

REPORT OF THE AZOREAN BIODIVERSITY GROUP GBA-CE3C

[2024]

Angra do Heroísmo e Ponta Delgada, 7 de fevereiro de 2025

 CHANGE



REPORT OF THE AZOREAN BIODIVERSITY GROUP GBA-CE3C [2024]

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SCIENTIFIC AREA: NATURAL SCIENCES

SCIENTIFIC SUB-AREA: BIOLOGICAL SCIENCES

HOME INSTITUTION: UNIVERSIDADE DOS AÇORES

FCT AFFILIATION: CENTER FOR ECOLOGY, EVOLUTION AND ENVIRONMENTAL CHANGES (CE3C/GBA)

[ANGRA DO HEROÍSMO & PONTA DELGADA, FEBRUARY 7, 2025]

Index

I-Executive summary	6
II-Sumário executivo.....	7
III-Abbreviations	8
1-RESEARCH GROUP DESCRIPTION AND ACHIEVEMENTS IN 2024	9
1.1-Introduction	9
1.2-Members in 2024	11
1.2.1-Integrated members with Ph.D. (13)	11
1.2.2-Post-Docs (5)	12
1.2.3-Other members	12
1.2.4-Associate Research Fellows (External Collaborators) (23):	13
1.3- M.S.C. and Ph.D. Students who completed their thesis in 2024	14
2-PROJECTS RUNNING IN 2024	16
2.1-Research projects and study grants	16
2.2-Research contracts	18
3-PUBLICATIONS IN 2024	19
Summary data on publications.....	19
Number OF publications by integrated members in 2024 (Total = 363)	19
Number of publications by associate research fellows in 2024 (Total = 11)	19
Publication achievements in 2024.....	19
Detailed outputs of publications per researcher in 2024.....	20
Comparison of publication rate in the past years	22
4-OUTREACH ACTIVITY IN 2024.....	25
4.1-Scientific Outreach in 2024	25
4.2-Public awareness activities in 2024.....	26
4.3-Web-based resources running in 2024	30
APPENDIX 1. DETAILED INFORMATION OF RESEARCH PROJECTS	31
INTERNATIONAL PROJECTS (23)	31
Start: 2024. Funded by European funds.....	31
Start: 2023. Funded by European funds.....	32

Start: 2022. Funded by European funds.....	33
Start: 2021. Funded by European funds.....	34
Start: 2020. Funded by European funds.....	34
Start: 2019. Funded by European funds.....	34
Start: 2017. Funded by European funds.....	34
Start: 2016. Funded by European funds.....	35
Start: 2015. Funded by European funds.....	35
Start: 2014. Funded by European funds.....	35
Start: 2009. Funded by European funds.....	36
Start: 2008. Funded by European funds.....	36
NATIONAL PROJECTS (2).....	36
Start: 2023. Funded by FCT (Portuguese Science Foundation)	36
Start: 2022. Funded by FCT (Portuguese Science Foundation)	36
REGIONAL PROJECTS (7)	37
Start: 2024. Funded by DRCT (Azorean Science Foundation).....	37
Start: 2022. Funded by DRCT (Azorean Science Foundation).....	37
Start: 2021. Funded by DRCT (Azorean Science Foundation).....	38
APPENDIX 2. DETAILED INFORMATION OF SERVICE ACQUISITION (3).....	39
Start: 2023.....	39
Start: 2022.....	39
Start: 2020.....	39
APPENDIX 3. DETAILED INFORMATION OF PUBLICATIONS	40
ARTICLES IN SCI JOURNALS (WITH IMPACT FACTOR).....	40
2024. SCOPUS Papers written by at least one integrated member (n=59)	40
2024. SCOPUS Papers written by associate research fellows only (n=11)	45
BOOKS	46
2024. Books written or edited by at least one integrated member (n=4)	46
BOOK CHAPTERS.....	47
2024. Book chapters written by at least one integrated member (n=268).....	47
NATIONAL AND INTERNATIONAL PEER REVIEWED PAPERS (NO IMPACT FACTOR)	69
2024. Peer-reviewed papers written by at least one integrated member (n=6)	69
OUTREACH PUBLICATIONS	70

2024. Papers in periodicals written by AT LEAST ONE INTEGRATED MEMBER (N=10)	70
TECHNICAL REPORTS	70
2024. Technical reports written by at least one integrated member (n=1)	70
OTHER TYPE OF PUBLICATIONS.....	70
2024. Datasets published by at least one integrated member (n=12)	71
2024. Newsletters published by at least one integrated member (n=1)	72
2024. Preprints published by at least one integrated member (n=2)	72
APPENDIX 4. SCIENTIFIC MEETINGS: ORGANIZATION and PARTICIPATION	73
APPENDIX 5. SCIENTIFIC MISSIONS: ORGANIZATION and PARTICIPATION	79

Index of tables

TABLE 1. LIST OF THESIS/DISSERTATIONS, STUDENTS, SUPERVISORS, AND GRADING INSTITUTIONS SUCCESSFULLY COMPLETED IN 2024.	14
TABLE 2. NUMBER OF PUBLICATIONS PER RESEARCHER AND PUBLICATION TYPE IN 2024.	20
TABLE 3. DISTRIBUTION OF PUBLICATIONS BY TYPE PRODUCED BY GBA-CE3C INTEGRATED MEMBERS OVER THE PERIOD 2014-2024.	24
TABLE 4. OVERVIEW OF SCIENTIFIC OUTREACH ACHIEVED THROUGH EDITORIAL CONTRIBUTIONS BY GBA-CE3C MEMBERS IN 2024.....	25
TABLE 5. OVERVIEW OF PUBLIC OUTREACH ACHIEVED THROUGH EVENTS, TALKS, NEWS, AND OTHER AWARENESS CONTRIBUTIONS BY GBA-CE3C MEMBERS IN 2024.	26
TABLE 6. ORGANIZATION OF SCIENTIFIC MEETINGS FROM GBA-CE3C MEMBERS THROUGHOUT 2024.....	73
TABLE 7. PARTICIPATION IN SCIENTIFIC MEETINGS BY GBA-CE3C MEMBERS, INCLUDING ORAL PRESENTATIONS (KEYNOTE, REGULAR) AND POSTER PRESENTATIONS (WITH/WITHOUT FLASH TALKS), THROUGHOUT 2024....	74
TABLE 8. ORGANIZATION OF FIELD SCIENTIFIC MISSIONS	79

Index of figures

FIGURE 1. TOTAL FUNDS OBTAINED BY INTEGRATED MEMBERS IN PROJECTS FROM 2013 TO 2024: DIVERSE FUNDING SOURCES.....	16
FIGURE 2. TOTAL FUNDS OBTAINED IN GRANTS, MOSTLY FOR PH.D. AND POST-DOC PURPOSES, FROM 2013 TO 2024: DIVERSE FUNDING SOURCES.	17
FIGURE 3. TOTAL FUNDS OBTAINED IN PROJECTS AND GRANTS FROM 2013 TO 2024.....	17
FIGURE 4. TOTAL NUMBER OF PUBLICATIONS PER TYPE IN 2024.....	20
FIGURE 5. TOTAL NUMBER OF PAPERS PUBLISHED IN SCI JOURNALS BY INTEGRATED MEMBERS DURING THE PERIOD 2008-2024.....	23
FIGURE 6. SUMMED IMPACT FACTOR IN JOURNALS OF THE SCI BY INTEGRATED MEMBERS IN THE PERIOD 2008-2024.	23

I-EXECUTIVE SUMMARY

In 2015 the Azorean Biodiversity Group (GBA-cE3c) was recognized by the University of the Azores as an independent 'Research and Development Centre', and in the same year, the GBA-CE3C was recognized by the Azorean Government as an independent Research Unit. At a national level, the Azorean Biodiversity Group is a sub-group of the Centre for Ecology, Evolution and Environmental Changes (CE3C) since 2013, an R&D unit awarded classified as EXCELLENT by the Foundation for Science and Technology (FCT) in December 2014 and also in 2019.

The Centre for Ecology, Evolution and Environmental Changes' main objectives are to perform research that addresses societal challenges in ecology, evolution, and the environment, the three 'Es' in the center's name. Aligned with this goal, the GBA-CE3C's mission is to produce, integrate, and communicate scientific knowledge about biodiversity in island systems, determining the effects of global changes, habitat fragmentation, and species on ecosystems, including exotic ones. Addressing societal challenges involves assessing these impacts at the environmental, agricultural, and health levels and devising strategies to minimize them by focusing on debunking beliefs and resistance among populations and promoting pro-environmental practices. The Azorean Biodiversity Group is organized in four main groups: AGRO-FOR-CARE – Agroforestry Ecology in Islands; EHI – Environmental Health on Islands; IBBC – Biodiversity, Biogeography, and Conservation in Islands; and NAT-PROD-APPL – Natural Products and Applications.

Thirty-two projects ran in 2024; 23 were supported by international funds, two by National funds and seven by regional funds. These 32 projects (some finishing in 2024) brought 461.020,36 Euros to the research group. In addition, 263.254,50 Euros were secured with Ph.D., Post Doc, and other types of grants in 2024.

In 2024, the 18 integrated members of GBA-CE3C put out 363 publications. Among these, 59 were published in international journals indexed in the Scopus System. The average Impact Factor of those 59 papers was 3.88 (max = 44.70; *Science*). Notably, half of these publications (30 out of 59; 51.0%) were classified in the first quartile of SCI publications, indicating high visibility and impact within the scientific community. Our 23 external collaborators enhanced our publication record with 11 SCI papers under the GBA-CE3C affiliation. Most GBA-CE3C group members participated in scientific outreach and science communication activities in 2024.

II-SUMÁRIO EXECUTIVO

Em 2015, o Grupo da Biodiversidade dos Açores (GBA-CE3C) foi reconhecido pela Universidade dos Açores como um Centro de Investigação e Desenvolvimento (UI&D) independente, e no mesmo ano o grupo foi reconhecido pelo Governo Regional dos Açores como uma Unidade de Investigação. A nível nacional, 2013 marca ainda o início oficial da integração do Grupo da Biodiversidade dos Açores como um subgrupo do Centro de Ecologia, Evolução e Alterações Ambientais (CE3C), classificado em dois momentos de avaliação (2014 e 2019) como EXCELENTE pela Fundação para a Ciência e Tecnologia (FCT).

O principal objetivo do Centro de Ecologia, Evolução e Alterações Ambientais é realizar investigação que aborde os desafios sociais em ecologia, evolução e ambiente, os três 'Es' no nome do centro. Alinhado com este objectivo, o GBA-CE3C tem por missão produzir, integrar e comunicar conhecimento científico sobre a biodiversidade em sistemas insulares, determinando efeitos das alterações globais, da fragmentação dos habitats e das espécies nos ecossistemas, incluindo as exóticas. Dar resposta aos desafios societais implica avaliar esses impactos ao nível do ambiente, agricultura e saúde e conceber estratégias de os minimizar focadas na desconstrução de crenças e resistências das populações e na promoção de práticas pró-ambientais.

O Grupo da Biodiversidade dos Açores está organizado em quatro sub-grupos com objetivos específicos: AGRO-FOR-CARE – Ecologia Agro-Florestal em Ilhas / “Agroforestry Ecology in Islands”; EHI – Saúde Ambiental em Ilhas / “Environmental Health on Islands”; IBBC – Biodiversidade, Biogeografia e Conservação em Ilhas / “Biodiversity, Biogeography, and Conservation in Islands”; e NAT-PROD-APPL – Produtos Naturais e Aplicações / “Natural Products and Applications.”

Trinta e dois projetos decorreram em 2024, sendo 23 apoiados por fundos internacionais, dois por fundos nacionais e sete por fundos regionais. Estes 32 projectos (alguns deles terminados em 2024) renderam cerca de 461.020,36 Euros para o grupo de investigação durante o ano em análise, ao qual se adiciona ainda um total de 263.254,50 Euros obtido em bolsas de doutoramento, pós-doutoramento e outros tipos de bolsas.

Durante o ano de 2024 os 18 membros integrados do GBA-CE3C publicaram 363 trabalhos científicos. Destes, 59 foram publicados em revistas internacionais reconhecidas e indexadas no Sistema Scopus. O Fator de Impacto médio dos 59 artigos foi de 3.88 (max = 44.70; *Science*). Cerca de metade das publicações SCI (30 em 59; 51.0%) foram classificadas no primeiro quartil SCI, indicando alta visibilidade e impacto dentro da comunidade científica. Também em 2024, os 23 colaboradores externos do GBA-CE3C contribuíram, entre outras, com mais 11 publicações indexadas no sistema SCI.

A interação entre os investigadores do GBA-CE3C e outros parceiros é altamente valorizada, e quase todos os membros do grupo estiveram envolvidos em atividades de divulgação científica e comunicação científica em 2024.

