

SCIENTIFIC REPORT – YEAR 2011

Universidade dos Açores, CITAA
Angra do Heroísmo, December 2011

COORDINATOR:

Paulo A. V. Borges

TEAM:

Senior Research Scientists

**Ana Moura Arroz
João Pedro Barreiros
Rui Bento Elias
Rosalina Gabriel
Patrícia Ventura Garcia
David Horta Lopes
Ana Maria Ávila Simões
António Onofre Soares
Virgílio Vieira**

Post-Docs:

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Pedro Cardoso
Clara S. Gaspar
José A. P. Marcelino
Alison L. Neilson
Carla Rego
François Rigal
Kostas Triantis**

Associate Research Fellows:

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Alberto Jimenez-Valverde**

Sérvio P. Ribeiro
Andrés Baselga
François Guilhaumon
Hanno Schaeffer
Ana Margarida Santos (Past Ph.D.)
Jorge M. Lobo
Lina Nunes
Simone Fattorini
Rudolf Scheffrahn
Isabel Borges
Aris Parmakelis (Starting in 2012)
José Carlos Carvalho (Starting in 2012)
Alain Vanderpoorten (Starting in 2012)
Jairo Patiño (Starting in 2012)

Ph.D. Students:

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Orlando Guerreiro
Annabella Borges
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Luís Crespo
Filomena Ferreira
Rita São Marcos
Isabel Neves
Lúcia Borba Ventura
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Jorge Azevedo
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Nuno Bicudo

Technicians:

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Clélia Sousa

Past members:

**Ana Isabel Brasil
Carolina Couto
João Moniz
Francisco Dinis
Catarina Melo**

The Azorean Biodiversity Group (ABG) is one of the four research groups of the Research Centre CITA-A (“Centro de Investigação em Tecnologias Agrárias dos Açores”). This centre is included in the University of Azores and is mainly sponsored by the Portuguese Foundation for Science and Technology (FCT) and the Regional Direction of Science and Technology (DRCT).

Although the Azorean Biodiversity group started officially in 2006, based on a reorganization of CITA-A, many investigators go back to 1999, when the BALA (Biodiversity of Arthropods from the Laurisilva of the Azores) project started. The number of people that is involved in the group has been steadily increasing since its creation and in 2011 includes 18 Permanent members with Ph.D. (8 of them Post-Docs), 16 research collaborators in several countries (with Ph.D.) and seven Ph.D. students.

Mission, Research

The excellence of islands as natural laboratories for ecological and evolutionary studies is well established since Darwin and Wallace. Their isolation allows controlling and measuring most effects with accuracy. Oceanic islands host a high proportion of endemic species, many of which are in danger as a consequence of recent human habitation, so there are very few places where the ‘biodiversity crisis’ is as apparent and in need of urgent action.

The “Azorean Biodiversity Group” (CITA-A) conducts basic and applied research in ecology and related disciplines (e.g. taxonomy, biogeography, evolutionary biology, conservation, science communication), to understand and predict the functioning of island communities and ecosystems. Our specific aims

are:

- The study of biological diversity. How many species exist in the Azores?
- To study the processes which link populations and whole communities in island ecosystems;
- To understand the consequences of Human impacts upon Azorean ecosystems;
- Apply the results of fundamental research in the conservation and management of natural populations and their habitats;
- Contribute for the control of pest species (e.g. urban termites):
- Communicate efficiently the results of our science to different kinds of audiences using a diversity of strategies.

We are particularly interested in assessing the effects of habitat fragmentation and exotic species on the endemic fauna and flora. Our course of action is being made around four articulated approach levels: i) data production, that includes the long-term monitoring of the diversity and rarity patterns several taxonomic groups, and the assessment of public perspectives about nature and the environment; ii) data integration; iii) science communication; iv) building networking.

