th grades).

2004 – Orientation of pre-graduation students in the context of the program "Scientific research during pre-graduation", Sponsored by the University of Porto.

2004 - 2005 – Co-orientation of the pre-graduation research project: Description and comparison of the development of embryos of the Fucaceans *Ascophyllum nodosum*, *Pelvetia canaliculata* e *Fucus* sp.. Student Nilza Rodrigues from the University of Aveiro.

2005 – Participation in the outreach component of the European Project MARBEF (www.marbef.org). Development of a school program for monitorization of biodiversity in the intertidal area.

XII - Publications

XII.1 Thesis

"Studies on the ecophysiology and biochemistry of *Porphyra dioica* Brodie et Irvine in culture", under supervision of Prof. Isabel Sousa Pinto (University of Porto) and Prof. Charles Yarish (University of Connecticut, USA). PhD Thesis

XII.2 In international journals

- Gómez, I., F.L. Figueroa, I. Sousa-Pinto, B. Viñegla, E. Pérez-Rodríguez, C. Maestre, S. Coelho, A. Felga & **R. Pereira** (2001). Effects of UV radiation and temperature on the photosynthesis as measured by PAM chlorophyll fluorescence in the red alga *Gelidium pulchellum* (Turner) Kutzing. *Botanica Marina*. 44: 9-16.
- Sousa-Pinto, I., Coelho S., Felga A., **Pereira R.** & Murano E. (1999). The effect of light on growth and agar content of *Gelidium pulchellum*. *Hidrobiologia*. 398/399: 329-338.
- Pereira, R.**, I. Sousa-Pinto and C. Yarish (2004). Field and culture studies of the life history of *Porphyra dioica* (Bangiales, Rhodophyta) from Portugal. *Phycologia* 43(6): 756-767.
- Pereira, R.**, C. Yarish and I. Sousa-Pinto. The influence of stocking density, light and temperature on the growth, production and nutrient removal capacity of *Porphyra dioica* (Bangiales, Rhodophyta) from Portugal. Accepted in *Aquaculture*.
- Matos, J., S. Costa, A. Rodrigues, **R. Pereira** and I. Sousa Pinto. Experimental Integrated aquaculture of fish and red seaweeds in Northern Portugal. Accepted in *Aquaculture*.
- Pereira, R.**, G.P. Kraemer, C. Yarish and I. Sousa-Pinto. Nitrogen uptake by gametophytes of *Porphyra dioica* (Bangiales, Rhodophyta) under controlled culture conditions. Invited paper submitted to the *Indian Journal of Marine Science*.

XII.3 In congress proceedings

- Honrado, J., **Pereira, R.**, Araújo, R., Santos, G., Matos, J., Alves, P. Alves, H., Sousa Pinto, I. & Barreto Caldas, F. 2002. Classification and mapping of terrestrial and inter-tidal vegetation in the Atlantic coast of Northern Portugal. In: *The Changing Coast* (Veloso-Gomes, Taveira-Pinto and Neves ed), Porto pp 211-216.
- Pereira, R.**, I. Sousa-Pinto and C. Yarish. 2001. Studies on the life cycle of *Porphyra dioica* and *Porphyra umbilicalis* from Portugal. *Journal of Phycology* Vol. 37, no. s3, pp. 41-41.