III-ABBREVIATIONS

Ce3c – *Centre for Ecology, Evolution and Environmental Change/Centro de Ecologia, Evolução e Alterações Ambientais*

DRAM – Direção Regional de Políticas Marítimas

DRCID- Direção Regional da Ciência, Inovação e Desenvolvimento

FCAA-DCA – Faculdade de Ciências Agrárias e do Ambiente – Dep. De Ciências Agrárias

FCAA-DCEA – Faculdade de Ciências Agrárias e do Ambiente – Dep. De Ciências e Engenharia do Ambiente

FCSH-DP – Faculdade de Ciências Sociais e Humanas – Dep. De Psicologia

FCT – Fundação para a Ciência e a Tecnologia

FCT-DB – Faculdade de Ciências e Tecnologia – Dep. De Biologia

FCT-DCFQE – Faculdade de Ciências e Tecnologia – Dep. De Ciências da Física, Química e Engenharia

FRCT- Fundo Regional da Ciência e Tecnologia

GBA – *Azorean Biodiversity Group /Grupo da Biodiversidade dos Açores*

IF – *Impact Factor/Factor de Impacto (Scopus System)*

LNEC – *National Laboratory of Civil Engineering/Laboratório Nacional de Engenharia Civil*

R&D unit – Research and Development Unit / Unidade de Investigação e Desenvolvimento

RCE – Regional Centre of Expertise on Education for Sustainable Development / Centro Regional de Excelência

SCI – Science Citation Index

UAc – *University of the Azores/Universidade dos Açores*

UN – United Nations/ Nações Unidas

1-RESEARCH GROUP DESCRIPTION AND ACHIEVEMENTS IN 2024

1.1-INTRODUCTION

The Azorean Biodiversity Group (GBA-CE3C) has been a key research institution in island biodiversity since 2004. The 18 scientists composing the Group have complementary expertise that allows them to address several recognized research issues in the inter-dependence of ecosystems and humans, improving scientific knowledge and contributing to social sustainability. The GBA-CE3C research focuses on the study of biodiversity patterns (taxonomic, functional, and phylogenetic diversity), and its changes under the impact of climatic changes, land use alterations, and species invasions, which is key for guidelines of management and conservation. Likewise, the development of communication strategies and tools for participatory risk assessment, characterization, and evaluation, aims to enhance environmental hazard governance, address climate change, and strengthen social engagement in regional nature conservation.

Over the past 17 years (2008–2024), GBA-CE3C researchers have seen steady growth and stabilization in funded projects, publications, and personnel, expanding from six integrated members in 2008 to 18 in 2024. The Group also counts twenty-three (23) international and national external collaborators who participate in several projects and publications as Associated Research Fellows.

The GBA-CE3C researchers employ an integrated approach that combines multi-spatial and temporal scales (scale has a profound effect on detecting ecological and evolutionary patterns) with multi-metric measures of biodiversity (taxonomic, functional, phylogenetic) and their inter-relationships. Due to the work over decades of biodiversity research, the group holds unique standardized databases for arthropods (BALA, ISLANDBIODIV and EDEN), bryophytes (MOVECLIM) and vascular plants (ISLANDBIODIV and MOVECLIM).

Spreading its acquired knowledge within the scientific community and the general public has always been important to the GBA-CE3C researchers. Namely, the Group is responsible for the creation/maintenance of eleven web-based resources, such as the Azorean Biodiversity Portal (<https://azoresbioportal.uac.pt/>) and IslandLab (<https://islandlab.uac.pt/>), with a high number of resources and the pedagogical podcast “Field Guide” (<https://soundcloud.com/field-guide-362856827>).

The research produced by the GBA-CE3C is crucial for wildlife conservation in Azorean natural terrestrial and marine habitats and the management of invasive species, some of which are useful for economic development. As an example, the Azorean government relied on GBA-CE3C for accurate information for the establishment of protected areas (Island Natural Parks), and the delimitation of Integrated Pest-Management and Invasive Species (PRIBES) policies. Moreover, our work on species conservation worldwide is also relevant: Approximately 550 bryophyte species, 70 fern species, 236 endemic arthropods, and seven groupers were evaluated for the IUCN Red List in the last five years. To enhance accessibility and dissemination of information for conservation concerning invertebrate species, a website was established within the framework of the IUCN SSC ATLANTIC ISLAND INVERTEBRATES SPECIALIST GROUP, co-chaired by Paulo A.V. Borges (<https://www.aiisg.net/>).

In 2015 the Azorean Biodiversity Group (GBA-CE3C) was recognized by the University of the Azores as an independent ‘Research and Development Centre’, and in the same year, the GBA-CE3C was recognized by the Azorean Government as a Research Unit. At a national level, the Azorean Biodiversity Group is a sub-group of the Centre for Ecology, Evolution and Environmental Changes (CE3C) since 2013, a research unit awarded the Classification of EXCELLENT by the Foundation for Science and Technology (FCT) in December of 2014 and 2019. Presently the management units of the CE3C group are: the University of Lisbon, the University of the Azores, the CiencialD Foundation, and the Gaspar Frutuoso Foundation. All the integrated GBA-CE3C members, plus the Ph.D. students

and collaborators, are now part of a larger research lab, the CHANGE Associate Laboratory, with 120 integrated members in which research questions will be addressed at both the mainland and insular scales.

The current report lists the main activities of the Azorean Biodiversity Group (GBA-CE3C) for 2024. Further details may also be seen on the following web pages:

Azorean Biodiversity Group GBA: <https://gba.uac.pt/>

Agroforestry Ecology (AGRO-FOR-CARE): <https://gba.uac.pt/team/AGRO>

Environmental Health in Islands (EHI): <https://gba.uac.pt/team/EHI>

Island Biodiversity, Biogeography & Conservation (IBBC): <https://gba.uac.pt/team/IBBC>

Natural products and applications (NPA): <https://gba.uac.pt/team/NPA>

1.2-MEMBERS IN 2024

The GBA-CE3C experienced steady growth in the number of funded projects, publications, and personnel over the last years, increasing from six integrated members with Ph.D. in 2008 to 18 in 2024.

Thus, in 2024 the group was composed of eighteen (18) senior researchers with Ph.D., 11 of whom held academic positions at the University of the Azores, two (2) held Research Contracts with the University of Azores under DL 57-NT (FCT), and five (5) holding post-doctoral grants: two (2) funded by FCT, one (1) funded by FRCT, one (1) funded by FEDER Açores and one (1) funded by H2020.

Furthermore, in 2024 the group included nineteen (19) Ph.D. students, of whom nine (9) were funded by FRCT, six (6) by FCT, one (1) is partially funded by DRCID, two (2) are funded by UE H2020 and one is self-funded. Additionally, the group included one (1) research grant holder, one (1) superior technician, and one (1) technician. Furthermore, twenty-three (23) Associated Research Fellows (External Collaborators) from several countries collaborate on different projects, creating a network of Island research investigators.

1.2.1-INTEGRATED MEMBERS WITH PH.D. (13)

1.2.1.1-DIRECTOR (1)

1. Rosalina Gabriel (UAc, FCAA-DCEA)
-

1.2.1.2-VICE-DIRECTOR (1)

2. Patrícia Ventura Garcia (UAc, FCT-DB)
-

1.2.1.3-OTHER SCIENTISTS WITH CONTRACT (11)

3. Ana Maria Loureiro da Seca (UAc, FCT-DCFQE)
4. Ana Moura Arroz (UAc, FCSH-DP)
5. António Onofre Soares (UAc, FCT-DB)
6. Catarina Drumond Melo (UAc, FCAA-DCA)
7. David Horta Lopes (UAc, FCAA-DCA)
8. Isabel R. Amorim (UAc, researcher hired under DL 57 FCT)
9. João Pedro Barreiros (UAc, FCAA-DCA)
10. Maria do Carmo Barreto (UAc, FCT-DCFQE)
11. Mário Boieiro (UAc, researcher hired under DL 57 FCT)
12. Paulo A.V. Borges (UAc, FCAA-DCEA)
13. Rui Bento Elias (UAc, FCAA-DCA)

1.2.2-POST-DOCS (5)

14. Catarina Isabel Marques da Fonseca (UAc, FCT-DB) Funded by H2020 (ended on May 31st, 2024)
15. Gabor Pozsgai (UAc, FCAA-DCEA) Funded by FCT (ended on November 30th, 2024)
16. Gonçalo P. da Rosa (UAc, FCT-DCFQE) Funded by Feder Acores
17. Guilherme Oyarzabal da Silva (UAc, FCAA-DCEA) Funded by FCT
18. Luís Crespo (UAc, FCAA-DCEA) Funded by FRCT

1.2.3-OTHER MEMBERS

1.2.3.1-PH.D. STUDENTS (19)

1. Alejandra Ros-Prieto (UAc, FCAA-DCEA), Funded by FRCT
2. Enésima Pereira (UAc, FCAA-DCEA), Partially Funded by DRCID (started on November 27th, 2024)
3. Hugo Renato Marques Garcia Calado (UAc, FCAA-DCEA), Funded by FRCT
4. Jailson Mendes (UAc, FCT-DB) Funded by FCT
5. Juan Pablo Cancela (UAc, FCAA-DCEA), Funded by FCT
6. Laurine Parmentier (UAc, FCAA-DCEA), Funded by FRCT (started on November 11th, 2024)
7. Lucie Fatková (Charles University, Prague, Czech Republic (started on June 12th, 2024)
8. Luís Barcelos (UAc, FCAA-DCEA), Funded by FRCT
9. Mariana Viveiros (UAc, FCT-DB), Funded by FRCT
10. Mauro Sebastião Pedro Micheu (UAc, FCAA-DCEA), Financiado pela FCT (started on December 5th, 2024)
11. Nicole Mineiro (Universidade do Porto, ICBAS), Funded by FCT
12. Rafaela de Paula Tiengo (UAc, FCT-DB), Funded by H2020 (ended on November 15th, 2024)
13. Ricardo Costa (UAc, FCAA-DCEA), Funded by FCT
14. Rui César A. Andrade (UAc, FCAA-DCEA) Funded by FCT
15. Sébastien Lhoumeau (UAc, FCAA-DCEA), Funded by FRCT
16. Sophie Wallon (UAc, FCAA-DCEA), Funded by FRCT
17. Vera da Conceição Benevides Raposo (UAc, FCT-DB), Funded by FRCT
18. Wilson Rodrigues Tavares (UAc, FCT-DB), Funded by FRCT
19. Bruna Almeida (UAc, FCT-DB), Funded by H2020 (ended on November 30th, 2024)

1.2.3.2-GANT STUDENTS (1):

1. Jéssica Garcia Uchoa (UAc, FCT-DB), Funded by H2020 (ended on May 31st, 2024)

1.2.3.3-SUPERIOR TECHNICIAN (1):

1. Enésima Pereira (UAc, FCAA-DCEA), Funded by FCT

1.2.3.4-TECHNICIANS (1):

1. Fernando Pereira (UAc, FCAA-DCEA)

1.2.4-ASSOCIATE RESEARCH FELLOWS (EXTERNAL COLLABORATORS) (23):

1. Alicia Navarro-Sempere (University of Alicante, Spain)
2. Ana Luísa Coderniz Picanço (Independent researcher, Praia da Vitória, Azores, Portugal)
3. Ana Margarida Santos (Autonomous University of Madrid, Spain)
4. Artur Gil (IVAR, Instituto de Investigação em Vulcanologia e Avaliação de Riscos, Ponta Delgada, Azores, Portugal)
5. Carolina Paula Furtado de Medeiros Parelho (DRCT, Ponta Delgada, Azores, Portugal)
6. Elisa Tarantino (Independent Researcher, Italy)
7. Filipe Bernardo (IVAR, Instituto de Investigação em Vulcanologia e Avaliação de Riscos, Ponta Delgada, Azores, Portugal)
8. François Rigal (Université de Pau et des Pays de l'Adour, France)
9. Gabor Lövei (Aarhus University, Denmark)
10. Isabel Marisa Mateus Borges (Independent researcher, Ponta Delgada, Azores, Portugal)
11. Jagoba Malumbres-Olarte (Independent researcher, Toulouse, France)
12. João Bernardo Vasconcelos Barreiros (Independent researcher, Portugal)
13. José A. P. Marcelino (University of Florida, University of Puerto Rico, USA)
14. Magdalena García (University of Alicante, Spain)
15. Márcia Catarina Mendes Coelho (Independent researcher, Angra do Heroísmo, Azores, Portugal)
16. Marco Ferrante (Georg-August-University of Göttingen, Alemania)
17. Pedro Cardoso (University of Lisbon, Portugal)
18. Rui Miguel dos Santos M. Carvalho (Independent researcher, Lisboa, Portugal)
19. Rui Miguel Ricardo Nunes (Independent researcher, Angra do Heroísmo, Azores, Portugal)
20. Tarso de Menezes Macedo Costa (Independent researcher, Azores, Portugal)
21. Thomas Matthews (School of Geography, Earth and Environmental Sciences, University of Birmingham, UK)
22. Virgílio Vieira (Independent researcher, Ponta Delgada, Azores, Portugal)
23. Yolanda Segovia (University of Alicante, Spain)

1.3- M.S.C. AND PH.D. STUDENTS WHO COMPLETED THEIR THESIS IN 2024

One (1) doctoral student and nine (9) master students completed their degrees in 2024 (Table 1).

Table 1. List of thesis/dissertations, students, supervisors, and grading institutions successfully completed in 2024.

<i>Title</i>	<i>Name</i>	<i>Program</i>	<i>Supervisors</i>	<i>Grading Institution</i>
Eco-sustainable valorization of <i>Cystoseira abies-marina</i> and <i>Caulerpa prolifera</i>	Gonçalo P. Rosa	Chemistry	Ana M. L. Seca, Maria do Carmo Barreto & Diana C. G. A. Pinto	Aveiro University
Évaluation de l'efficacité du Syrphe d'Amerique (Diptera: Syrphidae) en système de plante réservoirs par le contrôl du puceron du melon (Hemiptera: Aphididae) sur concombre de serre	Arlette Fauteux	Biology	António Onofre Soares	Quebéc University
A Natureza nas representações sobre os Açores de indivíduos com diferentes vínculos ao lugar: um estudo comparativo	Bruna Sousa Martins	Nature Management and Conservation	Isabel R. Amorim	University of the Azores
Effect of tomato agricultural production systems on the biodiversity of epigeal arthropod communities	Cecília de Jesus Soares Franco	Agricultural Engineering	António Onofre Soares	University of the Azores
Assessing arthropod species/groups as bioindicators of ecosystem health in the native forests of Terceira Island	Jaume Archillés Illa	Environment and Socio-Ecological Transition	Paulo A. V. Borges	Girona University
Arthropods of the Azorean Archipelago: conservation strategies through species distribution modeling	Marco Canino	Ecology	Paulo A. V. Borges	Calabria University

<i>Title</i>	<i>Name</i>	<i>Program</i>	<i>Supervisors</i>	<i>Grading Institution</i>
Avaliação do estado de conservação da biodiversidade da Matela - Área Protegida para a Gestão de Habitats ou Espécies da Ilha Terceira: uma abordagem multi-taxa	Mariana Aguiar Sousa	Nature Management and Conservation	Rosalina Gabriel & Paulo A.V. Borges	University of the Azores
Sustentabilidade e consumo de vestuário: uma análise comparativa dos comportamentos de aquisição, pós-compra e descarte nas gerações Baby Boomers, Geração X e Millennials em Portugal	Rafaela Alexandra Espada Almeida Pereira	Nature Management and Conservation	Ana Moura Arroz & Rosalina Gabriel	University of the Azores
Plano de Gestão da Micro-Reserva do Vale do Rio Cabrão no âmbito da Classificação de uma Área Protegida Local no Município de Estarreja	Rita Nunes	Ecology and Environmental Management	Catarina Fonseca	University of Lisbon
Alterações de Linguagem em crianças cronicamente expostas a Vulcanismo Ativo – Ilha de São Miguel (Açores)	Rute Silveira Fontes	Biomedical Sciences	Patricia Garcia	University of the Azores

2-PROJECTS RUNNING IN 2024

2.1-RESEARCH PROJECTS AND STUDY GRANTS

In 2024, there were a total of 32 projects, several concluding within that timeframe (cf. Appendix 1 and Appendix 2). Among them, 23 received funding from international sources, two were supported by national funds, and seven obtained funding from regional sources (Figure 1). These projects generated 461,020.36 Euros for the research group.