The “Azorean Biodiversity Group” research Agenda for the next five years addresses six key themes:

ECOLOGY – Study of the species environment and patterns of diversity, distribution and abundance

- Macroecology
- Ecophysiology
- Dispersal dynamics
- Marine Ecology
- Agro-Ecology
- Ecotoxicology

BIOGEOGRAPHY – study of species distribution at several scales with emphasis on the insular biogeographical models

- Insular biogeography
- Species area relationships (SAR)

EVOLUTION – linking ecological, genetic and evolutionary processes

- Evolutionary ecology
- Phylogeography

TAXONOMY – discover and classify the Azorean species

- Describe new taxa and prepare local and regional lists of species.

SUSTAINABILITY – potential for long-term maintenance of well being, which has environmental, economic, and social dimensions.

- Conservation biology
- Pest management and control (with emphasis on termites)
- Risk communication
- Environmental education
- Sustainable development
- Public participation

SCIENCE COMMUNICATION – interdisciplinary approach that aims the diffusion of knowledge, and the communication of science and technology among professionals and to the public

- Web portals
- Books for the general public

PROJECTS (2008-2012)

Funded by FCT (Portuguese Science Foundation)

1. FCT - PTDC/BIA-BEC/104571/2008 – “What can the Macaronesian islands teach us about speciation? A case study of Tarphius beetles and Hipparchia butterflies” (2010-2012)

Coordinator: Paulo Borges; Members: Rosalina Gabriel; Ana Moura Arroiz; Isabel Amorim; Fernando Pereira;

Other participants: Brent Emerson and Christiana Faria (Centre for Ecology, Evolution and Conservation, School of Biological Sciences, University of East Anglia); Artur R. M. Serrano (CBA- Fac. de Ciências de Lisboa).

Budget for the Azorean Biodiversity Group: 120.000,00€

2. FCT- PTDC/BIA-BEC/100182/2008 – “Predicting extinctions on islands: a multi-scale assessment” (2010-2013)

Coordinator: Paulo Borges (Azorean Biodiversity Group); Members: Kostas Triantis, Luís Crespo, François Rigal, Carla Rego, Fernando Pereira. Robert Whittaker (Biodiversity Research Group, Oxford University Centre for the Environment); Aris Parmakelis (Department of Ecology and Taxonomy, Faculty of Biology, National & Kapdistrian University of Athens).

Budget for the Azorean Biodiversity Group: 194.907,00€

3. FCT - PTDC/CCI/72381/2006 - ÁFRICA ANNES - Social perception in environmental risk communication – (2009-2011)

Coordinator: António Felix Rodrigues (CITA-A); Members: Rosalina Gabriel; Ana Moura Arroz; Paulo Borges.

Budget for the Azorean Biodiversity Group: 10.907,00€

4. FCT - PTDC/AMB/70801/2006 - Understanding Underground Biodiversity: Studies of Azorean Lava Tubes. (2009-2011)

Coordinator: Maria de Lurdes Nunes Enes Dapkevicius (CITA-A); Members: Rosalina Gabriel, Paulo Borges, Isabel Amorim, Fernando Pereira.

Budget for the Azorean Biodiversity Group: 5.000,00€

5. FCT - Green Islands Project – “Use of woody plant biomass for energy production in the Azores Islands” – (2010-2012)

Coordinator: Luís Silva (CIBIO- Azores); Members: Rosalina Gabriel, Paulo Borges, Sílvia Calvo, Artur Gil.

Budget for the Azorean Biodiversity Group: 13.348,00€ Euros.

6. FCT - PTDC/BIA-BEC/099138/2008 - Conflict between human activities and the conservation of island endemics in a Global Biodiversity Hotspot. (2010-2013)

Coordinator: Artur Serrano (CBA- Lisbon) ; Members: Paulo Borges, Carla Rego, Clara S. Gaspar, Pedro Cardoso, Alberto J. Valverde, Joaquin Hortal, Ana Santos, Fernando Pereira.

Budget for the Azorean Biodiversity Group: 8.000,00€ (Field Work)

7. FCT - PTDC/BIA-BEC/098783/2008 - Adaptive significance and genetic basis of a balanced colour-polymorphism. (2010-2012)

Coordinator: Sofia Seabra (CBA- Lisbon); Members: Paulo Borges.

