

CURRICULUM VITAE

Presentation

Name: António de Vilhena Andrade Ferreira Sykes

Birth date and place: Lisboa, 17th March 1974

Nacionality: Portuguese

Address: C.C.Mar - Centre of Marine Sciences, Campus de Gambelas, 8005-139 Faro Portugal

Telephone: home – (+351) 289819945; cell phone – (+351) 968073496

Email: asykes@ualg.pt

Academic Qualifications:

- Degree in Marine Biology and Fisheries, Speciality of Fisheries/Aquaculture, by the Universidade do Algarve, with a mean of 14 in 20 (26th March 1999);
- Masters in Marine Sciences - Marine Resources, by the Instituto de Ciências Biomédicas Abel Salazar (University of Porto) and the Instituto de Investigação das Pescas e do Mar (IPIMAR), Speciality in Aquaculture, final classification of Very Good with Honours (23th April 2003);
- PhD in Aquaculture - Nutrition, by the Universidade do Algarve with a final classification of Very Good with Honours (23th November 2007).

Scientific Activities :

Courses:

- Speciality Course “Situacion Presente y Perspectivas en Acuicultura: Histofisiologia, Histopatologia y Biotoxicologia”, organized by University of Cadiz and CSIC, in Puerto Real, Cadiz (Espanha), between 17th and 21st February 1997;
- Course in Aquaculture Patology Diagnosis, by University of the Algarve in Faro, between 28th July and 1st August 1997;
- Course of Formation in Protection and Radiological Safety, organized by the Department of Radiological Protection and Safety of Portuguese Ministério do Ambiente in Faro, University of the Algarve, 15th-16th April 1998;

- Technical Seminar in Water Purification by Millipore Ibérica (S.A.) in Faro, University of the Algarve, 27th October 1998;
- Radiation Safety Course by Centre of Marine Sciences (CCMAR) in Faro, University of the Algarve, 31st May to 1st June 2010.

Coordination:

- Invited Assistant Professor at the University of the Algarve in 2008, 2009 and 2010;
- Tutor in Trabalho Experimental em Biologia Marinha of the Masters in Marine Biology (University of the Algarve) for 4 students in 2007-2008;
- Coordinator of Catarina Alexandra Vieira Gonçalves Coelho and Teresa Gomes in Ocupação Científica de Jovens nas férias 2008, promoted by Ciência Viva;
- Coordinator of FCT/CCMAR BII grant for the student Frederico Pessanha (2008-2009) and Catarina Passareiro (2009-2010);
- Coordinator of FP7 Project Assemble BTI Rui Gonçalves (2009 - 2010);
- Coordinator of FP7 Project Assemble BTI Paulo Frias (2010-?);
- Coordinator of FCT Project SEPIAMETA BTI Rui Gonçalves and Cátia Silva (2010-2013);
- Coordinator of thesis in the Masters in Aquaculture and Fisheries (University of the Algarve) of Diana Botelho Reis (2010);
- Coordinator of thesis in the Masters in Aquaculture and Fisheries (University of the Algarve) of Anastasia Shcherbakova (2011);
- Coordinator of thesis in the Masters in Aquaculture (Instituto Politécnico de Peniche - Escola Superior de Turismo e Tecnologia do Mar de Peniche) of Saul Taipina (2010-2011);
- Coordinator of thesis of PhD in Ciências do Mar e do Ambiente, speciality in Aquaculture, of Filipa Baptista (2011-2014);
- Tutor in Trabalho Prático em Aquacultura of the Masters in Fisheries and Aquaculture (University of the Algarve) of Tiago Rocha;
- Coordinator of PROMAR Project (31.03.05.FEP.002) - SEPIATECH BTI Rui Gonçalves (2011-2014);
- Coordinator of Ana Catarina de Almeida Costa in Ciência Viva no Laboratório—Ocupação Científica de Jovens nas Férias 2011, promoted by Ciência Viva;

- Coordinator of PROMAR Project (31.03.05.FEP.002) - SEPIATECH BTI Tiago Rocha (2011-2014).

