

AZOREAN BIODIVERSITY GROUP
NEWSLETTER 1



OCTOBER 2008



Editor: Paulo A. V. Borges



Preamble

The Azorean Biodiversity Group (ABG) is one of the four research groups of the FCT Centre CITA-A (University of Azores). This group started officially only in 2006 based on a reorganization of CITAA and has been growing including now 21 members plus 4 research associates. However the roots of the group are back to the year of 1999 when the BALA (*Biodiversity of Arthropods from the Laurisilva of the Azores*) project started. The fact that many of the members of the group are not always based on Terceira Island and that most of the co-supervisors of both Ph.D students and Post-Docs are from other Universities, created the need of a mechanism to easily communicate between all members and collaborators. As coordinator of the *Azorean Biodiversity Group* (ABG) I decided that a “Group News” or “Newsletter” would be the best way to achieve that goal. This is the first number of a “Newsletter” that I hope to have a Bimonthly frequency.

We welcome the two new members, the Post-Docs Dr. Andrés Baselga and Dr. Kostantinos Triantis, both with FCT Grants. With these two Post-Docs we also increase our international cooperation with two outstanding scientists that will co-supervise those two new members, respectively Prof. Alfried Vogler (Imperial College, Univ. of London) and Prof. Robert Whittaker (Univ. of Oxford, U.K.).

The scientific production of the group is increasing, with the publication in the current year of 38 publications, that include 5 international peer reviewed papers (IN: *Systematics and Biodiversity*; *Acta Oecologica*; *Insect Conservation and Diversity*; *BioControl*; *Oikos*), 3 Books, 24 Book Chapters, and 6 other type of publications. Moreover, an additional total of 52 publications were submitted, 37 of which are *in press*, that is, will be published during 2009, or some even in 2008.

The ABG is evolving to provide an effective vehicle for producing high standard science in the fields of Macroecology, Evolutionary Biology, Conservation and Environmental Education, with emphasis on Island Ecology. We are also very happy that as an outcome of our research in the last years new protected areas in the Azores (e.g. Pico Alto at Santa Maria) were created and the management of cave fauna is improving (GESPEA Cave Management Plan), that is, we are applying ecological research to real-world problems and contributing to the management of Azorean biodiversity. As a consequence, the Group received one of the BES-Biodiversity

Portuguese Awards in 2008, an important achievement for a group that uses taxonomic taxa like bryophytes and arthropods as study models.

The publication of three Books in 2008 was also an important achievement, notably two of them that will contribute for the better knowledge of the Azorean threatened species: i) Homem, N. & Gabriel, R. (2008). *Azorean Rare Bryophytes*. Principia, Oeiras. 96 pp; ii) Martín, J.L, Arechavaleta, M., Borges, P.A.V. & Faria, B. (eds.) (2008) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias, 500 pp.

There is a pressing need to communicate science to a wide audience. To address that need, the ABG, in collaboration with members of the CIBIO-Azores (Dep. Biology, UA), made an important contribution with the *Azorean Biodiversity Portal* (www.azoresbiportal.angra.uac.pt). This Portal is online since June this year and has currently an average of 350 visits per day. Moreover, two of the senior researchers of group (Rosalina Gabriel and Ana Moura Arroz) are actively promoting environmental education based on a Master Degree on “Environmental Education” that they helped to create. The second edition of the “Mestrado em Educação Ambiental”, is currently under the main coordination of **Ana Moura Arroz**.

In the coming year the ABG aims to consolidate its position in the fields of Macroecology, Evolutionary Biology, Conservation and Environmental Education. It is my believe that the outcome of our group’s effort will have a growing contribution for the management and conservation of the Azorean biodiversity in particular and thus fore for the conservation of biodiversity worldwide.

ACTIVITIES OF THE GROUP IN THE LAST MONTH

PAST EVENTS – Book launchings

1) On October 1, the book
Neilson, A. L., (2008). *Disrupting privilege, identity and meaning. A reflexive dance of environmental education*. Sense Publishers: Rotterdam/Taipei.
was launched at the Transformative Learning Centre, Ontario Institute for Studies in Education, University of Toronto, Canada.