Budget for the Azorean Biodiversity Group: 3.000,00€ (Field Work)

8. FCT - PTDC/AGR-AAM/108312/2008. “An omnipotent guest in an omnipotent pest: Aphids/Wolbachia case “(2010-2013)

Coordinator: Manhaz Khadem (Univ. Madeira); Members: Paulo Borges.

Budget for the Azorean Biodiversity Group: 3.000,00€

9. FCT - POCTI/BIA-BDE/59202/2004 - High Endemism Areas in the Archipelago of Madeira - Establishing priorities for the conservation of the endemic insect fauna. (2006-2009)

Coordinator: Artur Serrano (CBA- Lisbon) ; Members: Paulo Borges, Carla Rego, Pedro Cardoso, Fernando Pereira, Sérgio Ribeiro, Isabel Amorim.

Budget for the Azorean Biodiversity Group: 8.000,00€ (Field Work)

10. PTDC/BIA-BIC/119255/2010 – “Biodiversity on oceanic islands: towards a unified theory” Starting July 2012

Coordinators: Paulo A. V. Borges and Kostas Triantis;

Other participants from Azorean Biod. Group: Ana Margarida Santos, Pedro Cardoso.

Other participants from other Institutions: Robert Whittaker (Biodiversity Research Group, Oxford University Centre for the Environment); Aris Parmakelis (Department of Ecology and Taxonomy, Faculty of Biology, National & Kapdistrian University of Athens)

Project’s consultants (Brent Emerson, John Halley, Joaquin Hortal and Richard Ladle; Luis António Borda Água)

Budget for the Azorean Biodiversity Group: 99.000,00€

11. NETBIOME – Europe – FCT

ISLAND-BIODIV: Understanding biodiversity dynamics in tropical and subtropical islands as an aid to science based conservation action (2012-2014)

Coordinator: Brent Emerson (Instituto de Productos Naturales y Agrobiología (IPNA-CSIC), Tenerife, Canary Islands); Members: Paulo Borges, Rui B. Elias (CITA-A – Azorean Biodiversity Group); Pedro Oromí, José María Fernández-Palacios (Univ de La Laguna, Canaries, Spain); Dominique Strasberg (Université de La Réunion); Christophe Thébaud (Université Paul Sabatier (Toulouse 3)), Juli Caujapé-Castells (Jardín Botánico Canario “Viera y Clavijo” – Unidad Asociada CSIC)

Coordinator Portugal: Paulo Borges; Members: Rui B. Elias

Budget for the Azorean Biodiversity Group: 70.000,00€

12. NETBIOME – Europe – FCT

MOVECLIM: **Montane** vegetation as listening posts for **climate** change (2012-2014)

Coordinator: Claudine Ah-Peng (University of La Réunion); Members: Rosalina Gabriel (Azorean Biodiversity Group – Univ Azores); Magnin Hervé (Parc national de la Guadeloupe); Jean-Yves Meyer (Délégation à la Recherche, Gouvernement de Polynésie française Research Department, Government of French Polynesia); Juana María González-Mancebo (University of La Laguna, Department of Botany); Jacques Bardat (Muséum National d’Histoire Naturelle); Benoît Lequette (Parc National de La Réunion); Lisa Lavocat (Conservatoire Botanique National de Guadeloupe); Terry Hedderson (University of Cape Town, Botany Department); Michael Kessler (University of Zürich); Juergen Kluge (University of Marburg); Min Chuah-Petiot (Universiti Sains Malaysia);

Coordinator Portugal: Rosalina Gabriel (Azorean Biodiversity Group – Univ Azores)

Budget for the Azorean Biodiversity Group: 70.000,00€

Funded by DRCT (Azorean Science Foundation)

10. DRCT - M.2.1.2/I/003/2008 “Consequences of land-use change on Azorean fauna and flora - the 2010 Target” (2009-2010)

Coordinator: Paulo Borges; Members: Pedro Cardoso, Clara Gaspar; Silvia Calvo; Fernando Pereira, João Moniz.

Budget for the Azorean Biodiversity Group: 25.000,00€

11. DRCT - M.2.1.2/I/004/2008 . “EDUMAR Perspectives About the Sea and Sea Life Cetaceans and Tourism in the Azores and Newfoundland” – (2009-2010)

Coordinator: Alison L. Neilson; Members: Rosalina Gabriel, Ana Moura Arroz, Enésima Mendonça.