Referee:

- Referee of the Journal of Experimental Marine Biology, in 2004;
- Referee of the Journal of Food Biochemistry, in 2008 and 2009;
- Referee for the Pakistan Journal of Zoology, Aquaculture Nutrition, Aquaculture International, Acta Adriatica, International Journal of Fisheries and Aquaculture, and Chemistry and Physics of Lipids in 2009;
- Referee of several manuscripts for International Journal of Fisheries and Aquaculture, Turkish Journal of Fisheries and Aquatic Sciences, Aquaculture Nutrition, Aquaculture International and Aquaculture Research in 2010;
- Referee of several manuscripts for Aquaculture, Aquaculture Nutrition, Aquaculture Research, Aquaculture International, Journal of Shellfish Research and Journal of Food Science in 2011.

Panel Member (Non-Coordinator Member):

- Panel member in the thesis of Licenciatura in Marine Biology and Fisheries of Miguel José Correia (Universidade do Algarve, December 2003);
- Panel member in the Masters thesis in Marine Biology, speciality in Fisheries and Aquaculture of Ana Luísa Maulvault (Universidade do Algarve, July 2009);
- Invited Panel Member in the Philosophy Doctor in Biology of Daniel Quintana Cobo (Universidade de La Laguna, Tenerife, Spain, December 2009).

Projects:

- 2012-2014 - Project "SEPIABREED - Improving the reproduction of the European cuttlefish, *Sepia officinalis* (Linnaeus, 1758) in captivity: a multidisciplinary approach". Fundação para a Ciência e a Tecnologia PTDC/MAR/120876/2010. Principal Investigator - 176.268€
- 2011-2014 - Project "SEPIATECH - Development of cuttlefish, *Sepia officinalis*, aquaculture production technology - feed and husbandry refinements". DGPA PROMAR Ref^a - 31-03-05-FEP-2 - Universidade do Algarve. Writer of proposal and coordinator - 389.625€

- 2010-2012 - Project "SEPIAMETA - On the metabolism of the European cuttlefish, *Sepia officinalis* (Linnaeus, 1758)". Fundação para a Ciência e Tecnologia - PTDC/MAR/102348/2008. Principal Investigator - 189.702€
- 2009 – ongoing - Project "ASSEMBLE: Association of european marine biological laboratories". Grant agreement no.: 227799 FP7. Participation on the suitability of the European cuttlefish (*Sepia officinalis*) as a research animal model - 5735€
- 2002-2004 - Project "AQUASEPIA: Development of aquaculture techniques for the cuttlefish, *Sepia officinalis*". Fundação para a Ciência e Tecnologia - Agência de Inovação, ref. P0009/POCTI 2.3/OUT.01 - member of team - 26.447,92€
- 2001-2003 - Project "Cephalopod stocks in European waters: review, analysis, assessment and sustainable management" Quality of Life and Management of Living Resources, UE, ref. QOL-2001-5.1.2 - member of team;
- 1999-2002 - Project "Cephalopoda: Octopodidae - relationship of the resource with the marine environment" Programa Praxis XXI, ref. 2/2.1/MAR/1707/95 - Thematic areas: Ecophysiology, Behaviour and Recruitment. - member of team.

Fields of Expertise:

- Marine Biology and Fisheries, Specialty of Fisheries/Aquaculture;
- Marine Sciences - Marine Resources - Introduction of new species in Aquaculture;
- Aquaculture Nutrition;
- Aquaculture, specially mollusks;
- Fish and mollusks (cephalopod and mussels) quality as food for human consumption.

Other Dominions:

- Biological:
 - Pathology and Histopathology;
 - Marine Microbiology.
 - Maintenance of marine and freshwater species in captivity
 - Concept, elaboration and maintenance of seawater and freshwater culture and maintenance systems.
 - Aquaculture production of fish, molluscs and crustaceans.
- Fisheries:
 - Capture and transport of cephalopods from sea to the laboratory.

- Informatics:
 - MS-DOS 7.0;
 - Microsoft Windows XP, Vista and 7;
 - Linux 8 and 9;
 - Microsoft Office 2003, 2007 and 2010;
 - Microsoft Publisher 2003 and 2007; Project 2003; Money 2003; PhotoDraw 2000;
 - Adobe Acrobat, Premiere and PhotoShop;
 - SigmaPlot (v10) e SigmaStat (v3.11), SPSS (v18), Prism (v5) and Statistica (v8).