Congratulations to **Alison Neilson** a DRCT Post-Doc under supervision of Rosalina Gabriel and Ana Arroz.

At https://www.sensepublishers.com/product_info.php?manufacturers_id=13&products_id=548&osCsid=5f7cce6dd6c5c152880003bd4bdb2881 you can find a free preview as well as an order form to buy the book

2) On the October 3, the book “*A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos*” was officially presented in Funchal (Madeira, Portugal), in a ceremony with the Regional Secretary of the Environment of Madeira.

I will be glad to offer a book to group members interested in this subject:

Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Carvalho, P., Jardim, R., Melo, I., Oliveira, P., Sérgio, C., Serrano, A.R.M. & Vieira, P. (eds.) (2008). *A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos*. Direcção Regional do Ambiente da Madeira and Universidade dos Açores, Funchal and Angra do Heroísmo. 438 pp.

3) On October 6, during the Anniversary of the Department of Agrarian Sciences of the University of the Azores, the Rector of the University of the Azores officially presented the book of **Nídia Homem** and **Rosalina Gabriel**, “Azorean rare bryophytes”. The book is available to purchase

(<http://www.webboom.pt/ficha.asp?ID=187590>). **The authors will also be glad to offer a book to group members interested in this subject.**

Homem, N. & Gabriel, R. (2008). *Briófitos raros dos Açores / Azorean Rare Bryophytes*. Principia, Oeiras. 96 pp.

4) The book

Martín, J.L, Arechavaleta, M., **Borges, P.A.V.** & Faria, B. (eds.) (2008) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias, 500 pp.

was officially presented in the Azores during the “Jornadas Técnicas do Projecto BIONATURA” (Ponta Delgada, 17th and 18th October).

I will be glad to offer a book to group members interested in this subject.

PROJECTS

- 1) **Alison L. Neilson**, together with **Rosalina Gabriel** and **Ana Moura Arroiz** were recently awarded a grant of circa 25.000 Euros from DRCT (Azores, Portugal) to perform the project “*Perspectivas sobre o mar e a vida marinha: Cetáceos e turismo nos Açores, Portugal e Newfoundland, Canadá*”. This project will explore the perspectives about sea, whales and whale-watching in the Azores and in Canada and it involves several research groups in different parts of the world.
- 2) **Pedro Cardoso** together with **Paulo Borges** were recently awarded a grant of 25.000 Euros from DRCT (Azores, Portugal) to perform the project “*Consequências das alterações de uso de solo na fauna de artrópodes dos Açores - Objectivo 2010*”. They will sample several habitats using the BALA protocol in the islands of Flores, Faial and S. Maria.

PAST AND FUTURE EVENTS – Oral and poster Communications

1. Three oral presentations were made by **Paulo Borges, Rosalina Gabriel** and **Pedro Cardoso** during the “Jornadas Técnicas do Projecto BIONATURA” (Ponta Delgada, 17th and 18th October):
 - a. “A biodiversidade do arquipélago dos Açores. Análise e discussão da listagem de espécies”: *Paulo A. V. Borges*
 - b. “Apresentação da Página Web www.azoresbioportal.angra.uac.pt on line”: *Rosalina Gabriel*
 - c. A Lista Top 100 do arquipélago dos Açores: *Pedro Cardoso*

2. **Ana Santos** (PhD student at Imperial College under the co-supervision of Donald Quicke and Paulo Borges) participated recently in the following events:
 - a) XXIII International Congress of Entomology (Durban, South Africa), where she presented a poster entitled “Which island parasitoid faunas are evenly sampled? A case study using the Taxapad database on Ichneumonoidea (Hymenoptera)”.
 - b) British Ecological Society Meeting (London, UK), where she presented a poster entitled “Species area curves from entire archipelagos are congruent with those of their constituent islands”.