- Yarish, C., G. Kraemer, J. Kim, Carmona, P. He, C.H. Sohn, C.D. Neefus, T. Chopin, D. Snellgrove, G.C. Nardi, K. Shadel, J.J. Curtis and **R. Pereira**. "The bioremediation potential of the economically important red alga *Porphyra*, in an integrated aquaculture system with finfish" published in a book Of Abstracts, Pp. 659, abstract #737. The Meetings of the World Aquaculture Society's Aquaculture 2004 meetings, Honolulu, Hawaii, March 1-5, 2004.
- Yarish, C., C.D. Neefus, G. Kraemer, R. Carmona, P. He, Tang, **R. Pereira**, T. Chopin, G.C. Nardi, J.J. Curtis and D.B. Sahoo. "Seaweed Cultivation and Biotechnology: Opportunities for Integrating Seaweeds in Aquaculture Systems for Bioremediation and Industry Diversification." Published in a book of Abstracts, Pp. 14, K-2. The 5th Asia-Pacific Conference on Algal Biotechnology, October 18-21, 2003, Qingdao, P.R. China.
- He, P., C. Yarish, X. Tang, **R. Pereira** and J. Curtis. "The free conchosporangia culture of Northeast American *Porphyra* species: Applications for a finfish/seaweed recirculating aquaculture systems in an urban environment." Published in a book of Abstracts, Pp. 76, S3-O-8. The 5th Asia-Pacific Conference on Algal Biotechnology, October 18-21, 2003, Qingdao, P.R. China.

XIII - Communications and presentations

XIII.1 In congresses

- Araújo, R., J. Violante, **R. Pereira**, H Abreu e I. Sousa-Pinto. 2005. *Grateloupia turuturu* (Yamada): a recently introduced species in the Portuguese Coast. Workshop in Marine Invasive Species, Sylt, Germany, 27-30 January.
- C. Yarish, G.P. Kraemer, J. Kim, R. Carmona, C.D. Neefus, G.C. Nardi, J.J. Curtis, **R. Pereira** and M. Rawson. The bioremediation potential of economically important seaweed in integrated aquaculture systems with finfish. 33rd Annual UJNR Conference, Nagasaki, Japan, Nov. 2-3, 2004.
- C. Yarish, C.D. Neefus, G. Kraemer, R. Carmona, P. He, X. Tang, **R. Pereira**, T. Chopin, G.C. Nardi, J.J. Curtis, D.B. Sahoo and M. Rawson. An Introduction to Large Scale Cultivation of Seaweeds: Opportunities for Integrating Seaweeds in Aquaculture Systems in Northeast America.. Northeast Aquaculture Conference and Exposition, Manchester, NH.

- Yarish, C., G. Kraemer, C. D. Neefus, R. Carmona, D. Snellgrove, P. He, X. Tang, **R. Pereira** and G. C. Nardi. 2004. The bioremediation opportunities of *Porphyra* spp. in an integrated land-based aquaculture system with finfish in coastal New England. 58th PSA Meeting, Williamsburg, USA.
- Kraemer, G. P., D. Snellgrove, **R. Pereira** and C. Yarish. 2004. Bioremediation of eutrophic aquaculture effluents by *Porphyra*: diurnal patterns and influence of stocking density. 43rd Northeast Algal Symposium. Avery Point, CT, USA.
- Araújo, R., I. Bárbara, G. Santos, M. Rangel, **R. Pereira** & I. Sousa Pinto. 2003. Six new seaweed records for the Portuguese coastline. III European Phycological Congress. Belfast 21-26 July.
- Yarish, C., C.D.Neefus, G. Kraemer, R. Carmona, P. He, X. Tang, **R. Pereira**, T. Chopin, G.C. Nardi & J.J. Curtis. 2003. The bioremediation potential of *Porphyra* spp. in an integrated aquaculture system with finfish: implications for coastal zone management for coastal New England. Coastal Zone 03, Baltimore, USA.
- Pereira, R.**, I. Sousa-Pinto & C. Yarish. 2003. Studies on the life history of the Portuguese red alga *Porphyra dioica* (Brodie and Irvine) under varying environmental conditions. 57th Annual Meeting of the Phycological Society of America. Oregon, USA.
- Kraemer, G.P., **R. Pereira**, D. Snellgrove, R. Carmona, C. Neefus, T. Chopin & C. Yarish. 2003. Algal bioremediation of eutrophic effluents in small scale integrated aquaculture systems. 57th Annual Meeting of the Phycological Society of America. Oregon, USA.
- Matos, J. E., **R. Pereira**, E. Gomes, D. Martins, A. Gouveia and I. Sousa Pinto. 2002. Co cultivation of red algae and Turbot in Northern Portugal. Algal Biotechnology: A Sea of Opportunities, 1st Congress of the International Society for Applied Phycology – 9th International Conference on Applied Algology. Aguadulce, Roquetas de Mar, Espanha.
- Pereira, R.**, I. Sousa-Pinto & C. Yarish. 2001. Studies on the life cycle of *Porphyra dioica* and *Porphyra umbilicalis* from Portugal. 55th Annual Meeting of the Phycologica Society of America. Colorado, USA.
- Sousa-Pinto, I., **R. Pereira**, A. Felga & C. Yarish. 2001. Developments in domestication of indigenous *Porphyra* in Portugal. XV International Seaweed Symposium. Cape Town, South Africa.
- Pereira, R.**, I. Sousa-Pinto, C. Neefus & C. Yarish. 2001. Morphological and Ecological Characterization of *Porphyra dioica* and *Porphyra umbilicalis* from Portugal. "Aquaculture and the Environment". Boston, USA.