Research Fields of Interest:

- Development of technology for mollusc aquaculture, specially cephalopods;
- Growth and associated nutrition and metabolism of cephalopods,
- Pathology of mass cultured cephalopods;
- Cephalopod reproduction in captivity;
- Cephalopod welfare;
- Fisheries biology and population genetics of cephalopods;
- Mollusc (cephalopods and mussels) spoilage and valorisation as food for human consumption;
- Cephalopod Ethics and Welfare in Research and Production;
- Applications of Molluscs in Biotechnology and Biomedicine.

Spoken Languages:

- Portuguese - Excellent;
- English - Good speaking and Writing;
- French - Good speaking and Writing;
- Spanish - Good speaking and Writing.

Invited Speaker in Conferences:

- 3rd Fisheries Meeting held at the Universidade do Algarve (18th November 2000) - Cephalopod Culture & Research cuttlefish and octopus presentation (commented video);
- Joint Meeting of the ICES WGCEPH and the DG Fisheries Project CEPHASSESS, held at the Universidade do Algarve (28th-31th March 2001) - Cephalopod Culture & Research cuttlefish and octopus presentation (English commented video);

- Annual CCMAR/CIMAR meeting held in Santarém (Portugal, November 2003) - Cephalopod Culture & Research, 3 years of research and future prospects;
- Moderator in the Aquaculture Plenary Session of the 3rd National Meeting of Postgraduate Students in Biological Sciences with the presentation “On the aquaculture potential of cephalopod species: developing new culture technology based on the species biology and ecology”, held at the Universidade do Algarve (Faro, 3rd to 5th September 2008).;
- Speaker in the Aquaculture Europe 2010 Student Workshop Session, held at CIMAR (Porto, 5th to 8th October, 2010) with the theme “Aquaculture in Portugal”;
- Speaker in EUROCEPH 2011 - Cephalopod Biology Research in the 21st Century - A European Perspective , held in Vico Equense, Naples, Italy (7th to 10th April 2011) with the theme “ON THE AQUACULTURE POTENTIAL OF CEPHALOPOD SPECIES: THE EUROPEAN CUTTLEFISH AS A SHOWCASE”;
- Facilitator of Group 3 - Animal supply, handling and euthanasia and Implications of EU 2010/63/EU for studies involving juvenile cephalopods and aquaculture in the EUROCEPH 2011 - Cephalopod Biology Research in the 21st Century - A European Perspective, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

Publications

a) Thesis

SYKES, A.V. (1999), “Utilização de *Artemia* sp. enriquecida como primeiro alimento de para-larvas de *Sepia officinalis* (Mollusca: Cephalopoda)”, Relatório de Estágio do Curso de Licenciatura em Biologia Marinha e Pescas, Universidade do Algarve, Faro, 55p.

SYKES, A.V. (2003), “On the use of live grass shrimp (*Palaemonetes varians*) as the only prey for cuttlefish (*Sepia officinalis*) culture throughout the life cycle”, Dissertação apresentada ao Instituto de Ciências Biomédicas Abel Salazar para obtenção do grau de Mestre no ramo das Ciências do Mar - Recursos Marinhos, especialidade de Aquacultura, 61p.

SYKES, A.V. (2007), “Hatchery technologies and nutritional contents of cuttlefish (*Sepia officinalis*) spawners, eggs, hatchlings and live prey associated”, PhD in Aquaculture - Nutrition, Universidade do Algarve, Faro, 212p.

b) Publications in Indexed Journals

DOMINGUES, P.M., KINGSOTON, T., SYKES, A.V. & ANDRADE, J.P. (2001). Growth of young cuttlefish, *Sepia officinalis* at the upper end of the biological distribution temperature range. *Aquaculture Research* 32 (11), 923-930.

DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2002). The effects of temperature in the life cycle of two consecutive generations of the cuttlefish *Sepia officinalis* (Linnaeus, 1758), cultured in the Algarve (South Portugal). *Aquaculture International* 10, 207-220.

DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2002). The use of Artemia or Mysids as food for hatchlings of the cuttlefish *Sepia officinalis*; effects on growth and survival throughout the life cycle. *Aquaculture International* 9(4), 319-331.

SYKES, A.V., DOMINGUES, P.M., LOYD, M., SOMMERFIELD, A. & ANDRADE, J.P. (2003). The influence of culture density and enriched environments on the first stage culture of young cuttlefish *Sepia officinalis* (Linnaeus, 1758). *Aquaculture International* 11, 531-544.

DOMINGUES, P.M., POIRIER, R., DICKEL, L., ALMANSA, E., SYKES, A.V. & ANDRADE, J.P. (2003). Effects of culture density and different live prey on growth and survival of young cuttlefish, *S. officinalis* (Linnaeus, 1758). *Aquaculture International* 11, 225-242.

DOMINGUES, P.M., SYKES, A.V., SOMMERFIELD, A., & ANDRADE, J.P. (2003). The effects of feeding live or frozen shrimp on growth, survival and life cycle of the cuttlefish, *Sepia officinalis* (Linnaeus, 1758). *Aquaculture International* 11, 397-410.

DOMINGUES, P.M., SYKES, A.V., SOMMERFIELD, A., ALMANSA, E., LORENZO, A. & ANDRADE, J.P. (2004). Growth and survival of young cuttlefish, *Sepia officinalis* (Linnaeus, 1758) fed live and frozen fish and crustaceans. *Aquaculture* 229, 239-254.

SYKES, A.V., DOMINGUES, P.M. & ANDRADE, J.P. (2004). Nucleic acid derived indices and instantaneous growth rates as tools to determine different nutritional condition in cuttlefish (*Sepia officinalis* L.) hatchlings. *Journal of Shellfish Research* 23(2), 585-591.

CORREIA, M., DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2005). Effects of culture density on growth and broodstock management of the cuttlefish, *Sepia officinalis* (Linnaeus, 1758). *Aquaculture* 245, 163 - 173.

SYKES, A.V., DOMINGUES, P.M., CORREIA, M., & ANDRADE, J.P. (2006). Cuttlefish culture – state of the art and future trends. *Vie et Milieu* 56(2), 129-137.

SYKES, A.V., DOMINGUES, P.M. & ANDRADE, J.P. (2006). Effects of using live grass shrimp (*Palaemonetes varians*) as the only source of food for the culture of cuttlefish, *Sepia officinalis* (Linnaeus, 1758). *Aquaculture International* 14(6), 551-568.

ALMANSA, E., DOMINGUES, P.M., SYKES, A.V., TEJERA, N., LORENZO, A. & ANDRADE, J.P. (2006). The effects of feeding with shrimp or fish fry on growth and mantle lipid composition of juvenile and adult cuttlefish (*Sepia officinalis*). *Aquaculture* 256, 403-413.

SILVA, V.S., NUNES, M.A., CORDEIRO, J.M., CALEJO, A.I., SANTOS, S., NEVES, P., SYKES, A.V., MORGADO, F., DUNANT, Y. & GONÇALVES, P.P. (2007). Comparative effects of aluminium and ouabain on synaptosomal choline uptake, acetylcholine release and (Na⁺/K⁺) ATPase. *Toxicology* 236, 158-177.

NUNES, M.A., SANTOS, S., CORDEIRO, J.M., NEVES, P., SILVA, V.S., SYKES, A.V., MORGADO, F., DUNANT, Y. & GONÇALVES, P.P. (2008). Acetylcholine release and choline uptake by cuttlefish (*Sepia officinalis*) optic lobe synaptosomes. *Biological Bulletin* 214, 1-5.

SYKES, A.V., OLIVEIRA, A.R., DOMINGUES, P.M., CARDOSO, C.M., ANDRADE, J.P. & NUNES, M.L. (2009). Assessment of European cuttlefish (*Sepia officinalis*, L.) nutritional value and freshness under ice storage using a developed Quality Index Method (QIM) and biochemical methods”. *LWT - Food Science and Technology* 42, 424-432.