3. **Pedro Cardoso** and **Isabel Amorim** participated in May in the I jornadas Científicas de Espeleologia, Maciço Calcário Estremenho, Leiria, Portugal 1-4 Maio 2008 with the following oral presentations:
 - a) **I.R. Amorim & P.A.V. Borges**, Biodiversidade das Cavidades Vulcânicas dos Açores.
 - b) **P. Cardoso** "Anapistula - Protegendo espécies troglóbias europeias de aranhas - O caso de estudo de uma nova espécie de Sinfitognátídeo em Portugal

4. **Maria Teresa Ferreira** (Ph.D. student in Entomology at the University of Florida under the co-supervision of Rudolf Scheffrahn and Paulo Borges) participated in the following events:
 - a) 2008 National Conference on Urban Entomology (Tulsa, Oklahoma, U.S.A.), where she gave an oral presentation on the subject “Efficacy of chlorpenapyr-treated wood to prevent colonization by dealates of the West Indian drywood termite, *Cryptotermes brevis*.”
 - b) 2008 Florida Entomological Society Meeting (Jupiter, Florida, U.S.A.), where she gave an oral presentation on the subject “Dispersal behavior of the West Indian drywood termite *Cryptotermes brevis* (Walker)” achieving the 3rd place in the Student Competition.

5. **Silvia C. Aranda** (Ph.D. in Plant Ecology by the University of Azores under supervision of Rosalina Gabriel, Jorge Lobo and Paulo Borges) participated in September in the following events:
 - a) V Congreso Nacional de Biogeografía (Málaga, Spain). She presented a lecture entitled “La naturaleza incierta de los modelos de distribución”
 - b) Workshop “Multivariate Statistical Modelling of Ecological Data” (Madrid, Spain), where she learnt common techniques applied in Ecology by using R software.

6. **Paulo A. V. Borges, Kostantinos Triantis** and **Ana Santos** will participate in January 2009 in the Fourth Biennial Meeting of the International Biogeography Society (8-12 January, Merida, Mexico). They will present the following Posters:
 - a) **Santos, A., Hortal, J., Triantis, K.A., Jones, O.R., Borges, P.A.V. & Quicke, D.L.J.** (2009). Global patterns in the niche width of island parasitoids.

 - b) **Triantis, K.A., Borges, P.A.V., Ladle, R.J., Mendonça, E., Gaspar, C., Dinis, F., Melo, C., Santos, A.M.C., Amorim, I.R., Cardoso, P., Hortal, J., Gabriel, R., Ribeiro, S.P., Serrano,**

A.R.M., Quartau, J.A. & Whittaker, R.J. (2009). Catastrophic extinction debt on oceanic islands.

c) **Borges, P.A.V.**, Ribeiro, S.P., Ugland, K.I. & **Gaspar, C.** (2009). Insect and spider rarity in island tree canopies: true rare and pseudo-rare species.

d) **Borges, P.A.V.**, Boieiro, M., **Cardoso, P.**, Aguiar, C., Rego, C., **Gaspar, C.**, **Amorim, I.**, **Ribeiro, S.P.**, Silva, I., Pereira, F. & Serrano, A.R.M. (2009). Comparing patterns of diversity and abundance of ground-beetles in the Laurisilva of Azores and Madeira archipelagos.

7. **Rosalina Gabriel** and **Ana Arroz** will participate in January 2009 in the “10º Congresso de Psicologia Ambiental: Comportamento humano e alterações globais” (Lisbon, Fundação Calouste Gulbenkian, 28-30 January 2009). They will present the following oral presentations:

a) **Gabriel, R.**, Silva, A. C., **Borges, P. A. V.** & **Arroz, A. M.** Conservação da biodiversidade: atitudes das crianças acerca dos invertebrados no âmbito de um projecto do 1º CEB.

b) **Gabriel, R.**, **Arroz, A. M.**, **Neilson, A. L.** & Rodrigues, L. C. O Ambiente não é qualquer coisa!: diversidade de perspectivas das crianças.

c) Ávila, S., **Arroz, A. M.** & Gabriel, R.. Em defesa do ambiente! – uma análise de conteúdo de medidas propostas por alunos do 2º Círculo do Ensino Básico.

d) Rodrigues, L. C., **Arroz, A. M.**, & **Gabriel, R.** O ambiente no futuro: Representações e preocupações de crianças terceirenses

PAST EVENTS – Leaflet publication

1. The leaflet “*Portal Biodiversidade dos Açores – www.azoresbiportal.angra.uac.pt ”*, included in the BIONATURA project, is going to be distributed to all Azorean Schools. We thus hope to reach more teachers and students and receive feedback from their needs in order to improve the site.