Budget for the Azorean Biodiversity Group: 25.000,00€

12. DRCT - M2.1.2/F/007/2007 - Identificação de populações geneticamente distintas de espécies de artrópodes endémicas dos Açores para a conservação da biodiversidade no arquipélago (2009-2010)

Coordinator: Rosalina Gabriel; Members: Paulo Borges, Isabel Amorim, Ana Simões.

Budget for the Azorean Biodiversity Group: 35.000,00€ (Finalized)

13. DRCT - M221-I-002-2009 - TERMODISP - A térmita de madeira seca *Cryptotermes brevis* (Walker) nos Açores: Monitorização dos voos de Dispersão e prevenção da colonização. (2009-2011)

Coordinator: Paulo Borges; Members: Ana Moura Arroz, Ana Simões, Orlando Guerreiro, Annabella Borges, Filomena Ferreira, Carolina Couto, Lina Nunes.

Budget for the Azorean Biodiversity Group: 183.029,00€

14. DRCT - M3.2.3/I/017B/2009, no âmbito da Medida 3.2.3 – “Apoio à edição de publicações científicas”, no âmbito do Eixo 3.2 – “Incentivos à produção científica”, do Programa 3 (Apoio à formação avançada (FORMAC)- “Listagem dos Fungos, Flora e Fauna Terrestre e costeira dos Açores / A list of the terrestrial and coastal fungi, flora and fauna of Azores” (2009-2010)

Coordinator: Paulo Borges; Members: Rosalina Gabriel, Enésima Mendonça.
Budget for the Azorean Biodiversity Group: 10.000,00€

15. DRCT - M3.2.3/I/019B/2009, no âmbito da Medida 3.2.3 – “Apoio à edição de publicações científicas”, no âmbito do Eixo 3.2 – “Incentivos à produção científica”, do Programa 3 (Apoio à formação avançada (FORMAC)- “Abordagens ao ambiente em contexto escolar” (2009-2010)

Coordinator: Rosalina Gabriel; Members: Ana Moura Arroz, Paulo Borges
Budget for the Azorean Biodiversity Group: 5.000,00€

OTHER FUNDING INSTITUTIONS

16. Câmara Municipal de Angra do Heroísmo - “Combate e Gestão das Térmitas (Isoptera) na Cidade de Angra do Heroísmo” (2009)

Coordinator: Paulo Borges; Members: Ana Simões, Orlando Guerreiro, Annabella Borges.

Budget for the Azorean Biodiversity Group: 12.000,00€ (Finalized)

17. DRA- Direcção Regional do Ambiente - “Gestão de Resíduos Contaminados com Térmitas” (2009-2010)

Coordinator: Paulo Borges; Members: Ana Moura Arroz; Orlando Guerreiro, Annabella Borges

Budget for the Azorean Biodiversity Group: 24.000,00€

18. FLAD - [PRO-BIO] Profiling Reliable Organisms as BIOindicators (2009-2011)

Coordinator: António Onofre Soares (CIRN) ; Members: Paulo Borges; João Moniz.

Budget for the Azorean Biodiversity Group: 5.000,00€ Euros.

19. Câmara Municipal da Praia da Vitória - “Monitorização da Térmita subterrânea *Reticulitermes flavipes* no concelho da Praia da Vitória, Ilha Terceira” (2010)

Coordinator: Paulo Borges; Members: Lina Nunes, Orlando Guerreiro, Annabella Borges.

Budget for the Azorean Biodiversity Group: 9.000,00€

20. United Nations University - RCE-Azores, UNESCO Research Centre of Expertise (2009-2014)

Coordinator: Alison L. Neilson; Members: Rosalina Gabriel, Ana Moura Arrozo, Enésima Mendonça, Paulo Borges, Ana Simões, Fernando Pereira.

Câmara Municipal de Angra do Heroísmo – Budget to RCE Açores for printing for foto contest 200€

21. Câmara Municipal de Angra do Heroísmo- “Teste da Técnica de Temperatura para combate às térmitas de Madeira Seca (Isoptera)” (2010)

Coordinator: Paulo Borges; Members: Lina Nunes; Orlando Guerreiro, Annabella Borges.