SYKES, A.V., ALMANSA, E., LORENZO, A. & ANDRADE, J.P. (2009). Lipid characterization of both wild and cultured eggs of cuttlefish (*Sepia officinalis*) throughout the embryonic development. *Aquaculture Nutrition* 15, 38-53.

HORMIGA, J.A., ALMANSA, E., **SYKES, A.V.** & TORRES, N. (2010). Model based optimization of feeding regimens in aquaculture: Application to the improvement of *Octopus vulgaris* paralarvae viability in captivity. *Journal of Biotechnology* 149, 209-214.

SYKES, A.V., DOMINGUES, P.M., MARQUÉZ, L. & ANDRADE, J.P. (2011), “The effects of tank colours on growth and survival of cuttlefish (*Sepia officinalis*, Linnaeus 1758) hatchlings and juveniles”. *Aquaculture Research* 42, 441-449.

c) Communications in Conferences

SYKES, A.V. & ANDRADE, J.P. (2000), “Preliminary results in a new recirculating seawater system for the culture of *Octopus vulgaris* (Mollusca: Cephalopoda)”, Poster presented at the CIAC 2000 –Millenium Cephalopod Conference, Aberdeen, Scotland.

DOMINGUES, P.M., KINGSTON, T., **SYKES, A.V.** & ANDRADE, J.P. (2001), “Growth of young cuttlefish, *Sepia officinalis* at the upper end of the biological distribution temperature range”., Poster presented at the Aquaculture 2001, Orlando, United States of America.

DOMINGUES, P.M., **SYKES, A.V.** & ANDRADE, J.P. (2001), “Differences in the life cycle of the cuttlefish *Sepia officinalis* cultured during the summer and the winter months in the Algarve (South Portugal)”, Oral communication presented at the Aquaculture Europe 2001, Trondheim, Norway.

DOMINGUES, P.M., POIRIER, R., DICKEL, L., ALMANSA, E., **SYKES, A.V.** & ANDRADE, J.P. (2002), “Effects of culture density and different live prey on growth and survival of young cuttlefish, *S. officinalis* (Linnaeus, 1758), Poster presented at the World Aquaculture Conference held in Beijing, China.

SYKES, A.V., DOMINGUES, P.M. & ANDRADE, J.P. (2002) “Culture of two consecutive generations for cuttlefish, *Sepia officinalis* (Linnaeus, 1758), using live grass shrimp (*Palaemonetes varians*) as the only prey”, Poster presented at the World Aquaculture Conference held in Beijing, China.

SYKES, A.V., DOMINGUES, P.M. & ANDRADE, J.P. (2004) “Nucleic acid derived indices and instantaneous growth rates as tools to determine different nutritional condition in cuttlefish (*Sepia officinalis* L.), hatchlings”, Poster presented at the World Aquaculture Society Conference held in Honolulu, Hawaii.

DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2004) “Effects of inbreeding on the life cycle of the cuttlefish *Sepia officinalis* (Linnaeus, 1758)”, Poster presented at the World Aquaculture Society Conference held in Honolulu, Hawaii.

ANDRADE, J.P., SYKES, A.V. & DOMINGUES, P.M. (2004) “The experimental culture of the cuttlefish, *Sepia officinalis*, in the Algarve, South Portugal”, Oral communication presented at the World Aquaculture Society Conference held in Honolulu, Hawaii.

SYKES, A.V., DOMINGUES, P.M. & ANDRADE, J.P. (2004) “The use of live grass shrimp (*Palaemonetes varians*) as the only source of food to culture Cuttlefish, *Sepia officinalis* (Linnaeus, 1758)”, Oral communication presented at the Aquaculture Europe 2004 - Barcelona, October 2004

CORREIA, M., DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2004) “Effects of culture density on growth and broodstock management of the cuttlefish, *Sepia officinalis* (Linnaeus, 1758), Poster presented at the Aquaculture Europe 2004 - Barcelona, October 2004.