See the PDF of the Leaflet online at the News section of the Azorean Biodiversity Portal.

EDUCATION AND COURSES ORGANIZATION

1. **Ana Simões** is organizing Small Courses for the general public in Agro-Environmental subjects. The first course was on Floral Arts and occurred on the 25th of October under the coordination of Sr D. Beatriz Bigotte Chorão. On the 24th of January 2009 there will be a course on Plant Propagation and on the 18th of April a Course on Biological Horticulture.
2. The second edition of the “Mestrado em Educação Ambiental”, under the coordination of **Ana Moura Arrozo**, has just finished the post-graduation year. Sixteen students, in three Islands: São Jorge, São Miguel and Terceira, 14 decided to continue their studies in order to receive a M.Sc. title. Their thesis project and supervisors coordination will be appreciated next week on the Scientific Councils of “Departamento de Ciências Agrárias” and “Departamento de Ciências da Educação”.

THE MEMBERS WHEREABOUTS AND THEIR ACTIVITIES

- 1) The two new group members , the Post-Docs Dr. **Andrés Baselga** and Dr. **Kostantinos Triantis** (FCT fellows), already visited us at Terceira to deal with all the documentation necessary for their contract:
-Andrés Baselga will start here at DCA in January 2009.

-Kostantinos Triantis will start here at DCA in December 2008.

- 2) **Alison L. Neilson** (Post-Doc DRCT – under the co-supervision of Rosalina Gabriel and Ana Arroz) spoke about and sought research collaborators for EDUMAR at the Annual meeting of the Canadian Association for Environmental Education and Communications, EECOM, in Gros Morne, Newfoundland, Canada, Sept 24 to 27 2008.
- 3) **Kostantinos Triantis** (Post-Doc FCT – under the co-supervision of Paulo Borges and Robert Whittaker) received a Visitors Research Grant and is visiting Joaquín Hortal and Ana Santos at NERC Centre for Population Biology, Imperial College London (Silwood Park, U.K.) during November 2008.
- 4) **Isabel Amorim** (Post-Doc FCT – under the co-supervision of Paulo Borges and Brent Emerson) spent the last month actively sampling *Hipparchia* specimens in mainland Portugal, successfully sampling the four species occurring at Portugal. She will be doing Laboratory Work in Lisbon isolating DNA, and then will move to University of East Anglia(U.K.), to the laboratory of Brent Emerson, for sequencing and analysing data (January-May 2009). We hope to have her here at Terceira again in the Summer of 2009.
- 5) **Pedro Cardoso** (Post-Doc DRCT – under the co-supervision of Paulo Borges, Rosalina Gabriel and Jorge Lobo) was at Porto Santo (Madeira, Portugal) sampling endemic Tarantulas (*Hogna* spp.) under a contract with the Madeira Government to perform the monitoring of those endemic spiders at the Golf Course of Porto Santo. He was also at Copenhagen during two weeks with an EU Synthesis Grant: “Taxonomy and conservation of a new species of *Anapistula* (Araneae, Symphytognathidae)”. He is currently at Terceira.
- 6) **Pedro Cardoso** also gave an interesting interview to the Portuguese TV channel SIC, about the new *Anapistula* species he found in a cave at Serra da Arrábida, Portugal. Please look at.