Budget for the Azorean Biodiversity Group: 162.480€

INTERNATIONAL PEER REVIEWED PAPERS

2011 (n=46)

Albouy, C., **Guilhaumon, F.**, Villéger, S., Mouchet, M., Mercier, L., Culioli, J.M., Tomasini, J.A., Le Loc'h, F. & Mouillot D. (2011). Predicting trophic guild and diet overlap from functional ecomorphological traits: opportunities and limitations for fish ecology. *Marine Ecology Progress Series*, **436**: 17-28. DOI: 10.3354/meps09240. (IF: 2.483) **(P035)**

Aranda, S.C. & Lobo, J.M. (2011). How well does presence-only-based species distribution modelling predict assemblage diversity? A case study of the Tenerife flora. *Ecography*, **34**: 31-38. DOI: 10.1111/j.1600-0587.2010.06134.x. (IF: 4.417) **(P036)**

- Aranda, S.C., Gabriel, R. & Hedeñas, L.** (2011). New national and regional bryophyte records. 16. *Rhynchostegiella litorea* (De Not.) Limpr. *Journal of Bryology*, **33**: 70. DOI: 10.1179/1743282010Y.0000000014. (IF: 0.872) **(P037)**
- Aranda, S.C., Gabriel, R., Borges, P.A.V., Azevedo, E.B. & Lobo, J.M.** (2011). Designing a survey protocol to overcome the Wallacean shortfall: a working guide using bryophyte distribution data on Terceira Island (Azores). *The Bryologist*, **114**: 611-624. DOI: 10.1639/0007-2745-114.3.611. (IF: 0.89) **(P038)**
- Augustinos, A.A., Santos-Garcia, D., Dionyssopoulou, E., Moreira, M., Papapanagiotou, A., Scarvelakis, M., Doudoumis, V., Ramos, S., Franquinho, A.M., **Borges, P.A.V.**, Khadem, M., Latorre, A., Tsiamis, G., Bourtzis, K. (2011). Detection and characterization of *Wolbachia* infections in natural populations of aphids: is the hidden diversity fully unraveled? *PLoS ONE* **6**: e28695. Doi:10.1371/journal.pone.0028695. (IF: 4.411) **(P018)**
- Borges I., Soares, A.O., Magro A. & Hemptinne, J-L** (2011). Prey availability in time and space is a driving force in life history evolution of predatory insects. *Evolutionary Ecology*, **25**: 1307-1319. DOI 10.1007/s10682-011-9481-y (IF: 2.398) **(P039)**
- Cabral, S., **Soares, A.O. & Garcia, P.** (2011). Voracity of *Coccinella undecimpunctata*: effects of insecticides when foraging in a plant/prey system. *Journal of Pest Science*, **84**: 373-379. DOI: 10.1007/s10340-011-0373-2. (IF: 0.988) **(P040)**
- Cardoso, P., Pekár, S., Jocqué, R. & Coddington, J.A.** (2011). Global patterns of guild composition and functional diversity of spiders. *PLoS ONE*, **6**: e21710 -DOI: 10.1371/journal.pone.0021710. (IF: 4.411) **(P041)**
- Cardoso, P., Borges, P.A.V., Triantis, K., Fernández, M.A. & Martín, J.L.** (2011). Adapting the IUCN red listing criteria for invertebrates. *Biological Conservation*, **144**: 2432-2440. DOI: 10.1016/j.biocon.2011.06.020. (IF: 3.498) **(P042)**
- Cardoso, P., Erwin, T.L., Borges, P.A.V. & New, T.R.** (2011). The seven impediments in invertebrate conservation and how to overcome them.