ALMANSA, E., DOMINGUES, P.M., SYKES, A.V., LORENZO, A. & ANDRADE, J.P. (2004) “Lipid and Fatty acid composition of Cuttlefish (*Sepia officinalis*) of different ages fed with shrimp and fish fry”, Poster presented at the Aquaculture Europe 2004 - Barcelona, October 2004

NUNES, M.A., SANTOS, S., CORDEIRO, J.M., NEVES, P., SILVA, V.S., SYKES, A.V., DUNANT, Y., MORGADO, F. & GONÇALVES, P.P. (2005) “Comparative analysis of aluminium effect on the Na⁺/K⁺ - ATPase activity of synaptosomes isolated from rat brain cortex, torpedo electrical organ and cuttlefish optic lobe” Poster presented at the Sixth Keele Meeting on Aluminium - Bussaco Palace - Portugal, February-March 2005.

SANTOS, S., NUNES, M.A., CORDEIRO, J.M., NEVES, P., SILVA, V.S., SYKES, A.V., MORGADO, F. & GONÇALVES, P.P. (2005) “In Vitro Aluminium effect on the (Na⁺/K⁺) ATPase activity of synaptosomes from *Sepia officinalis* optic lobes”. Poster presented at the 6^o Congresso Ibérico e 3^o Iberoamericano de Contaminação e Toxicologia Ambiental. Cádiz (Spain) 25th to 28th September 2005.

SYKES, A.V., ALMANSA, E., LORENZO, A. & ANDRADE, J.P. (2007) “Estudio de la composición lipídica de huevos de choco (*Sepia officinalis*) a lo largo del desarrollo embrionario. Comparación entre huevos salvajes y cultivados”. Poster presented at the XI Congreso Nacional de Acuicultura. Centro Cultural Caixa Nova, Vigo (Spain) 24th to 28th September 2007.

HORMIGA, J.A., SYKES, A.V., FRIAS, I., SKALLI, A., ALMANSA, E. & TORRES, N. (2009). Modelling *Octopus vulgaris paralarvae* growth in captivity. Poster presented at the Eleventh International Conference on molecular systems biology. Shanghai (China) 21st to 25th June 2009.

GARCÍA, S., GARRIDO, D., ROSAS, C., RODRÍGUEZ, C.J., PASCUAL, C., SYKES, A.V. & DOMINGUES, P. (2009).”Caracterización de la actividad enzimática del jugo gástrico de Pulpo, *Octopus vulgaris* y de Choco, *Sepia officinalis* a distintos pH. Digestibilidad *in vitro* de distintas dietas, con jugo gástrico de pulpo.” Poster presented at the XII Foro dos Recursos Marinos e da Acuicultura das Rías Galegas held at Hotel Hesperia Isla de la Toja (O Grove –Pontevedra, España) between 8th and 9th October 2009.

ALMANSA, E., SKALLI, A., SYKES, A.V., HORMIGA, J.A., & TORRES, N. (2009). “Mejora de la viabilidad de las paralarvas de pulpo común (*Octopus vulgaris*) mediante modelización y optimización de la dieta empleada.” Poster presented at the XII Congreso Nacional de Acuicultura held at the Escuela Técnica Superior de Ingenieros Agrónomos de la Universidad Politécnica de Madrid between 24th and 26th November 2009.

SYKES, A.V., GONÇALVES, R.A. & ANDRADE, J.P. (2010). “Early weaning of cuttlefish (*Sepia officinalis*) with dead grass shrimp (*Palaemonetes varians*) from the first day after hatching”. Poster presented at the Congresso Português de Malacologia 2010, held at CCMAR, Universidade do Algarve between the 13th and 14th March 2010.

SYKES, A.V., GONÇALVES, R.A. & ANDRADE, J.P. (2010). “Early weaning of cuttlefish (*Sepia officinalis*) with dead grass shrimp (*Palaemonetes varians*) from the first day after hatching”. Poster presented at the V Jornadas de Acuicultura en el Litoral SurAtlántico, held at Cartaya, Huelva (Spain) between the 15th and 16th April 2010.

TORRES, N.V., SANTOS, G., HORMIGA, J.A., SYKES, A.V. & ALMANSA, E. (2010). “Modelling of the body composition of *Octopus vulgaris*: Application to diet design for the optimization of paralarvae survival rate”. Poster presented at the Biotec2010 held at Pamplona, Spain, 29th September to the 1st October 2010.