<http://sic.aeiou.pt/online/scripts/2007/videopopup2008.aspx?videoid={6CE50545-C045-4FF3-A206-CC01213D06BB}>

- 7) **Joaquín Hortal** (past Post-Doc of the group and currently at the NERC Centre for Population Biology, Imperial College London) has been appointed for a 5-year postdoctoral position on ‘Macroecology and Biodiversity’ at the Centro de Biologia Ambiental of the University of Lisbon, under the Portuguese FCT Ciência2008 scheme. He will probably move from the Imperial College by autumn next year. **Congratulations to him!**

- 8) **Ana Santos** (Ph.D. student at Imperial College under the co-supervision of Donald Quicke and Paulo Borges) just completed her Masters degree at the University of London (Imperial College) with the project **Ecology, biogeography and evolution of parasitic wasps (Hymenoptera, Parasitica) on islands**. She is currently finishing the paper “Are species-area relationships from entire archipelagos congruent with those of their constituent islands?”, that will be probably submit to *Global Ecology and Biogeography*. She is also doing laboratory work at Silwood Park (Imperial College London) isolating DNA from specimens collected in the Canary Islands.

- 9) **Maria Teresa Ferreira** (Ph.D. student in Entomology at the University of Florida under the co-supervision of Rudolf Scheffrahn and Paulo Borges) just completed her Masters degree at the University of Florida on “Dispersal flight, post flight behaviour, and early colony development of the West Indian drywood termite *Cryptotermes brevis* (Walker) (Isoptera: Kalotermitidae)”. She is now a Ph.D. student under the co-supervision of Dr. Rudolf Scheffrahn and Dr. Paulo Borges continuing her work with *C. brevis* in finding new and better control mechanisms for this species with application to the Azores situation.

- 10) **Sílvia Calvo** (Ph.D. student in Plant Ecology at the University of the Azores under the co-supervision of Rosalina Gabriel, Jorge Lobo and Paulo Borges) is currently sampling bryophytes in Terceira, and next month she will start with their identification at the laboratory. Rosalina Gabriel is going with her to the most difficult localities at natural forests, and other members of the group are helping her with their field experience and knowledge (e.g. Fernando Pereira; João Moniz and Paulo Borges). **Sílvia Calvo** will return to the Museo Nacional

de Madrid on December, where she would like to carry out her own ideas of data analyses supervised and encouraged by their PhD co-director Jorge M. Lobo.

- 11) **Catarina Melo** (Ph.D. in Ecology by the University of Coimbra under supervision of Helena de Freitas and Paulo Borges) is currently finalising her experimental work and starting the writing of her thesis. She is now performing the last experiment: **Interactions between arbuscular mycorrhizal fungi and foliar-feeding insects (*Pseudaletia unipuncta*, Lepidoptera: Noctuidae) in *Holcus lanatus***. She wants to compare in laboratory conditions the growth of larvae of the generalist foliar-feeding insect, *Pseudaletia unipuncta* (Haworth) (Lepidoptera: Noctuidae) in mycorrhized and non-mycorrhized plants (*Holcus lanatus*).
- 12) **Enésima Mendonça** (Research Student of Project BIONATURA), is encharged of photographing arthropods with the Syncroscopy Software to post them in the Azorean Biodiversity portal www.azoresbioportal.angra.uac.pt
- 13) **João Moniz** was awarded a grant from CITA-A to work another four months (October 2008-January 2009) on the Entomoteca “Arruda Furtado”. He is sorting and identifying morphospecies of arthropods of Pitfall and Canopy samples taken in several Azorean islands (Terceira, Flores and Corvo).
- 14) **Nídia Homem** applied to a CITA-A grant in order to continue the identification of Azorean bryophytes, recently collected in Flores and Terceira islands.
- 15) **Clara Gaspar** (past PhD student of the group on arthropod diversity and conservation planning, currently manager of the Science Centre of Angra do Heroísmo in Terceira, DRCT) is now interested in the area of science communication to the general public. She is at the moment writing and giving guidance to co-authors contributing for the book “Azores - a natural portrait” by Cardoso P, Gaspar C, Borges PAV, Gabriel R et al.), a photographic book for the general public about the natural patrimony of the Azores (mainly supported by CITA-A and a Grant of DRCT, to be printed at March/April of next year).