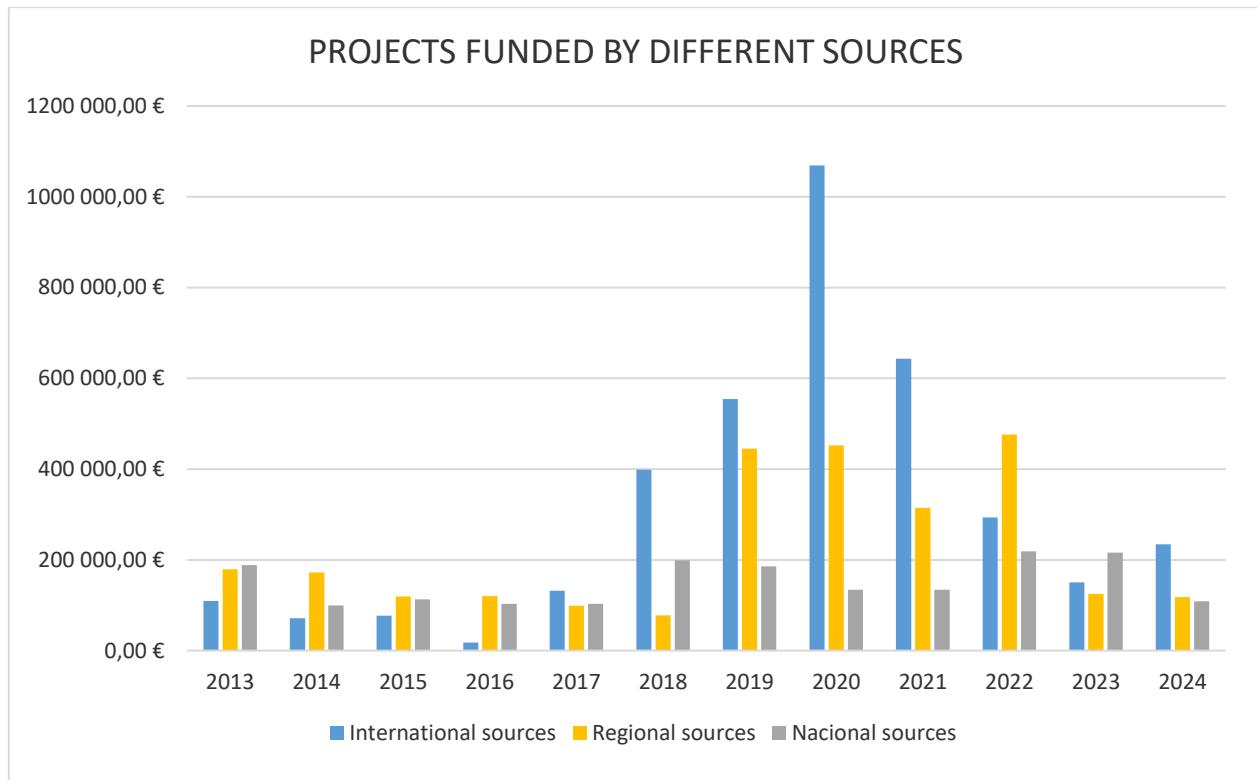


Figure 1. Total funds obtained by integrated members in projects from 2013 to 2024: Diverse funding sources.

International funding encompasses support from various programs sponsored by the European Commission, such as Biodiversa+, and other contributions coming from companies, industries, and other private entities. Additionally, it includes funds from other sources. National funding comprises multi-year funding for the R&D unit CE3C, grants from the Foundation for Science and Technology (FCT) obtained through competitive projects, and other funding streams. Regional funding sources encompass multi-year funding for the GBA-CE3C as a recognized research unit by the Azorean Government through DRCT, support from other public entities like City Councils, and additional funding opportunities.

In the period between 2013 and 2024, a large quantity of funds was obtained for Ph.D. and Post-Doc grants (Figure 2). Namely, in 2024 263.254,50 Euros were secured through various grants, including those designated for Ph.D., Post Doc, and other programs, with regional sources representing a little more than one-third of them (39.5%).

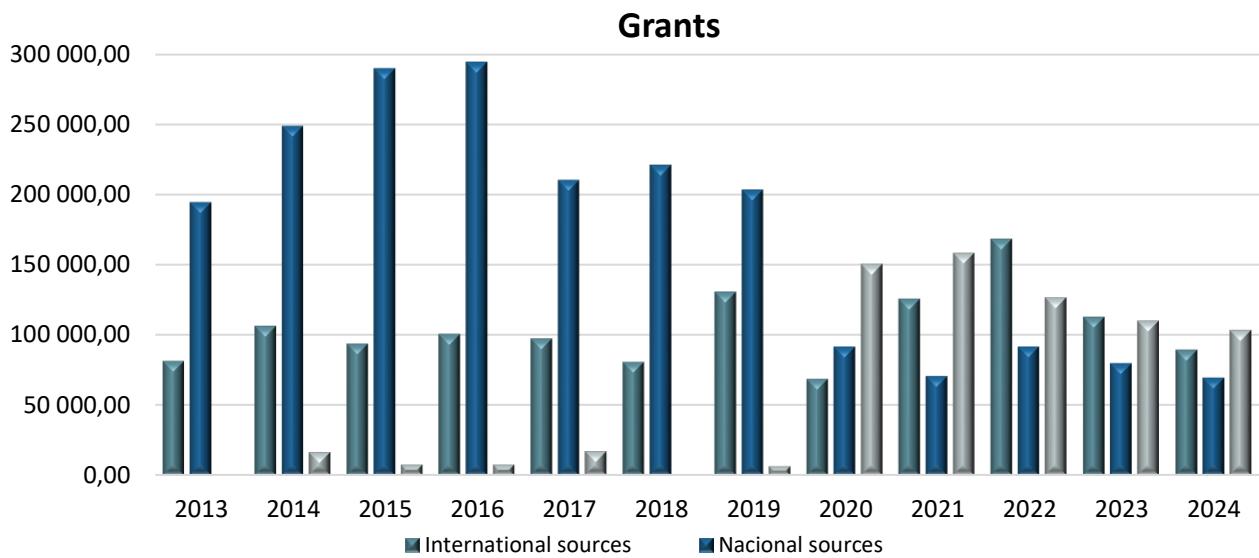


Figure 2. Total funds obtained in grants, mostly for Ph.D. and Post-Doc purposes, from 2013 to 2024: Diverse funding sources.

The analysis of global funds acquired in projects (Figure 3) indicates a trend towards a decrease in the last two years, aligning with the conclusion of the financial cycle. In contrast, grant funding has shown greater stability over the same period.

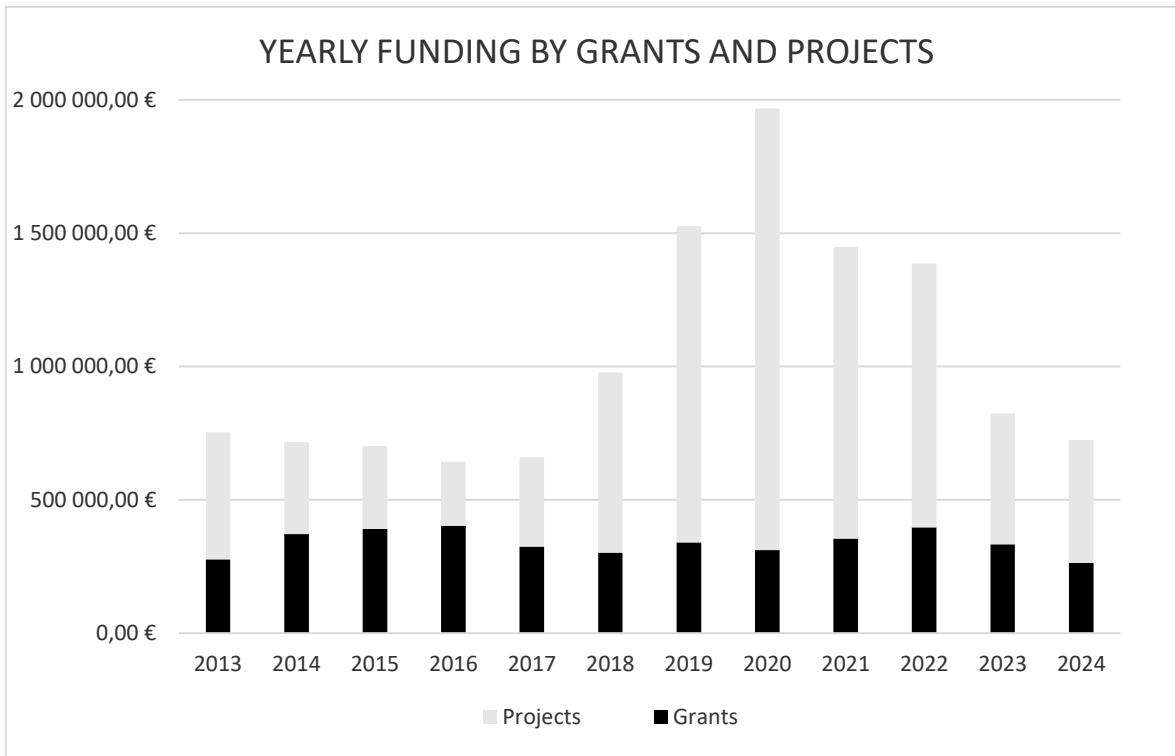


Figure 3. Total funds obtained in projects and grants from 2013 to 2024.

2.2-RESEARCH CONTRACTS

Several research contracts with national and international entities occurred in 2024. We highlight the following:

- **NATURE PARKS OF AZORES** – In 2012 we started an unprecedented collaboration with several Azorean environmental organizations to perform a Long-Term Ecological Study in the natural forest of several Azorean islands. This study is possible due to the collaboration of the Natural Park of Santa Maria, the Natural Park of Terceira, the Natural Park of Faial, the Natural Park of Pico, the Botanical Garden of Faial, and the Furnas Monitoring and Research Centre in São Miguel Island.
- **RCE Açores** – In 2009 we started the development and coordination of the UN international education network Regional Centre of Expertise on Education for Sustainable Development, accredited by the United Nations University, Institute of Advanced Studies. Among our partners we count: *Ecoteca da Ilha Terceira, Câmara Municipal de Angra do Heroísmo, Câmara Municipal da Praia da Vitória, Gabinete de Promoção Ambiental dos Açores, Museu de Angra do Heroísmo, Associação Os Montanheiros, Gê-Questa, Associação das Mulheres de Pescadores e Armadores da Ilha Terceira, Ilhas em Rede - Associação de Mulheres na Pesca nos Açores, Associação para a Defesa do Património Marítimo dos Açores, Escola Secundária Jerónimo Emiliano de Andrade, Rede de Eco-Escolas dos Açores and BioAzorica*.

3-PUBLICATIONS IN 2024

SUMMARY DATA ON PUBLICATIONS

NUMBER OF PUBLICATIONS BY INTEGRATED MEMBERS IN 2024 (TOTAL = 363)

INTERNATIONAL PEER REVIEWED PAPERS (SCI Journals) = 59

BOOKS = 4

BOOK CHAPTERS = 268

OTHER PEER-REVIEWED PAPERS = 6

EDUCATION & OUTREACH PUBLICATIONS = 10

TECHNICAL REPORTS = 1

OTHER TYPE OF PUBLICATIONS = 15

NUMBER OF PUBLICATIONS BY ASSOCIATE RESEARCH FELLOWS IN 2024 (TOTAL = 11)

INTERNATIONAL PEER REVIEWED PAPERS (SCI Journals) = 11

PUBLICATION ACHIEVEMENTS IN 2024

In 2024, the 18 integrated members published 363 works with 59 appearing in International Indexed Journals with Impact Factor (Figure 4; Appendix 3). The mean Impact Factor of these publications was 3.88, with the highest reaching 44.70 in *Science*. Half of SCI publications (30; 51,0%) were included in the first quartile, that is to say, the top 25% of journals within their categories ranked by Impact Factor, indicating greater influence and visibility within the academic community.

Additionally, it is noteworthy to mention the writing/editing of four books, 268 book chapters, 10 education and outreach publications, one technical report, six papers in peer-reviewed journals with no impact factor, and fifteen publications of other types.

In 2024, on average, each integrated Ph.D. member of the group published 20.17 publications, with 3.28 of them being SCI papers.