SYKES, A.V., DOMINGUES, P., LORENZO, M. & ANDRADE, J.P. (2010). “The effects of tank colours on growth and survival of cuttlefish (*Sepia officinalis*) hatchlings and juveniles”. Poster presented at Aquaculture Europe 2010 held at Porto, Portugal, October 2010.

SYKES, A.V., QUINTANA, D., & ANDRADE, J.P. (2010). “The effects of light intensity on growth and survival of cuttlefish (*Sepia officinalis*) hatchlings and juveniles”. Poster presented at Aquaculture Europe 2010 held at Porto, Portugal, October 2010.

SYKES, A.V., GONÇALVES, R.A. & ANDRADE, J.P. (2010). “Early weaning of cuttlefish (*Sepia officinalis*) with dead grass shrimp (*Palaemonetes varians*) from the first day after hatching”. Poster presented at Aquaculture Europe 2010 held at Porto, Portugal, October 2010.

SYKES, A.V., ALMANSA, E., MARTIN, R., RODRÍGUEZ, C., LOREN.ANSVES

GARCÍA, S., GARRIDO, D., ROSAS, C., **SYKES, A.V.** & DOMINGUES, P. (2010). “Characterization of the enzymatic activity in the gastric juice and digestive gland of Octopus (*Octopus vulgaris*) and Cuttlefish (*Sepia officinalis*) at different pH and temperatures”. Poster presented at Aquaculture Europe 2010 held at Porto, Portugal, October 2010.

SYKES, A.V. (2010). “Aquaculture in Portugal”. Oral Presentation at Aquaculture Europe 2010 - Student Workshop Session, held at CIMAR (Porto, 5th to 8th October, 2010)

SYKES, A.V. , PEREIRA, D., RODRÍGUEZ, C., LORENZO, A & ANDRADE, J.P. (2011). “Effects of increased tank bottom areas on Cuttlefish (*Sepia officinalis*, L.) reproduction performance”. Poster presented at EUROCEPH 2011, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

SYKES, A.V., TAIPINA, S., GONÇALVES, R., BERNARDINO, R.J. & ARAGÃO, C. (2011). “Efficiency of different anaesthetics as welfare promoters during human manipulation of European Cuttlefish (*Sepia officinalis*) juveniles”. Poster presented at EUROCEPH 2011, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

GARCÍA-HERRERO, I., REIS, D., RODRÍGUEZ, C., RIERA, R., **SYKES, A.V.**, FELIPE, B.C., MARTÍN, V., VILLAMANDOS, J.E. & ALMANSA, E. (2011). “Lipid composition of common Octopus (*Octopus vulgaris*) paralarvae fed with alternative preys and a microdiet”. Poster presented at EUROCEPH 2011, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

PERALES-RAYA, C., FELIPE, B., **SYKES, A.V.**, BARTOLOME, A. & ALMANSA, E. (2011). “Preliminary results on *Octopus vulgaris* juvenile and adult cold-water anesthesia and euthanasia”. Poster presented at EUROCEPH 2011, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

SYKES, A.V., DOMINGUES, P., GONÇALVES, R., CORREIA, M. & ANDRADE, J.P. (2011). “On the aquaculture potential of cephalopod species: the European Cuttlefish as a showcase”. Oral Presentation at EUROCEPH 2011, held in Vico Equense, Naples, Italy (7th to 10th April 2011).

RIBEIRO, L., SILVA, C., GONÇALVES, R. & SYKES, A.V. (2011). “Effects of fresh or frozen grass shrimp (*Palaemonetes varians*) on cuttlefish (*Sepia officinalis*) digestive enzyme activity”. Poster presented at Aquaculture Europe 2011, held at Rhodes (Greece), October 2011.

d) Grey Literature

SYKES, A.V. (2000), “Manutenção de Cefalópodes em Cativeiro”, relatório de seminário constante do Mestrado em Ciências do Mar - Recursos Marinhos, Instituto de Ciências Biomédicas Abel Salazar, Porto, 25p., 2000.

DOMINGUES, P.M., SYKES, A.V. & ANDRADE, J.P. (2001), Pilot-scale culture of the cuttlefish *Sepia officinalis* at the University of Algarve (South Portugal). *World Aquaculture* 32 (2), 3-5.