- Biological Conservation*, **144**: 2647-2655. DOI: 10.1016/j.biocon.2011.07.024. (IF: 3.498) **(P043)**
- Carvalho, J.C., **Cardoso, P.**, Crespo, L.C., Henriques, S., Carvalho, R. & Gomes, P. (2011) Determinants of beta diversity of spiders in coastal dunes along a gradient of mediterraneity. *Diversity and Distributions*, **17**: 225-234. DOI: 10.1111/j.1472-4642.2010.00731.x (IF: 4.248) **(P044)**
- Carvalho, J.C., **Cardoso, P.**, **Crespo, L.C.**, Henriques, S., Carvalho, R. & Gomes, P. (2011). Biogeographic patterns of spiders in coastal dunes along a gradient of mediterraneity. *Biodiversity and Conservation*, **20**: 873-894. DOI 10.1007/s10531-011-0001-8. (IF: 2.146) **(P046)**
- Chiarucci, A., Bacaro, G., **Triantis, K.A.**, Fernández-Palacios, J.M. (2011). Biogeographical determinants of pteridophytes and spermatophytes on oceanic archipelagos. *Systematics and Biodiversity*, **9**: 191-201. DOI: 10.1080/14772000.2011.603381. (IF: 1.692) **(P047)**
- Cruz, A, Benedicto, J. & **Gil, A.** (2011). Socio-economic Benefits of Natura 2000 in Azores Islands – a Case Study approach on the ecosystem services provided by a Special Protected Area. *Journal of Coastal Research*, SI 64, 1955-1959. Szczecin, Poland, ISSN 0749-0208. 0.679 (IF: 0.679) **(P048)**
- Dennis, R.L.H., Dapporto, L., **Fattorini S.** & Cook, L.M. (2011). The generalism-specialism debate: the part played by generalists in the life and death of species. *Biological Journal of the Linnean Society*, **104**: 725-737. DOI: 10.1111/j.1095-8312.2011.01789.x. (IF: 2.166) **(P049)**
- Elias, R.B.**, Dias, E. & **Pereira, F.** (2011). Disturbance, regeneration and the spatial pattern of tree species in Azorean mountain forests. *Community Ecology*, **12**: 23-30. DOI: 11.1556/ComEc.12.2011.1.4. (IF: 0.974) **(P050)**
- Evans, E.W., **Soares, A.O.** & Yasuda, H. (2011). Invasions by ladybugs, ladybirds, and other predatory Coleoptera. *BioControl*, **56**: 597-611. DOI 10.1007/s10526-011-9374-6. (IF: 2.191) **(P051)**
- Fattorini, S.** (2011). Insect extinction by urbanization: a long term study in Rome. *Biological Conservation*. **144**: 370-375. DOI: 10.1016/j.biocon.2010.09.014. (IF: 3.498) **(P052)**

- Fattorini, S.** (2011). Influence of island geography, age and landscape on species composition in different animal groups. *Journal of Biogeography*, **38**: 1318–1329. DOI:10.1111/j.1365-2699.2011.02486.x. (IF: 4.273) **(P053)**
- Fattorini, S.** (2011). Insect rarity, extinction and conservation in urban Rome (Italy): a 120-year-long study of tenebrionid beetles. *Insect Conservation and Diversity*, **4**: 307-315. DOI: 10.1111/j.1752-4598.2010.00129.x. (IF: 2.717) **(P054)**
- Fattorini, S.** (2011). Biogeography of tenebrionid beetles (Coleoptera: Tenebrionidae) on the circumsicilian islands (Italy, Sicily): Multiple biogeographical patterns require multiple explanations. *European Journal of Entomology*, **108**: 659-672. (IF: 0.945) **(P055)**
- Fattorini, S., Dennis, R.L.H. & Cook, L.M.** (2011). Conserving organisms over large regions requires multi-taxa indicators: One taxon's diversity-vacant area is another taxon's diversity zone. *Biological Conservation*, **144**: 1690-1701. Doi:10.1016/j.biocon.2011.03.002. (IF: 3.498) **(P056)**
- Ferreira, M.T. & Scheffrahn, R.H.** (2011). Light attraction and subsequent colonization behaviors of alates and dealates of the West Indian drywood termite (Isoptera: Kalotermitidae). *Florida Entomologist*, **94**: 131–136. DOI: 10.1653/024.094.0202. (IF: 1.052) **(P057)**
- Fonseca, C., Calado, H., Pereira da Silva C. & **Gil, A.** (2011). New approaches to environment conservation and sustainability in Small Islands: The Project SMARTPARKS. *Journal of Coastal Research*, SI 64, 1970-1974. Szczecin, Poland, ISSN 0749-0208. (IF: 0.679) **(P058)**
- Gaspar, C., Gaston, K.J., Borges, P.A.V. & Cardoso, P.** (2011). Selection of priority areas for arthropod conservation in the Azores archipelago. *Journal of Insect Conservation*, **15**: 671–684. DOI: 10.1007/s10841-010-9365-4. (IF: 1.769) **(P059)**
- Gil A., Calado H., Costa L.T., Bentz J., Fonseca C., Lobo A., Vergilio M. & Benedicto J.** (2011). A Methodological Proposal for the Development of Natura 2000 Sites Management Plans. *Journal of Coastal Research*, SI 64, 1326-1330. Szczecin, Poland, ISSN 0749-0208. (IF: 0.679) **(P060)**
- Gil A., Yu Q., Lobo A., Lourenço P., Silva L. and Calado H.** (2011). Assessing the effectiveness of high resolution satellite imagery for vegetation