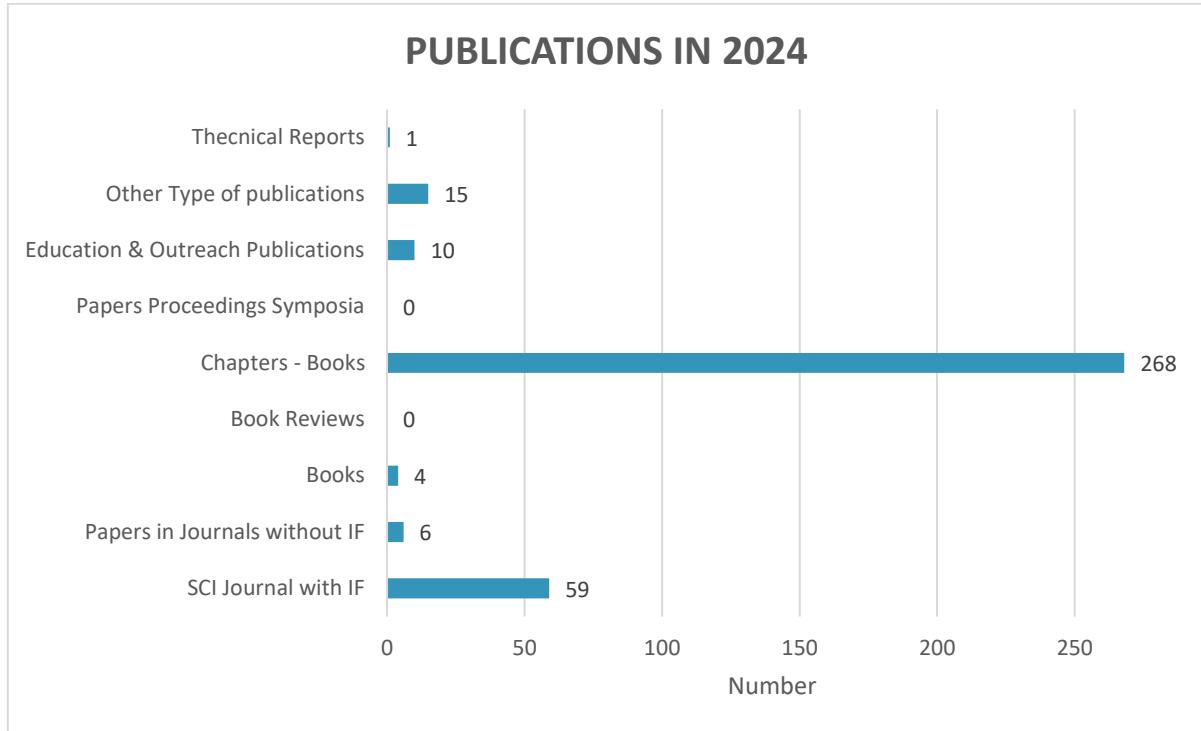


Figure 4. Total number of publications per type in 2024.

In addition to the referred 363 publications, there are an additional 11 SCI papers affiliated with the GBA (CE3C) authored by 15 of the 23 associate research fellows. All the external collaborators promote the internationalization of the GBA, the CE3C, and the University of the Azores, and increase the visibility of the group. The contribution of Thomas Matthews and François Rigal is remarkable, authoring seven SCI papers each.

DETAILED OUTPUTS OF PUBLICATIONS PER RESEARCHER IN 2024

The detailed output of publications in 2024 for each member is given in Table 2, both for integrated members and associated research fellows.

Table 2. Number of publications per researcher and publication type in 2024.

<i>Author</i>	<i>Authors Status</i>	<i>Article in SCI Journals</i>	<i>Article in non-SCI journals -</i>	<i>Book</i>	<i>Book chapter</i>	<i>Book review</i>	<i>Proceedings of Symposia</i>	<i>Other type of publications</i>	<i>Outreach Publications</i>	<i>Technical Report</i>	<i>Total</i>
Borges, P.A.V.	Uac - PI	18	5	2	6			12	3	1	47
Gabriel, R.	Uac - PI	13	1	3	56			4	1		78
Pozsgai, G.	Post_Doc	7						3			10
Soares, A.O.	Uac - PI	7						2	1		11
Amorim, I.R.	UAc - DL57	6	3					1	1		11

<i>Author</i>	<i>Authors Status</i>	<i>Article in SCI Journals</i>	<i>Article in non-SCI journals -</i>	<i>Book</i>	<i>Book chapter</i>	<i>Book review</i>	<i>Proceedings of Symposia</i>	<i>Other type of publications</i>	<i>Outreach Publications</i>	<i>Technical Report</i>	<i>Total</i>
Elias, R.B.	Uac - PI	6		1	118			2			127
Fonseca, C.	Post_Doc	5									5
Lhoumeau, S.	UAc - Ph.D. student	5		1	5			3			14
Pereira, F.	Technician	5	1					1	1		8
Boieiro, M.	UAc - DL57	4	1					3			8
Almeida, B.	UAc - Ph.D. student	3									3
Arroz, A.M.	Uac - PI	3									3
Barcelos, L.M.D.	UAc - Ph.D. student	3		1	12				1		17
Costa, R.	UAc - Ph.D. student	3						1			4
Crespo, L.	Post_Doc	3									3
Oyarzabal, G.	Post_Doc	3	1					1			5
Rosa, G.P.	Post_Doc	3									3
Barreiros, J.P.	Uac - PI	2		2	85				1		90
Barreto, M.C.	Uac - PI	2							1		3
Calado, H.R.M.G.	UAc - Ph.D. student	2						1			3
Garcia, P.V.	Uac - PI	2							1		3
Lopes, D.H.	Uac - PI	2						1			3
Ros-Prieto, A.	UAc - Ph.D. student	2						1			3
Cancela, J.P.	UAc - Ph.D. student	1			2						3
Melo, C.	Uac - PI	1									1
Neto, A.I.	Uac - PI	1						1			2
Pereira, E.	Superior Technician	1							1		2
Prestes, A.C.L.	Post_Doc	1						1			2
Seca, A.M.L.	Uac - PI	1									1
Tiengo, R.	UAc - Ph.D. student	1									1
Uchôa, J.G.	Grant Student	1									1
Wallon, S.	UAc - Ph.D. student	1									1
Raposo, V.B.	UAc - Ph.D. student								1		1
Viveiros, M.M.	UAc - Ph.D. student								1		1
Matthews, T.J.	External Collaborator	7									7
Rigal, F.	External Collaborator	7						1			8

<i>Author</i>	<i>Authors Status</i>	<i>Article in SCI Journals</i>	<i>Article in non-SCI journals -</i>	<i>Book</i>	<i>Book chapter</i>	<i>Book review</i>	<i>Proceedings of Symposia</i>	<i>Other type of publications</i>	<i>Outreach Publications</i>	<i>Technical Report</i>	<i>Total</i>
Nunes, L.	External Collaborator	4									4
Lamelas-López, L.	External Collaborator	3						2			5
Tsafack, N.	External Collaborator	3									3
Barreiros, J.B.	External Collaborator	2		1	2						5
Borges, I.	External Collaborator	2									2
Carvalho, R.	External Collaborator	2									2
Coelho, M.C.M.	External Collaborator	2						1			3
Gil, A.	External Collaborator	2									2
Malumbres-Olarte, J.	External Collaborator	2						1			3
Piasentin, F.	External Collaborator	1									1
Picanço, A.	External Collaborator	1									1
Sánchez, A.F.	External Collaborator	1									1
Silva, A.R.	External Collaborator	1									1

COMPARISON OF PUBLICATION RATE IN THE PAST YEARS

Upon analysing the number of SCI publications by the integrated GBA-CE3C members from 2008 to 2024, it is evident that the total remains consistently high (Figure 5). In 2024 the number of chapters written by GBA-CE3C integrated members stands out.

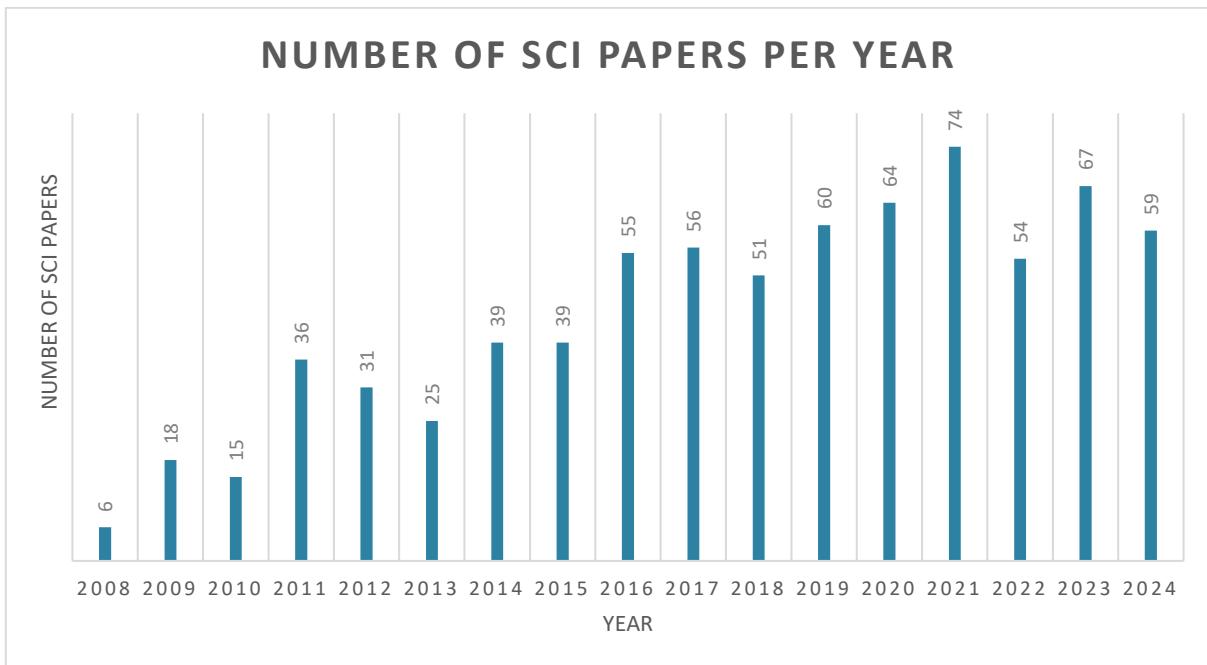


Figure 5. Total number of papers published in SCI Journals by integrated members during the period 2008-2024.

Particularly relevant is the sustained high value of Journal Impact Factors (IF) (Figure 6), demonstrating the success of integrated GBA-CE3C members in publishing their research in prestigious journals. Over time, the mean IF increased from 2.47 in 2014 to 3.88 in 2024.

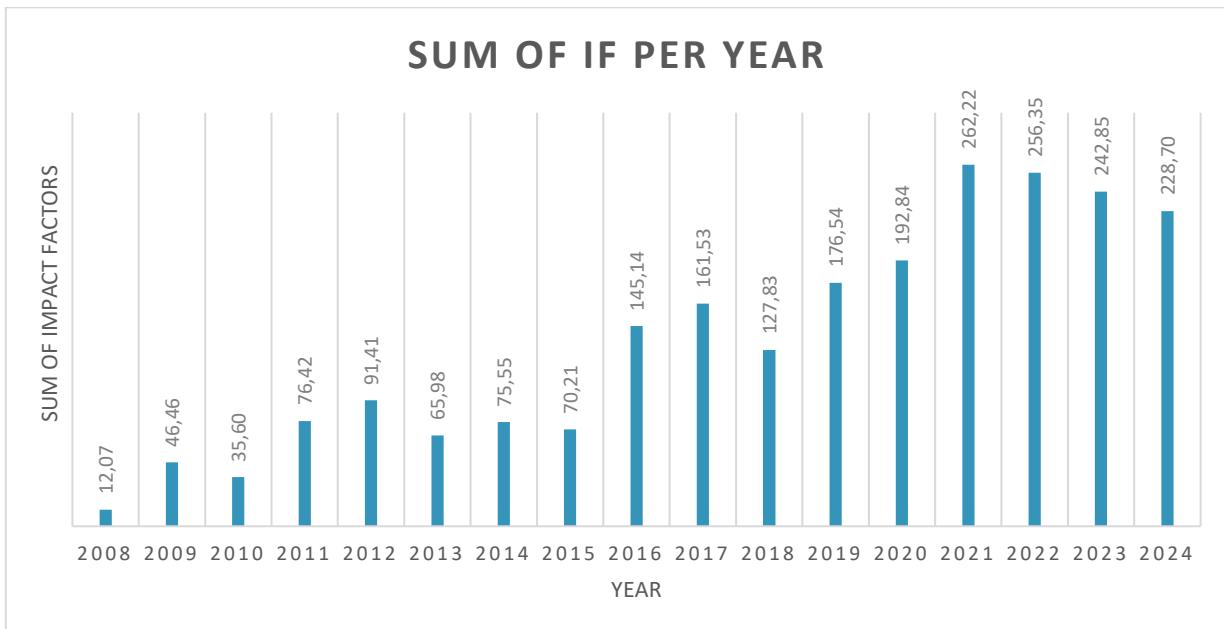


Figure 6. Summed Impact Factor in Journals of the SCI by integrated members in the period 2008-2024.

Besides the increase in papers in SCI journals, the group has also increased the number of other indicators in the last 10 years (Table 3). Over the period from 2014 to 2024, a total of 1971 publications were produced, with about a third of them (n=618; 31.35%) being articles in journals with an impact factor.

Table 3. Distribution of publications by type produced by GBA-CE3C integrated members over the period 2014-2024.