PUBLICATIONS

Summary of the 2008 production of the Group:

PUBLICATIONS PUBLISHED JUST IN 2008 (n= 38)

INTERNATIONAL PEER REVIEWED PAPERS: 5

BOOKS: 3

BOOK CHAPTERS: 24

OTHER PEER REVIEWED PAPERS: 2

PROCEEDINGS OF SYMPOSIA: 4

INTERNATIONAL PEER REVIEWED PAPERS

Borges, P.A.V. & Wunderlich, J. (2008). Spider biodiversity patterns and their conservation in the Azorean archipelago, with description of new taxa. *Systematics and Biodiversity* **6**: 249-282.

Cardoso, P., Gaspar, C., Pereira, L.C., Silva, I., Henriques, S.S., Silva, R.R. & Sousa, P. (2008). Assessing spider species richness and composition in Mediterranean cork oak forests. *Acta Oecologica*, **33**: 114-127.

Cardoso, P., Scharff, N., **Gaspar, C.,** Henriques, S.S., Carvalho, R., Castro, P.H., Schmidt, J.B., Silva, I., Szüts, T., Castro, A. & Crespo, L.C. (2008). Rapid biodiversity assessment of spiders (Araneae) using semi-quantitative sampling: a case study in a Mediterranean forest. *Insect Conservation and Diversity*, **1**: 71-84.

Soares, A.O., Borges, I., **Borges, P.A.V.,** Labrie, G. & Lucas, E. (2008). *Harmonia axyridis*; What will stop the invader? *BioControl*, **53**: 127-145.

Triantis, K.A., Nogués-Bravo, D., **Hortal, J., Borges, P.A.V.,** Adersen, H., Fernández-Palacios, J.M., Araújo, M.B. & Whittaker, R.J. (2008). Measurements of area and the (island) species–area relationship: new directions for an old pattern. *Oikos*, **117**: 1555-1559.

BOOKS

- Borges, P.A.V.**, Abreu, C., Aguiar, A.M.F., Carvalho, P., Jardim, R., Melo, I., Oliveira, P., Sérgio, C., Serrano, A.R.M. & Vieira, P. (eds.) (2008). *A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos*. Direcção Regional do Ambiente da Madeira and Universidade dos Açores, Funchal and Angra do Heroísmo. 438 pp.
- Homem, N. & Gabriel, R.** (2008). *Briófitos raros dos Açores*. Principia, Oeiras. 96 pp.
- Martín, J.L, Arechavaleta, M., **Borges, P.A.V.** & Faria, B. (eds.) (2008) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias, 500 pp.

BOOK CHAPTERS

- Borges, P.A.V. & Mendonça, E.** (2008). **Ficha de espécies: Calathus lundbladi Colas1938**. In: J. L Martín,. M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. pp 170-171. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.
- Borges, P.A.V. & Mendonça, E.** (2008). **Ficha de espécies: Thalassophilus azoricus Oromí & Borges, 1991** In: J. L Martín,. M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. pp 202-203. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.
- Borges, P.A.V.** (2008). **Ficha de espécies: Cixius cavazoricus Hoch, 1991**. In: J. L Martín,. M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia*. pp 174-175. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.
- Borges, P.A.V.** (2008). **Ficha de espécies: Gietella faialensis Menier & Constantín, 1988**. In: J. L Martín,. M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP*

100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia. pp. 180-181. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.

Borges, P.A.V. (2008). **Ficha de espécies: Macarorchestia martini Stoch, 1989.** In: J. L Martín, M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia.* pp. 186-197. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.

Borges, P.A.V. (2008). **Ficha de espécies: Pseudoblothrus oromii Mahnert, 1990.** In: J. L Martín, M. Arechavaleta, P.A.V. Borges & B. Faria, (eds.) *TOP 100 - As cem espécies ameaçadas prioritárias em termos de gestão na região europeia biogeográfica da Macaronésia.* pp. 196-181. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias.