- mapping in small islands protected areas. *Journal of Coastal Research*, SI 64, 1663-1667. Szczecin, Poland, ISSN 0749-0208. (IF: 0.679) **(P061)**
- Gil, A.**, Calado, H. & Bentz, J. (2011) Public participation in municipal transport planning processes – The case of the Sustainable Mobility Plan of Ponta Delgada, Azores, Portugal. *Journal of Transport Geography* **19**:1309–1319. DOI: 10.1016/j.jtrangeo.2011.06.010. (IF: 1.706). **(P062)**
- Gutierrez, F., **Gil, A.**, Reis, E., Lobo, A., Neto, C., Calado, H. & Costa, J.C. (2011). *Acacia saligna* (Labill.) H. Wendl in the Sesimbra Council: Invaded habitats and potential distribution modelling. *Journal of Coastal Research*, SI 64, 403-407. Szczecin, Poland, ISSN 0749-0208. (IF: 0.679) **(P063)**
- Kagiampaki, A., **Triantis, K.A.**, Vardinoyannis, K. & Mylonas, M. (2011). Factors affecting plant species richness and endemism in the South Aegean (Greece). *Journal of Biological Research*, **16**: 282-295. (IF: 0.682) **(P064)**
- Lorenzo-Carballa M.O., Beatty C.D., Haitlinger R., Valdecasas A. G., Utzeri C., **Vieira V.**, Cordero-Rivera A. (2011). Larval aquatic and terrestrial mites infesting parthenogenetic *Ischnura hastata* (Odonata: Coenagrionidae) from the Azores islands. *Experimental & Applied Acarology*, **54**: 225-241. DOI 10.1007/s10493-011-9437-5. (IF: 1.825) **(P065)**
- Meijer, S.S., Whittaker, R.J. & **Borges, P.A.V.** (2011). The effects of land-use change on arthropod richness and abundance on Santa Maria Island (Azores): unmanaged plantations favour endemic beetles. *Journal of Insect Conservation*, **15**: 505-522. DOI 10.1007/s10841-010-9330-2. (IF: 1.769) **(P066)**
- Pasquino A.F., Vaske-Júnior, T., Gadig, O.B.F. & **Barreiros, J.P.** (2011). Notes on the feeding habits of the skate *Rioraja agassizi* (Chondrichthyes, Rajidae) of southeastern Brazil. *Cybium – International Journal of Ichthyology*, **35**: 105-109. (IF: 0411) **(P067)**
- Pekár, S., **Cardoso, P.**, Barriga, J. & Carvalho, J.C. (2011) Update to the zodariid spider fauna of the Iberian Peninsula and Madeira (Araneae: Zodariidae). *Zootaxa*, **2814**: 19-32. (IF: 0.853) **(P068)**
- Pereira J.N., Neves, V.C., Prieto, R., Silva, M.A., Cascão, I., Oliveira, C., Cruz, M.J., Medeiros, J.V., **Barreiros, J.P.**, Porteiro, F.M. & Clarke, D.

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