<i>Type</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>Total</i>
SCI Journal with IF	39	39	55	56	51	60	64	74	54	67	59	618
Papers in Journals without IF	13	16	16	19	15	7	11	10	8	4	6	125
Books	3	4	4	2	0	1	3	4	7	4	4	36
Book Reviews	2	1	4	0	0	1	0	0	0	1	0	9
Chapters - Books	3	4	14	9	3	9	3	3	7	145	268	468
Papers Proceedings Symposia	15	6	6	4	6	7	4	2	5	1	0	56
Education & Outreach Publications	15	2	12	7	12	9	9	8	28	11	10	123
Other Type of publications	9	5	5	60	154	106	31	92	16	11	15	504
Technical Reports	0	5	6	1	6	2	2	1	1	7	1	32
TOTAL	99	82	122	158	247	202	127	194	126	251	363	1971

4-OUTREACH ACTIVITY IN 2024

Besides serving as editors of scientific journals (cf. section 4.1), the GBA-CE3C members share their research results with other stakeholders, including managers, teachers, students, photographers, etc. This goal is reached by engaging in different initiatives and advertising them in the media (cf. section 4.2) and keeping web-based resources (cf. section 4.3) (Appendix 4).

4.1-SCIENTIFIC OUTREACH IN 2024

Table 4 details the editorial work by GBA-CE3C members in 2024. Five researchers belong to the editorial board of 12 journals while different researchers edited seven special issues of Journals of the SCI.

Table 4. Overview of scientific outreach achieved through editorial contributions by GBA-CE3C members in 2024.

<i>Editorial work</i>	<i>Journal</i>	<i>Researcher(s)</i>
Associated Editor	Boletim do Instituto de Pesca, São Paulo	João Pedro Barreiros
	Frontiers in Conservation Science	João Pedro Barreiros
Member of the Editorial Board	Applied Sciences	Ana M. L. Seca
	Diversity	João Pedro Barreiros, Paulo A.V. Borges, Rosalina GabrieL.
Guest Editor	International Journal of Molecular Sciences	Ana M. L. Seca
Invited Editor	A special issue of Agriculture (ISSN 2077-0472)	David H. Lopes
	Ndagijimana, I. (2024) Rwanda Wild Mammals – Referential Field Guide. Nature Rights Plus, Kigali. ISBN 978-99977-985-7-2	João Pedro Barreiros
Reviewing Editor	CABI Agriculture and Bioscience	David H. Lopes
	EPPO Bulletin	David H. Lopes
	Insects	David H. Lopes

<i>Editorial work</i>	<i>Journal</i>	<i>Researcher(s)</i>
	International Journal of Pest Management	David H. Lopes
	Viruses	David H. Lopes
Topic Editor	Biodiversity Data Journal	Paulo A. V. Borges, Rosalina Gabriel, António Onofre Soares, João Pedro Barreiros & Rui Bento Elias
	Diversity	Rosalina Gabriel, João Pedro Barreiros, Paulo A.V. Borges, Rui Bento Elias & António Onofre Soares
	Insects	Paulo A.V. Borges & Mário Boieiro
Topical Advisory Panel Member	International Journal of Molecular Sciences	Ana M. L. Seca

4.2-PUBLIC AWARENESS ACTIVITIES IN 2024

Almost 50 **research awareness** activities were produced in 2024, including a number of invited lectures, the coordination and presence in radio shows and in television, the publication of newspaper articles, the participation in species biodiversity conservation actions, and the invited presence in seminars and school events (Table 5).

Table 5. Overview of public outreach achieved through events, talks, news, and other awareness contributions by GBA-CE3C members in 2024.

<i>Type</i>	<i>Awareness activities</i>
Event	1. Amorim, I. R. (2024, March 8). Science communication contest "Fala Ciência? Communicating Science in the Azores - 6th Edition" [Conference presentation]. Angra do Heroísmo, Terceira, Azores, Portugal.
	2. Amorim, I. R. (2024, September 27). Facilitation of educational games on Azorean biodiversity at the event "European Researchers' Night - Macaronight Azores 2024" [Workshop]. Angra do Heroísmo, Terceira, Azores, Portugal.
	3. Amorim, I. R. (2024). Masterclass on science communication "How many C's exist in science communication?" [Lecture]. Angra do Heroísmo, Terceira, Azores, Portugal.

Type	Awareness activities
	<p>4. Amorim, I. R. (2024, May 22). Organization of outreach and public engagement activities, including citizen science [Public event]. Praça Velha, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>5. Barcelos, L. M. D. (2024). Terceira at the center of a scientific expedition. Aboard the German research vessel "Meteor," researchers from 11 institutes, including the University of the Azores, studied the hunting behavior of cetaceans using cutting-edge technology [Research expedition].</p>
	<p>6. Barreiros, J. P. (2024). 4-hour mini-course on "Scientific illustration as an important tool in marine biology," part of the XX Latin American Congress of Marine Sciences (COLACMAR) and the 8th Brazilian Oceanography Congress (CBO) [Conference workshop]. Itajaí, Brazil.</p>
	<p>7. Borges, P. A. V., Gabriel, R., & Nunes, J. C. (2023, February 16). Book launch: "Practical guide to the geodiversity of the Azores" [Book presentation]. Auditorium of the "Os Montanheiros" Association, Angra do Heroísmo, Azores, Portugal. Organized by IAC - Azorean Cultural Institute & "Os Montanheiros" Association.</p>
	<p>8. Borges, P. A. V., Gabriel, R., & Nunes, J. C. (2024, April 19). Book launch: "Practical guide to the geodiversity of the Azores" [Book presentation]. Organized by IAC - Azorean Cultural Institute & Pico Island Library. Madalena, Pico, Azores, Portugal.</p>
	<p>9. Elias, R. B. (2024, April 26). Representative of the University of the Azores at the Parliamentary Hearing of the Permanent Specialized Committee on Parliamentary Affairs, Environment, and Sustainable Development (CAPADS), regarding Resolution Project No. 4/XIII (CH) - "Recommending the Regional Government of the Azores to preserve the Azorean hydrangeas" [Parliamentary hearing]. Delegation of the Legislative Assembly of the Autonomous Region of the Azores, Terceira Island, Angra do Heroísmo, Azores, Portugal.</p>
	<p>10. Elias, R. B. (2024). Member of the Working Group for the development of an Action Plan for Habitat 9360 - Macaronesian Laurel Forest, within the Natura 2000 Biogeographical Process in the Macaronesian region [Committee membership]. Invited by the Regional Directorate for Environment and Climate Change, Azorean Regional Government.</p>
	<p>11. Pereira, E., Martin-Castellano, S., Rodriguez-Meneguzzi, M. J., Borges, P. A. V., & Gabriel, R. (2024, May 9). Facilitation of the 5th RAVE Terceira: Matela - 2024 [Workshop]. GBA-CE3C - Azorean Biodiversity Group. https://raveterceira.wixsite.com/ravegb</p>
	<p>12. Pereira, E., Martin-Castellano, S., Rodriguez-Meneguzzi, M. J., Borges, P. A. V., & Gabriel, R. (2024, May 9). Facilitation of the inventory of exotic species on the "Passage of Beasts" Trail [Fieldwork]. In SEI 24 - Invasive Species Awareness Week 2024. SPECO - Portuguese Society of Ecology & GBA-CE3C - Azorean Biodiversity Group. "Passage of Beasts" Trail, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>13. Seca, A. M. L. (2024, May 30). Workshop as part of the "Scientist Returns to School" program [Workshop]. Escola Básica de Cedrim, Portugal.</p>
	<p>14. Seca, A. M. L. (2024, May 30). Workshop as part of the "Scientist Returns to School" program [Workshop]. Escola Básica de Rocas do Vouga, Portugal.</p>

Type	Awareness activities
News	15. Barreiros, J. P. (2024, October 25). Marine protected areas are "sand in the eyes" [Newspaper article]. Diário Insular.
	16. Barreiros, J. P. (2024, October 29). Decline of marine protected areas [Newspaper article]. Diário Insular.
	17. Barreiros, J. P. (2024, March 11). New regime for marine protected areas [Newspaper article]. Diário Insular.
	18. Barreto, M. C. (2024, April 18). Nature, the great inventor [Newspaper article]. Correio dos Açores.
	19. Barreto, M. C. (2024, February 29). Hydrophilic or hydrophobic? It makes all the difference... [Newspaper article]. Correio dos Açores.
	20. Barreto, M. C. (2024, December 30). Research seeks new ingredients for cosmetics in endemic plants [Newspaper article]. Correio dos Açores.
	21. Barreto, M. C. (2024, January 11). Alcohol - Food or toxic substance? [Newspaper article]. Correio dos Açores.
	22. Barreto, M. C. (2024, June 6). Calcium, a dynamic element in the human body [Newspaper article]. Correio dos Açores.
	23. Barreto, M. C. (2024, December 19). Christmas is in the air - And science explains why! [Newspaper article]. Correio dos Açores.
	24. Barreto, M. C. (2024, October 31). Collagen, a fascinating molecule [Newspaper article]. Correio dos Açores.
	25. Borges, P. A. V. (2024, June 5). Introducing environmental education early is crucial for shaping future generations committed to sustainability [Newspaper article]. Correio dos Açores.
	26. Borges, P. A. V. (2024, April 21). Earth Day - "It is essential to implement effective land use policies in the Azores and develop sustainable tourism areas" [Newspaper article]. Correio dos Açores.
	27. Borges, P. A. V. (2024, March 3). The impact of global changes on the terrestrial biodiversity of the Azores [Newspaper article]. Correio dos Açores.
	28. Soares, A. O. (2024, March 25). Did you also see ladybugs this weekend? [Newspaper article]. O Público.
Promotion	29. Gabriel, R., & Amorim, I. R. (2024). Content production for the exhibition "The Singularity of Maria Ramos": Canvas "Vinegar Fly: Drosophila spp." [Exhibition content]. Public Library and Regional Archive Luís da Silva Ribeiro, Angra do Heroísmo, Terceira, Azores, Portugal.
	30. Gabriel, R., & Amorim, I. R. (2024). Drosophila melanogaster and other flies. In Public Library and Regional Archive Luís da Silva Ribeiro (Ed.), Exhibition catalog "The Singularity of Maria Ramos" (pp. 34-35). ISBN 978-989-54455-9-2.
	31. Gabriel, R., Borges, P. A. V., & Barreto, M. C. (2024). GBA-CE3C outreach video [Video].

Type	Awareness activities
Radio	<p>32. Barreiros, J. P. (2024, October 24). Interview on Antena 1: Marine protected areas are "sand in the eyes" [Radio interview].</p>
	<p>33. Amorim, I. R. (2024). My journey in science: Women and girls in science [Presentation]. International Day of Women and Girls in Science, Escola Secundária Jerónimo Emiliano de Andrade, Angra do Heroísmo, Terceira, Azores, Portugal. Organized by Observatório do Ambiente dos Açores and Escola Secundária Jerónimo Emiliano de Andrade.</p>
	<p>34. Amorim, I. R., & Andrade, R. (2024, November 24). Lecture on Azorean biodiversity and facilitation of educational games on biodiversity conservation [Lecture]. National Scientific Culture Day Celebration, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>35. Barreiros, J. P. (2024, March 18). "What will Earth look like in 5, 100, and 200 million years? A scientific imagination exercise" [Invited lecture]. XX Science Week, Department of Sciences, Escola Básica e Integrada de Angra do Heroísmo, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>36. Barreiros, J. P. (2024, February 6). "Évolution des poissons et adaptation aux habitats marins" [Invited lecture]. University of French Guiana, Cayenne, French Guiana.</p>
	<p>37. Barreiros, J. P. (2024, February 7). "Les Elasmobranches de l'Atlantique Nord-Est – les espèces des Açores comme étude de cas" [Invited lecture]. University of French Guiana, Cayenne, French Guiana.</p>
	<p>38. Barreiros, J. P. (2024, January 27). "What can Terceira gain from the sea that surrounds it?" [Guest speaker]. Conference series promoted by Iniciativa Liberal. Clube Naval da Praia da Vitória, Azores, Portugal.</p>
Talk	<p>39. Barreiros, J. P. (2024, February 8). "Marine protected areas: An insight into urgency" [Invited lecture]. University of French Guiana, Cayenne, French Guiana.</p>
	<p>40. Barreiros, J. P. (2024, May 31). "What will Earth look like in 5, 100, and 200 million years?" [Lecture]. Livraria Lar Doce Livro, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>41. Barreiros, J. P. (2024, June 29). "The new dinosaurs" [Lecture]. Livraria Lar Doce Livro, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>42. Gabriel, R. (2024, April 22). "The art of photography as a biodiversity outreach strategy" [Invited talk]. Inauguration of the photographic exhibition "Bichos" by Javier Torrent, World Earth Day. Organized by CCAH - Centro de Ciência de Angra do Heroísmo, Angra do Heroísmo, Terceira, Azores, Portugal.</p>
	<p>43. Gabriel, R. (2024, February 9). "Science and me: A journey in 12 questions" [Invited talk]. International Day of Women and Girls in Science, Escola Secundária Jerónimo Emiliano de Andrade, Angra do Heroísmo, Terceira, Azores, Portugal. Organized by Observatório do Ambiente dos Açores and Escola Secundária Jerónimo Emiliano de Andrade.</p>
	<p>44. Lopes, D. H. (2024, September). Lecture on the professional market and renewal of the agricultural sector: The case of the Master's program in MPB at the University of the Azores [Lecture].</p>
	<p>45. Melo, C. (2024, September 27). Macaronight: The agroecological importance of arbuscular mycorrhizal fungi (AMF) [Presentation].</p>

Type	Awareness activities
TV	46. Barreiros, J. P. (2024, October 24). Interview on Antena 1: Marine protected areas are "sand in the eyes" [Radio interview].
	47. Barreiros, J. P. (2024, July 15). Interview on RTP Açores: "Conversas com Ciência" [Television interview].
	48. Barreiros, J. P. (2024, July 18). Interview on RTP Açores: "Telejornal Açores" [Television interview].
	49. Soares, A. O. (2024, December 28). Participation in the RTP Açores program "Ahh Ciência nos Açores" [Television program]. https://www.facebook.com/rtpacores/videos/1864281830771092

4.3-WEB-BASED RESOURCES RUNNING IN 2024

Several web-based resources run in 2024, supervised by different GBA-CE3C members.