Borges, P.A.V. (2008). **Preliminary list of the terrestrial flatworms and earthworms (Platyhelminthes and Annelida) from the archipelagos of Madeira and Selvagens.** In: Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Carvalho, P., Jardim, R., Melo, I., Oliveira, P., Sérgio, C., Serrano, A.R.M. & Vieira, P. (eds.). *A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos.* pp. 209-212, Direcção Regional do Ambiente da Madeira and Universidade dos Açores, Funchal and Angra do Heroísmo.

Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Boieiro, M., Jardim, R., Melo, I., Sequeira, M.M., Sérgio, C., Serrano, A.R.M. & Vieira, P. (2008). **Appendix 1. List of problematic species.** In: Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Carvalho, P., Jardim, R., Melo, I., Oliveira, P., Sérgio, C., Serrano, A.R.M. & Vieira, P. (eds.). *A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos.* pp. 377-382 Direcção Regional do Ambiente da Madeira and Universidade dos Açores, Funchal and Angra do Heroísmo.

Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Carvalho, P., Fontinha, S., Jardim, R., Melo, I., Oliveira, P., Sequeira, M.M., Sérgio, C., Serrano, A.R.M., Sim-Sim, M. & Vieira, P. (2008). **Description of the Madeira and Selvagens archipelagos terrestrial and freshwater biodiversity.** In: Borges, P.A.V., Abreu, C., Aguiar, A.M.F., Carvalho, P., Jardim, R., Melo, I., Oliveira, P., Sérgio, C., Serrano, A.R.M. & Vieira, P. (eds.). *A list of the terrestrial fungi, flora and fauna of Madeira and Selvagens archipelagos.* pp. 13-26, Direcção Regional do

Ambiente da Madeira and Universidade dos Açores, Funchal and Angra do Heroísmo.

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BOOK CHAPTERS: 17

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Other News

1. The paper **Borges, P.A.V. & Hortal, J.**, (in press). Time, area and isolation: Factors driving the diversification of Azorean arthropods. *Journal of Biogeography* DOI: 10.1111/j.1365-2699.2008.01980.x , will be the **Highlight Paper** of the next number of *the Journal of Biogeography*!

It is already Available online at

<http://www3.interscience.wiley.com/journal/121403376/abstract>

2) The following papers were submitted during the last month:

Jiménez-Valverde, A., Diniz, F. Azevedo, E.B. & **Borges, P.A.V.** (subm). Species distribution models do not account for abundance: the case of arthropods in Terceira Island. *Acta Oecologica*.

Albano, S., Chagnon, M., de Oliveira D., Houle, E., Thibodeau, P.O., and Mexia A. (subm). Effectiveness of *Apis mellifera* and *Bombus impatiens* as dispersers of the Rootshield® biofungicide (*Trichoderma harzianum*, strain T-22) in strawberry crop. *Hellenic Plant Protection Journal*.

Albano, S., Salvado, E., Borges, P.A.V. and Mexia A. (subm). Floral visitors, their frequency, activity rate and Index of Visitation Rate in the strawberry fields of Ribatejo, Portugal: selection of potential pollinators (part 1). *Spanish Journal of Agricultural Research*.

Albano, S., Salvado, E., Borges, P.A.V. and Mexia A. (subm). Pollination rate resulting from a single visit of different strawberry floral visitors in Ribatejo, Portugal: selection of potential pollinators (part 2). *Spanish Journal of Agricultural Research*.

The manuscript **Hortal, J., Triantis, K.A., Meiri, S., Thébault, E. & Sfenthourakis, S.** “Island species richness does increase with habitat diversity: a critique of Kadmon and Allouche (2007)” that was initially sent as a note to *American Naturalist* has been rejected as such but suggested to be extended and submitted as a regular research paper.

1. The following papers were accepted for publication during the last month:
 - a. González-Mancebo, J., Patiño, J., Werner, O., **Gabriel, R.** & Ros, R. M. Distribution patterns of *Leucodon* species in Macaronesia, with special reference to the Canary Islands. *Cryptogamie*.

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