- Felga, A., **Pereira R.**, Santos, A. M. & Sousa Pinto I. 1999. "Seasonal growth and reproduction of *Himanthalia elongata* and *Pelvetia canaliculata* (Phaeophyta) in eastern Atlantic southern limit populations". II European Phycological Congress, Montecatini. Itália.
- Pereira, R.**, Felga A., Santos A. M. & Sousa Pinto I. 1999. Characterisation of *Ascophyllum nodosum* (Phaeophyta) populations in their east Atlantic southern limit: growth and reproduction. II European Phycological , Montecatini, Itália.
- Sousa-Pinto, I., Murano E., **Pereira R.**, Coelho S. & Andrade A. 1999. Effects of phosphate nutrition and salinity on growth and agar content of *Gelidium pulchellum* (turner) kutz. II European Phycological Congress, Montecatini, Itália.
- Pereira, R.**, I. Sousa-Pinto, A. Felga & S. Coelho 1998. Estudo da dinâmica populacional e relações inter-específicas das principais espécies de algas intertidais da costa norte de Portugal. Boletim da Sociedade Broteriana.
- Sousa Pinto, I., **Pereira R.**, Coelho S., Felga A., Viñegla B., Pérez-Rodríguez E., Maestre C., Gómez I. & Figueroa F. L. (1998). Effects of UV radiation and temperature on photosynthesis as measured by PAM chlorophyll fluorescence in the red alga *Gelidium pulchellum* (Turner) Kutzing. (abstract) COST 49 Workshop on "Photobiology of Marine Algae", Stockholm, Sweden.
- Sousa-Pinto, I., Felga, A. & **Pereira, R.** 1998. Cultivation of red seaweeds in eutrophicated coastal waters. COST 49 Workshop "The role of physical and biotic factors in macroalgal growth in eutrophicated coastal waters: species sensitivity and ecosystem restoration", Yersekee, Holand.
- Sousa-Pinto, I., Coelho S., Felga A., **Pereira R.** & Murano E. 1998. Effects of irradiance, salinity and pH on growth and agar content of *Gelidium pulchellum*. Proc. International Seaweed Symposium, Cebu.
- Sousa-Pinto, I., Coelho S., Felga A. & **Pereira R.** 1998. Studies of macroalgae dynamics in the North Coast of Portugal. "X Simposium Ibérico de Bentos Marinho", Faro, Portugal.

XIII.2 Other presentations

- Pereira, R.** 2004. The role of marine macroalgae on the bioremediation in the coastal área. III Conference cycle "Biologia à conversa" organized by Biology students association of the University of Porto. Porto, May 2004.

- Pereira, R.** 2004. Sustainable use of marine resources: the importance of marine macroalgae. Conference organized by the Department of Biology/Geology of the high school E.B. 2,3 de Frazão, Paços de Ferreira.
- Pereira, R.** 2005. Sustainable use of marine resources: the importance of marine macroalgae. Conference organized by the Department of Biology/Geology of the high school E.B. 2,3 de Frazão, Paços de Ferreira.