1. **AGRO-FOR-CARE** – Agroforestry Ecology in Islands (<https://gba.uac.pt/team/AGRO>)
2. **AIISG** - IUCN SSC Atlantic Island Invertebrates Specialist Group (<https://www.aiisg.net/>)
3. **Azorean Biodiversity Group Page** (<http://www.gba.uac.pt/>)
4. **Azores Bioportal** (<http://azoresbioportal.uac.pt/pt/>)
5. **ECCB** (<https://uia.org/s/or/en/1122279366>)
6. **EHI** – Environmental Health on Islands (<https://gba.uac.pt/team/EHI>)
7. **ERGA** (<https://www.erga-biodiversity.eu/>)
8. **Field Guide** – Pergunta ao cientista, Audio podcast. SoundCloud. (<https://soundcloud.com/field-guide-362856827/tracks>)
9. **IBBC** – Biodiversity, Biogeography, and Conservation in Islands (<https://gba.uac.pt/team/IBBC>)
10. **IBIG** - Island Biology Interest Group (<http://www.ibigbiology.com/>)
11. **ISLAND LAB** (<http://islandlab.uac.pt/>)
12. **Joaninhas dos Açores** – Projeto Ciência Cidadã (<https://joaninhasdosacosores.com/>)
13. **NAT-PROD-APPL** – Natural Products and Applications (<https://gba.uac.pt/team/NPA>)
14. **POLLI.NET** (<https://www.pollinet.pt/>)
15. **Termites of the Azores** (<http://sostermitas.angra.uac.pt>)

APPENDIX 1. DETAILED INFORMATION OF RESEARCH PROJECTS

INTERNATIONAL PROJECTS (23)

START: 2024. FUNDED BY EUROPEAN FUNDS

(2024-2028) – ALSEMAC - ALIMENTOS SEGUROS, SALUDABLES Y SOSTENIBLES PRODUCIDOS EN UN MARCO DE ECONOMIA CIRCULAR EFICIENTE QUE GARANTICE LA SOBERANÍA ALIMENTARIA PARA UN CONSUMO RESPONSABLE EM LA MACARONESIA

Coordinator from Portugal: **David H. Lopes** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission.

Budget for the GBA: 6.3018,38 Euros.

(2024-2028) – MICROCLI-MAC - TECNOLOGIA E GESTÃO INTELIGENTE DE MICROCLIMAS PARA ADAPTAÇÃO ÁS MUDANÇAS CLIMÁTICAS NA MACRO REGIÃO DA MACARONÉSIA E NOS PAÍSES TERCEIROS AFRICANOS

Coordinator from Portugal: **Rosalina Gabriel** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission: INTERREG MAC 2021-2027.

Budget for the GBA: 15.000,00 Euros.

(2024-2028) – NATUR-EXT - RENEWABLE BIOLOGICAL NATURAL RESOURCES AS A SOURCE OF EXTRACTION COMPOUNDS TO DEVELOP INDUSTRY, SCIENCE AND TECHNOLOGY, WITHIN A FRAMEWORK OF CIRCULAR ECONOMY AND ECOLOGICAL SUSTAINABILITY

Coordinator: Abenchara Betancor Abreu (Instituto Tecnológico de Canarias).

Coordinator from Portugal: **Maria do Carmo Barreto** (Universidade dos Açores - GBA-CE3C).

GBA members: **Ana Seca & Gonçalo Rosa** (Universidade dos Açores - GBA-CE3C).

Funding Institution: Feder, Interreg Mac 2021-2027 (85%), DRCT (15%).

Budget for the GBA: 244.987,10 Euros.

(2024-2027) – BIOMONI - BIODIVERSITY MONITORING OF ISLAND ECOSYSTEMS

Coordinator: Holger Kreft (University of Göttingen).

Coordinator from Portugal: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Rosalina Gabriel & Rui Bento Elias** (Universidade dos Açores - GBA-CE3C).

Funding Institution: EU BIODIVERSA plus.

Budget for the GBA: 79.755,00 Euros.

(2024-2026) – RESCUE - SAVING THE ISLAND ENDEMIC PLANTS AND BEETLES OF SELVAGEM PEQUENA AND ILHÉU DE FORA FROM EXTINCTION (SELVAGENS ISLANDS, PORTUGAL)

Coordinator: Francisco Fernandes (Instituto das Florestas e Conservação da Natureza).

GBA members: **Mário Boieiro** (Universidade dos Açores - GBA-CE3C).

Funding Institution: Mossy Earth Ltd.

Budget for the GBA: In kind [compensation].

(2024-2025) ERGA/BGE (BIODIVERSITY GENOMICS EUROPE)

GBA members: **Isabel R. Amorim & Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission.

Budget for the GBA: In kind [compensation].

START: 2023. FUNDED BY EUROPEAN FUNDS

(2023-2026) – TRANS-LIGHTHOUSES - MORE THAN GREEN: LIGHTHOUSES OF TRANSFORMATIVE NATURE-BASED SOLUTIONS FOR INCLUSIVE COMMUNITIES

Coordinator: Eduardo Marques (Universidade dos Açores).

GBA members: **Isabel R. Amorim & Ana Moura Arroz** (Universidade dos Açores - GBA-CE3C)

Funding Institution: European Commission: HORIZON-CL6-2022-COMMUNITIES-01-05.

Budget for the GBA: In kind [compensation].

(2024-2025) – ARCADE - ALIGNING REFERENCE COLLECTIONS AND TAXONOMIC DEVELOPMENT EFFORTS FOR POLLINATOR CONSERVATION IN PORTUGAL

Coordinator: Sílvia Castro (Centro de Ecologia Funcional - Universidade de Coimbra).

GBA members: **Mário Boieiro & Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission: HORIZON IA - Innovation Action / TETTRIs Transforming European Taxonomy through Training, Research and Innovations.

Budget for the GBA: 2.891,00 Euros.

(2023-2026) – DARCO - THE VERTICAL DIMENSION OF CONSERVATION: A COST-EFFECTIVE PLAN TO INCORPORATE SUBTERRANEAN ECOSYSTEMS IN POST-2020 BIODIVERSITY AND CLIMATE CHANGE AGENDAS

Coordinator: Paulo A.V. Borges (Universidade dos Açores - GBA-CE3C).

GBA members: Isabel R. Amorim, Rosalina Gabriel, Fernando Pereira & Luís Crespo (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission: EU – BIODIVERSA.

Budget for the GBA: 99.536,00 Euros.

(2023-2024) – ASSESSING TO PLAN FOR MADEIRA'S GENETICALLY UNIQUE AND THREATENED ENDEMIC LONGHORN BEETLE DEUCALION OCEANICUM

Coordinator: Dinarte Teixeira (Instituto das Florestas e Conservação da Natureza).

GBA members: **Mário Boieiro** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN & EDGE.

Budget for the GBA: In kind [compensation].

START: 2022. FUNDED BY EUROPEAN FUNDS

(2022-2025) – DUNGPOOL: EFFECTS OF SPECIES POOL AND COMMUNITY ASSEMBLY PROCESSES ON DUNG BEETLE DIVERSITY AND ECOSYSTEM FUNCTIONS IN A WARMING WORLD

Coordinator: Ana M. C. Santos (Universidade Autónoma de Madrid, Spain).

GBA members: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C) & **François Rigal** (University of Pau, France).

Funding Institution: Ministerios de Ciencia e Innovación (Spain): Agencia Estatal de Investigación.

Budget for the GBA: 176.000,00 Euros.

(2022-2025) IPM-POPILLIA “INTEGRATED PEST MANAGEMENT OF THE INVASIVE JAPANESE BEETLE”

Coordinator: Giselher Grabenweger (Agroscope Standort Reckenholz, Zurich).

GBA members: **António Onofre Soares** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission: EU 2020.

Budget for the GBA: In kind [compensation].

(2022-2024) – BIOGEOGRAPHIC NATURA 2000 PROCESS CONTINUATION IN THE MACARONESIAN REGION

Coordinator: José Maria Fernandez-Palacios (University of La Laguna, Canary Islands).

GBA members: **Paulo A.V. Borges & Rui Bento Elias** (Universidade dos Açores - GBA-CE3C).

Funding Institution: Ministerio para la Transición Ecológica y el Reto Demográfico, de Espanha.

Budget for the GBA: In kind [compensation].

(2022-2025) – FORESTFISHER - PRIORITY AREAS FOR CONSERVATION AND RESTORATION OF AMAZONIAN FOREST-FRUGIVOROUS FISH INTERACTIONS AND ASSOCIATED FISHERIES

Coordinator: Pablo A. Tedesco (Laboratoire Evolution et Diversité Biologique, EDB), Marcelo Rodrigues dos Anjos (Universidade Federal do Amazonas).

GBA members: **João Pedro Barreiros** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission: BiodivRestore Transnational Cofund Call 2020-2021 - BiodivRestore-802.

Budget for the GBA: In kind [compensation].

START: 2021. FUNDED BY EUROPEAN FUNDS

(2021-2025) ERGA - THE EUROPEAN REFERENCE GENOME ATLAS

GBA members: **Isabel R. Amorim & Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Funding Institution: European Commission.

Budget for the GBA: In kind [compensation].

START: 2020. FUNDED BY EUROPEAN FUNDS

(2020-2024) MACOBIOS - MARINE COASTAL ECOSYSTEM BIODIVERSITY AND SERVICES IN A CHANGING WORLD

Coordinator: Pierre Failler (University of Portsmouth, UK).

GBA members: **Catarina Fonseca & Cristina Seijo Nuñez** (Azorean Biodiversity Group – cE3c).

Funding Institution: European Commission: EU 2020.

Budget for the GBA: 349.182,50 Euros.

START: 2019. FUNDED BY EUROPEAN FUNDS

(2019-2024) IUCN LADYBIRD SPECIALIST GROUP

Coordinator: John Losey (Cornell University, USA).

GBA members: **António Onofre Soares** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN & Toyota Fund.

Budget for the GBA: In kind [compensation].

START: 2017. FUNDED BY EUROPEAN FUNDS

(2017-2024) - IUCN SSC MACARONESIAN ISLANDS PLANT SPECIALIST GROUP

Coordinator: Mónica Moura (Universidade dos Açores-CIBIO) and Juli Caujapé-Castells (Jardín Botánico “Viera y Clavijo”).

GBA members: **Rui Bento Elias** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN.

Budget for the GBA: In kind [compensation].

START: 2016. FUNDED BY EUROPEAN FUNDS

(2016-2024) IUCN/SSC SPECIES MONITORING SPECIALIST GROUP

Coordinator: Peter J. Stephenson (University of Lausanne, Switzerland).

GBA members: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN.

Budget for the GBA: In kind [compensation].

START: 2015. FUNDED BY EUROPEAN FUNDS

(2015-2024) - IUCN SSC MID-ATLANTIC ISLAND INVERTEBRATES SPECIALIST GROUP

Coordinator: Vicky Kindemba (Buglife - The Invertebrate Conservation Trust - UK) & **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Mário Boieiro, Virgílio Vieira & Isabel R. Amorim** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN & Toyota Fund.

Budget for the GBA: 6.000,00 Euros.

START: 2014. FUNDED BY EUROPEAN FUNDS

(2014-2024) IUCN - SPIDER AND SCORPION SPECIALIST GROUP

Coordinator: **Pedro Cardoso** (Finnish Museum of Natural History, University of Helsinki, Finland).

GBA members: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN.

Budget for the GBA: In kind [compensation].

START: 2009. FUNDED BY EUROPEAN FUNDS

(2009-2024) RCE-AZORES, UNU - THE UNITED NATIONS UNIVERSITY REGIONAL CENTRE OF EXPERTISE

Coordinator: Alison L. Neilson.

GBA members: **Rosalina Gabriel, Ana Moura Arroz, Enésima Pereira, Paulo A.V. Borges & Fernando Pereira** (Universidade dos Açores - GBA-CE3C).

Funding Institution: EU Leonardo DaVinci Programme for Vocational Training, Change Agents UK – support placement of interns with RCE Açores, two interns in 2011, three in 2012, two in 2013, two in 2014.

Budget for the GBA: 22.950,00 Euros.

START: 2008. FUNDED BY EUROPEAN FUNDS

(2008-2024) IUCN/SSC GROUPER AND WRASSE SPECIALIST GROUP

Coordinator: Yvonne Sadovy de Mitcheson (University of Hong Kong, China) and Matthew Craig (National Oceanic and Atmospheric Administration, USA).

GBA members: **João Pedro Barreiros** (Universidade dos Açores - GBA-CE3C).

Funding Institution: IUCN.

Budget for the GBA: In kind [compensation].

NATIONAL PROJECTS (2)

START: 2023. FUNDED BY FCT (PORTUGUESE SCIENCE FOUNDATION)

(2023-2025) POLINIZAÇÃO - PLANO DE AÇÃO PARA A CONSERVAÇÃO E SUSTENTABILIDADE DOS POLINIZADORES

Coordinator: Sílvia Castro (Centro de Ecologia Funcional - Universidade de Coimbra).

GBA members: **Paulo A.V. Borges & Mário Boieiro** (Universidade dos Açores - GBA-CE3C).

Funding Institution: Fundo Ambiental.

Budget for the GBA: 15.000,00 Euros.

START: 2022. FUNDED BY FCT (PORTUGUESE SCIENCE FOUNDATION)

(2022-2025) MACRISK-TRAIT-BASED PREDICTION OF EXTINCTION RISK AND INVASIVENESS FOR NORTHERN MACARONESIAN ARTHROPODS

Coordinator: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Rosalina Gabriel, Mário Boieiro, Isabel R. Amorim & Guilherme Oyarzabal da Silva** (Universidade dos Açores - GBA-CE3C).

Other participants from other Institutions: Pedro Cardoso (Finnish Museum of Natural History, University of Helsinki, Finland), **François Rigal** (University of Pau, France), Ana M. C. Santos (Universidade Autonoma de Madrid, Spain) and **Jagoba Malumbres-Olarte** (Independent researcher, Toulouse, France).

Project's consultants: Kostas Triantis (Department of Ecology and Taxonomy, Faculty of Biology, National & Kapdistrian University of Athens, Greece), Axel Hochkrich (Trier Centre for Biodiversity Conservation of the University Trier, Germany) and Michael Samways (Department of Conservation Ecology & Entomology, Stellenbosch University, South Africa).

Budget for the GBA: 206.486,00 Euros.

REGIONAL PROJECTS (7)

START: 2024. FUNDED BY DRCT (AZOREAN SCIENCE FOUNDATION)

(2024-2025) A MOSCA DA FRUTA - ARTE & CIÊNCIA

Coordinator: **Isabel R. Amorim** (Universidade dos Açores - GBA-CE3C).

Members: Carlos A. Leal (Associação para o Estudo do Ambiente Insular).

Budget for the GBA: 2.000,00 Euros.

(2024-2025) MAIS VIVER, MAIS APRENDER: OS BICHOS COMO NUNCA OS VIU

Coordinator: **Isabel R. Amorim** (Universidade dos Açores - GBA-CE3C).

GBA members: **Ana M. Arroz & Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

Budget for the GBA: 2.490,00 Euros.

(2024-2024) ENCONTRO CIÊNCIA E ARTE: VIDA E OBRA DA ANGRENSE MARIA RAMOS VALADARES

Coordinator: **Rosalina Gabriel** (Universidade dos Açores - GBA-CE3C).

GBA members: **Isabel R. Amorim** (Universidade dos Açores - GBA-CE3C).

Budget for the GBA: 1.999,17 Euros.

START: 2022. FUNDED BY DRCT (AZOREAN SCIENCE FOUNDATION)

(2022-2024) SUMMER SCHOOL IN ISLAND BIOGEOGRAPHY AND MACROECOLOGY (CURSO INTENSIVO DE VERÃO - 2ª ESCOLA DE VERÃO GRUPO DA BIODIVERSIDADE)

Coordinator: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Rosalina Gabriel, Rui Bento Elias, Isabel R. Amorim, Mário Boieiro, Gabor Pozsgai & Guilherme Oyarzabal da Silva** (Universidade dos Açores - GBA-CE3C).

Budget for the GBA: 90.000,00 Euros.

(2022-2024) ERGA TAXA AÇORES

Coordinator: Luís Silva (Universidade dos Açores - CIBIO-Azores).

GBA members: **Isabel R. Amorim** (Universidade dos Açores - GBA-CE3C).

Budget for the GBA: 10.800,00 Euros.

START: 2021. FUNDED BY DRCT (AZOREAN SCIENCE FOUNDATION)

(2021-2024) PO AZORES PROJECT - APOIO AO FUNCIONAMENTO DO GRUPO DA BIODIVERSIDADE DOS AÇORES - CENTRO DE ECOLOGIA, EVOLUÇÃO E ALTERAÇÕES AMBIENTAIS (GBA-CE3C)
M1.1.A/FUNC.UI&D/010/2021-2024

Coordinator: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: All Integrated Members of GBA-CE3C.

Budget for the GBA: 200.000,00 Euros.

(2021-2024) PHEPLA - PHENOTYPIC PLASTICITY OF PEST AND BIOLOGICAL CONTROL AGENTS: CONTRASTING MAINLAND AND INSULAR AGROECOSYSTEMS

Coordinator: **Hugo Renato Calado** (Universidade dos Açores - GBA-CE3C).

Budget for the GBA: 9.966,00 Euros.

APPENDIX 2. DETAILED INFORMATION OF SERVICE ACQUISITION (3)

Different financial sources

START: 2023.

(2023-2026) QUANTIFICAÇÃO DO INDEX OF BIOTIC INTEGRITY (IBI) NAS ÁREAS DE INTERVENÇÃO DO PROJETO LIFE SNAILS

Coordinator: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Noelline Tasafck** (Azorean Biodiversity Group – cE3c).

Funding Institution: Secretaria Regional do Ambiente e Alterações Climáticas.

Budget for the GBA: 35.675,00 Euros.

START: 2022.

(2022-2024) MATELA – UMA ILHA DE BIODIVERSIDADE

Coordinator: **Rosalina Gabriel & Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Ana Moura Arroz, Isabel R. Amorim, Mário Boieiro & Rui Bento Elias** (Universidade dos Açores - GBA-CE3C).

Funding Institution: Associação Viridia.

Budget for the GBA: 20.000,00 Euros

START: 2020.

(2020-2024) LIFE BEETLES - PREPARATORY AND MONITORING ACTIONS

Coordinator: **Paulo A.V. Borges** (Universidade dos Açores - GBA-CE3C).

GBA members: **Alejandra Ros-Prieto & Mário Boieiro** (Universidade dos Açores - GBA-CE3C) & Maria Teresa Fereira (Secretaria Regional do Ambiente e Ação Climática).

Funding Institution: AZORINA (LIFE EU Project).

Budget for the GBA: 111.890,00 Euros

APPENDIX 3. DETAILED INFORMATION OF PUBLICATIONS

ARTICLES IN SCI JOURNALS (WITH IMPACT FACTOR)

2024. SCOPUS PAPERS WRITTEN BY AT LEAST ONE INTEGRATED MEMBER (N=59)

1. **Almeida, B.**, & Cabral, P. (2024). A hybrid modelling approach for detecting seasonal variations in inland Green-Blue Ecosystems. *Remote Sensing Applications-Society and Environment*, **33**, 101121. DOI:10.1016/j.rsase.2023.101121 (IF2023 3,8; Q2 Environmental Sciences)
2. **Almeida, B.**, Cabral, P., **Fonseca, C.**, Gil, A., & Scemama, P. (2024). Top 10+1 indicators for assessing forest ecosystem conditions: A five-decade fragmentation analysis. *Science of the Total Environment*, **957**, 177527. DOI:10.1016/j.scitotenv.2024.177527 (IF2023 8,2; Q1 Environmental Sciences)
3. **Almeida, B.**, David, J., Campos, F.S., & Cabral, P. (2024). Satellite-based machine learning modelling of ecosystem services indicators: a review and meta-analysis. *Applied Geography*, **165**, 103249. DOI:10.1016/j.apgeog.2024.103249 (IF2023 4,0; Q1 Geography)
4. Álvarez, H.A., Walker, E., Mingarro, M., Ursul, G., **Cancela, J.P.**, Bassett, L., & Wilson, R.J. (2024). Heterogeneity in habitat and microclimate delay butterfly community tracking of climate change over an elevation gradient. *Biological Conservation*, **289**, 110389. DOI:10.1016/j.biocon.2023.110389 (IF2023 4,9; Q1 Biodiversity Conservation)
5. Baptista, M., **Carvalho, R.**, **Boieiro, M.** et al. (2024). The role of sheltered habitats in biodiversity conservation of species sensitive to drought: a case study using ground beetles (Coleoptera, Carabidae) in the Gorongosa National Park. *Biodiversity and Conservation*, **33**, 2345-2361. DOI:10.1007/s10531-024-02853-6 (IF2023 3,0; Q1 Biodiversity Conservation)
6. **Barcelos, L.M.D.**, Barreiros, J.B., & Barreiros, J.P. (2024). First record of the great barracuda, *Sphyraena barracuda* (Perciformes, Sphyraenidae), in the Azores, north-east Atlantic. *Journal of Fish Biology*, **104(4)**, 1255-1257. DOI:10.1111/jfb.15655 (IF2023 1,7; Q1 Marine & Freshwater Biology)
7. **Barcelos, L.M.D.**, Barreiros, J.B., & Barreiros, J.P. (2024). Records of *Isistius* sp. (Elasmobranchii: Squaliformes: Dalatiidae), from the Azores archipelago, inferred by fresh bite marks in dolphins. *Acta Ichthyologica et Piscatoria*, **54**, 151-155. DOI:10.3897/aiep.54.123825 (IF2023 0,8; Q3 Zoology)
8. **Boieiro, M.**, Varga-Szilay, Z., **Costa, R.**, **Crespo, L.**, Leite, A., Oliveira, R., **Pozsgai, G.**, Rego, C., **Calado, H.**, Teixeira, M., **Lopes, D.H.**, **Soares, A.**, & **Borges, P.A.V.** (2024). New findings of terrestrial arthropods from the Azorean Islands. *Biodiversity Data Journal*, **12**, e136391. DOI:10.3897/BDJ.12.e136391 (IF2023 1,0; Q3 Biodiversity Conservation)
9. **Borges, I.**, Dury, G.J., & **Soares A.O.** (2024). Population growth parameters of *Scymnus nubilus* fed single-aphid diets of *Aphis fabae* or *Myzus persicae*. *Insects*, **15(7)**, 486. DOI:10.3390/insects15070486 (IF2023 2,7; Q1 Entomology)
10. **Borges, I.**, Oliveira, L., Barbosa, F., Figueiredo, E., Franco, J.C., Durão, A.C., & **Soares, A.O.** (2024). Prey consumption and conversion efficiency in females of two feral populations of *Macrolophus pygmaeus*, a biocontrol agent of *Tuta absoluta*. *Phytoparasitica*, **52**, 31. DOI:10.1007/s12600-024-01130-0 (IF2023 1,5; Q4 Plant Sciences)
11. **Borges, P.A.V.**, Lamelas-López, L., Lhoumeau, S., Moura, N.B., Ponte, M., Leite, A., Parmentier, L., & Abreu, R. (2024). Monitoring arthropods under the scope of LIFE-SAILS project: I - Santa Maria Island baseline data

- with implementation of the Index of Biotic Integrity. *Biodiversity Data Journal*, **12**, e116829. DOI:10.3897/BDJ.12.e116829 (IF2023 1,0; Q3 Biodiversity Conservation)
12. Calado, H., Frazão Santos, C., Quintela, A., **Fonseca, C.**, & Gutierrez, D. (2024). The ups and downs of maritime spatial planning in Portugal. *Marine Policy*, **160**, 105984. DOI:10.1016/j.marpol.2023.105984 (IF2023 3,5; Q1 Environmental Studies)
 13. **Calado, H.R.M.G., Borges, P.A.V.,** Heleno, R., & **Soares, A.O.** (2024). A comparative analysis of island vs. mainland arthropod communities in coastal grasslands belonging to two distinct regions: São Miguel Island (Azores) and Mainland Portugal. *Diversity*, **16(10)**, 624. DOI:10.3390/d16100624 (IF2023 2,1; Q3 Ecology)
 14. Cedrés-Perdomo, R.D., Polaíno-Martín, C., Jennings, L., & **Gabriel, R.** (2024). Seeking a hideout: caves as refuges for various functional groups of bryophytes from Terceira Island (Azores, Portugal). *Diversity*, **16(1)**, 58. DOI:10.3390/d16010058 (IF2023 2,1; Q3 Ecology)
 15. Coelho, N., Camarinho, R., **Garcia, P.**, & Rodrigues, A.S. (2024). Evidence of hypothyroidism in mice chronically exposed to conventional farming. *Environmental Toxicology and Pharmacology*, **106**, 104387. DOI:10.1016/j.etap.2024.104387 (IF2023 4,2; Q2 Environmental Sciences)
 16. Connor, S.E., Lewis, T., van Leeuwen, J.F.N., van der Knaap, W.O., Schaefer, H., Porch, N., Gomes, A.I., Piva, S.B., Gadd, P., Kuneš, P., Haberle, S.G., Adeleye, M.A., Mariani, M., & **Elias, R.B.** (2024). Original plant diversity and ecosystems of a small, remote oceanic island (Corvo, Azores): Implications for biodiversity conservation. *Biological Conservation*, **291**, 110512. DOI:10.1016/j.biocon.2024.110512 (IF2023 4,9; Q1 Biodiversity Conservation)
 17. **Crespo, L.C., Cardoso, P., Malumbres-Olarte, J., Pereira, F., Romeiras, M., Ros-Prieto, A., Rigal, F., & Borges, P.A.V.** (2024). Standardised inventories of spiders (Arachnida, Araneae) of Macaronesia III: dry habitats of Cabo Verde Archipelago (São Vicente and Santo Antão). *Biodiversity Data Journal*, **12**, e115464. DOI:10.3897/BDJ.12.e115464 (IF2023 1,0; Q3 Biodiversity Conservation)
 18. da Silva Utta, A.C., Chiatante, G., Schifani, E., Meriggi, A., Fernandes, I.O., **Borges, P.A.V.**, Solar, R.R.C., Baccaro, F.B., & Grasso, D.A. (2024). How habitat simplification shapes the morphological characteristics of ant assemblages (Hymenoptera: Formicidae) in different biogeographical contexts. *Insects*, **15**, 961. DOI:10.3390/insects15120961 (IF2023 2,7; Q1 Entomology)
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 58. Wyckhuys, K.A.G., Akutse, K.S., Amalin, D.M., Araj, S.-E., Barrera, G., Joy B. Beltran, M., Ben Fekih, I., Calatayud, P.-A., Cicero, L., Cokola, M.C., Colmenarez, Y.C., Dessauvages, K., Dubois, T., Durocher-Granger, L., Espinel, C., Fernández-Triana, J. L., Francis, F., Gómez, J., Haddi, K., ... **Pozsgai, G.** et al. (2024). Functional structure of the natural enemy community of the fall armyworm, Spodoptera frugiperda in the Americas. *Biological Control*, **198**, 105640. DOI:10.1016/j.biocontrol.2024.105640 (IF2023 3,7; Q1 Entomology)
 59. Wyckhuys, K.A.G., **Pozsgai, G.**, Fekih, I.B., Sanchez-Garcia, F.J., & Elkahky, M. (2024). Biodiversity loss impacts top-down regulation of insect herbivores across ecosystem boundaries. *Science of the Total Environment*, **930**, 172807. DOI:10.1016/j.scitotenv.2024.172807 (IF2023 8,2; Q1 Environmental Sciences)

2024. SCOPUS PAPERS WRITTEN BY ASSOCIATE RESEARCH FELLOWS ONLY (N=11)

1. Cardoso, P., Guilherme, T., Mammola, S., **Matthews, T.J., Rigal, F.**, Graco-Roza, C., Stahls, G., & Carvalho, J.C. (2024). Calculating functional diversity metrics using neighbor-joining trees. *Ecography*, **2024**(7), e07156. DOI:10.1111/ecog.07156 (IF2023 5,4; Q1 Ecology)
2. Dovrolis, N., Gazouli, M., **Rigal, F.**, Whittaker, R.J., **Matthews, T.J.**, Georgiou, K., Theodoropoulos, G., & Triantis, K.A. (2024). Power-law scaling in intratumoral microbiota of colorectal cancer. *Gut Pathogens*, **16**(34), 1-4. DOI:10.1186/s13099-024-00631-x (IF2023 4,3; Q2 Microbiology)
3. Lima, D.F., Duarte, S., Branco, J.M., & **Nunes, L.** (2024). Mass timber buildings: the associated risks of rainwater exposure during construction in the Portuguese climate. *Journal of Building Engineering*, **98**, 111110. DOI:10.1016/j.jobe.2024.111110 (IF2023 6,7; Q1 Construction & Building Technology)
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5. **Nunes, L.**, Duarte, S., Parracha, J.L., Jones, D., Paulmier, I., & Kutnik, M. (2024). Insulation materials susceptibility to biological degradation agents: molds and subterranean termites. *Applied Sciences*, **13**(20), 11311. DOI:10.3390/app132011311 (IF2023 2,5; Q3 Materials Science, Multidisciplinary)
6. Parracha, J.L., Veiga, R., **Nunes, L.**, & Flores-Colen, I. (2024). Effects of hygrothermal and natural aging on the durability of multilayer insulation systems incorporating thermal mortars with EPS and aerogel. *Cement*

and Concrete Composites, **148**, 105483. DOI:10.1016/j.cemconcomp.2024.105483 (IF2023 10,8; Q1 Material Science, Composites)

7. Proios, K., Maroulis, L., **Rigal, F.**, **Matthews, T.J.**, Cameron, R.A.D., Sfenthourakis, S., Whittaker, R.J., Vardinoyannis, K., Mylonas, M., & Triantis, K.A. (2024). Functional diversity and community convergence of land snails in the Aegean Sea islands. *Journal of Biogeography*, **51(9)**, 1632-1645. DOI:10.1111/jbi.14740 (IF2023 3,4; Q1 Ecology)
8. Sayol, F., Wayman, J.P., Dufour, P., Martin, T.E., Hume, J.P., Jørgensen, M.W., Maru, N., Sanglas, A., Soares, F., Cooke, R., Mendenhall, C., Margolis, J., Illera, J.C., Lemoine, R., Benavides Rios, E., Lapiedra, O., Triantis, K., Pigot, A.L., Tobias, J.A., Faurby, S., & **Matthews, T.** (2024). AVOTREX: a global dataset of extinct birds and their traits. *Global Ecology and Biogeography*, **33(12)**, e13927. DOI:10.1111/geb.13927 (IF2023 6,3; Q1 Ecology)
9. Spiliopoulou, K., **Rigal, F.**, Plumptre, A.J., Trigas, P., Paragamian, K., Hochkirch, A., Lymberakis, P., Portolou, D., Stoumboudi, M.T., & Triantis, K.A. (2024). KBAscope: key biodiversity area identification in R. *Ecography*, **2024(9)**, e07061. DOI:10.1111/ecog.07061 (IF2023 5,4; Q1 Ecology)
10. Wayman, J., Sadler, J., Martin, T., Graham, L., White, H., Tobias, J., & **Matthews, T.J.** (2024). Unravelling the complexities of biotic homogenization and heterogenization in the British avifauna. *Journal of Animal Ecology*, **93(9)**, 1288-1302. DOI:10.1111/1365-2656.14145 (IF2023 3,5; Q1 Ecology)
11. Zhao, Y., Mendenhall, C.D., **Matthews, T.J.**, et al. (2024). Land-use change interacts with island biogeography to alter bird community assembly. *Proceedings of The Royal Society B-Biological Sciences*, **291**, 20232245. DOI:10.1098/rspb.2023.2245 (IF2023 3,8; Q1 Biology)

BOOKS

2024. BOOKS WRITTEN OR EDITED BY AT LEAST ONE INTEGRATED MEMBER (N=4)

1. **Barreiros, J.P.**, Botelho, A.Z., Costa, A.C., Parente, M.I., Porteiro, F.M., **Barcelos, L.M.D.**, Azevedo, J., **Barreiros, J.B.**, Menezes, G.M., **Lhoumeau, S.**, Malaquias, M., Coelho, R., Prestes, A.C.L., Faria, J., Torres, P., Albuquerque, I., Ramos, J.B., Fontes, J., Correia, L.A., & Luz, R. (Auth.) (2024). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna*. Instituto Açoriano de Cultura (IAC). 528 pp. ISBN:978-989-8225-89-4.
2. **Elias, R.B.**, Rodrigues, A.F., & **Gabriel, R.** (Auth.) (2024). *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora (2^a ed. revista)*. Instituto Açoriano de Cultura, Angra do Heroísmo. 520 pp. ISBN:ISBN:978-989-8225-88-7.
3. **Gabriel, R.**, & **Borges, P.A.V.** (Eds.) (2024). *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora (2^a ed. revista)*. Instituto Açoriano de Cultura, Angra do Heroísmo. 520 pp. ISBN:ISBN:978-989-8225-88-7.
4. **Gabriel, R.**, **Borges, P.A.V.**, **Barreiros, J.P.**, Costa, A.C., Porteiro, F.M., & Menezes, G.M. (Eds.) (2024). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna*. Instituto Açoriano de Cultura (IAC). 528 pp. ISBN:978-989-8225-89-4.

BOOK CHAPTERS

2024. BOOK CHAPTERS WRITTEN BY AT LEAST ONE INTEGRATED MEMBER (N=268)

1. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Dermochelys coriacea* (Vandelli, 1761). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 446-447. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
2. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Diplodus sargus* (Linnaeus, 1758). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 416-417. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
3. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Diplodus vulgaris* (Saint-Hilaire, 1817). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 418-419. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
4. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Globicephala macrorhynchus* Gray, 1846 & *Globicephala melas* (Traill, 1809). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 484-485. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
5. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Ophioblennius atlanticus* (Valenciennes, 1836). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 374-375. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
6. **Barcelos, L.M.D., & Barreiros, J.P.** (2024). *Parablennius parvicornis* (Valenciennes, 1836). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 376-377. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
7. **Barcelos, L.M.D., & Coelho, R.** (2024). *Hydrobates monteiroi* (Bolton et al., 2008). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 456-457. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
8. **Barcelos, L.M.D., & Coelho, R.** (2024). *Larus michahellis atlantis* Dwight, 1922. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 460-461. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
9. **Barcelos, L.M.D., & Coelho, R.** (2024). *Sterna dougallii* Montagu, 1813. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 462-463. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
10. **Barcelos, L.M.D., & Coelho, R.** (2024). *Sterna hirundo* Linnaeus, 1758. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros,

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 12. **Barcelos, L.M.D.** (2024). *Calonectris borealis* (Cory, 1881). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 458-459. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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 15. **Barreiros, J.B., & Barreiros, J.P.** (2024). *Pomatomus saltatrix* (Linnaeus, 1766). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 334-335. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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21. **Barreiros, J.P., & Barreiros, J.B.** (2024). *Balaenoptera physalus* (Linnaeus, 1758). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 478-479. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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25. **Barreiros, J.P., & Costa, A.C.** (2024). *Cinetorhynchus rigens* (Gordon, 1936). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 202-203. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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28. **Barreiros, J.P., & Costa, A.C.** (2024). *Lepas anatifera* Linnaeus, 1758. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 232-233. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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A.C. Costa, F.M. Porteiro and G.M. Menezes), 194-195. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.

32. **Barreiros, J.P., & Costa, A.C. (2024).** *Paracentrotus lividus* (Lamarck, 1816). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 242-243. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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34. **Barreiros, J.P., & Costa, A.C. (2024).** *Stenopus spinosus* Risso, 1827. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 200-201. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
35. **Barreiros, J.P., & Menezes, G. (2024).** *Thunnus obesus* (Lowe, 1839). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 340-341. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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39. **Barreiros, J.P. (2024).** *Bothus podas* (Delaroche, 1809). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 346-347. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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42. **Barreiros, J.P.** (2024). *Chelon labrosus* (Risso, 1827). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 364-365. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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48. **Barreiros, J.P.** (2024). Foreword. *Rwanda Wild Mammals – Referential Field Guide* (pp. vii–ix). In I. Ndagijimana (Ed.), Kigali: Nature Rights Plus. ISBN:978-99977-985-7-2.
49. **Barreiros, J.P.** (2024). *Gobius paganellus* Linnaeus, 1758. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 320-321. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
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247. **Gabriel, R.** (2024). *Riccardia chamedryfolia* (With.) Grolle. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 170-171). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
248. **Gabriel, R.** (2024). *Saccogyna viticulosa* (L.) Dumort.. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 194-195). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
249. **Gabriel, R.** (2024). *Scapania gracilis* Lindb.. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 196-197). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
250. **Gabriel, R.** (2024). *Scorpiurium circinatum* (Brid.) M.Fleisch. et Loeske. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 136-137). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
251. **Gabriel, R.** (2024). *Sematophyllum substrumulosum* (Hampe) E. Britton. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 152-153). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
252. **Gabriel, R.** (2024). *Sphagnum subnitens* Russow et Warnst.. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 100-101). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
253. **Gabriel, R.** (2024). *Targionia hypophylla* L.. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 166-167). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.

254. **Gabriel, R.** (2024). *Thamnobryum alopecurum* (Hedw.) Gangulee. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 148-149). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
255. **Gabriel, R.** (2024). *Thuidium tamariscinum* (Hedw.) Schimp.. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 154-155). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
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258. **Gabriel, R.** (2024). *Zygodon viridissimus*. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 130-131). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
259. **Gabriel, R., Borges, P.A.V., Barreiros, J.P.,** Costa, A.C., Porteiro, F.M., & Menezes, G.M. (2024) Organização do livro / Organization of the book. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 13-17. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
260. Gerlach, J., **Borges, P.A.V.**, Fattorini, S., Porch, N., & Wilkins, V. (2024) Insect conservation on islands. Routledge Handbk of Insect Conservation (ed. by J.S. Pryke, M.J. Samways, T.R. New, P. Cardoso and R. Gaigher), 319-333. Routledge, London. DOI:10.4324/9781003285793.
261. **Lhoumeau, S., & Barreiros, J.P.** (2024). *Enchelycore anatina* (Lowe, 1838). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 302-303. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
262. **Lhoumeau, S., & Barreiros, J.P.** (2024). *Gymnothorax unicolor* (Delaroche, 1809). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 304-305. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
263. **Lhoumeau, S., & Barreiros, J.P.** (2024). *Muraena helena* Linnaeus, 1758. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 308-309. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
264. **Lhoumeau, S., & Barreiros, J.P.** (2024). *Sarpa salpa* (Linnaeus, 1758). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 424-425. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
265. **Lhoumeau, S., & Barreiros, J.P.** (2024). *Serranus atricauda* Günther, 1874. *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P.

Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 380-381. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.

266. **Barreiros, J.P.**, & Meneses, G. (2024). *Thunnus thynnus* (Linnaeus, 1758). *Guia Prático da Flora e Fauna Marinha dos Açores / Field Guide of Azorean Marine Flora and Fauna* (ed. by R. Gabriel, P.A.V. Borges, J.P. Barreiros, A.C. Costa, F.M. Porteiro and G.M. Menezes), 342-343. Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-89-4.
267. Rodrigues, A.F., & **Gabriel, R.** (2024). Líquenes / Lichens. In R. Gabriel & P.A.V. Borges (Eds.), *Guia prático da flora nativa dos Açores / Field guide of the Azorean native flora* (2 ed., pp. 21-31). Instituto Açoriano da Cultura (IAC), Angra do Heroísmo. ISBN:978-989-8225-88-7.
268. Ursul, G., Mingarro, M., **Cancela, J.P.**, Romo H., & Wilson, R. (2024). Refugia from climate change, and their influence on the diversity and conservation of insects. *Effects of Climate Change on Insects: Physiological, Evolutionary, and Ecological Responses* (ed. by Daniel González-Tokman and Wesley Dátillo), 329-352. Oxford Academic. DOI:10.1093/oso/9780192864161.003.0016.

NATIONAL AND INTERNATIONAL PEER REVIEWED PAPERS (NO IMPACT FACTOR)

2024. PEER-REVIEWED PAPERS WRITTEN BY AT LEAST ONE INTEGRATED MEMBER (N=6)

1. Ascensão, F., Cardoso, P., Rebelo, R., **Boieiro, M.**, Nunes, A., Chozas, S., do Rosário, I.T., Príncipe, A., Mágua, C., Branquinho, C., & **Borges, P.A.V.** (2024). BASS - Biodiversity Assessments at Small Scales. *Research Ideas and Outcomes*, **10**, e138341. DOI:10.3897/rio.10.e138341.
2. Lumbierres, M., Abecasis, D., Alcaraz-Segura, D., Alison, J., Álvarez-Presas, M., Anderle, M., Avci, F., Bajocco, S., Baldo, M., Beja, P., Bergamini, A., Bergami, C., Blanco-Aguiar, J.A., Boada, J., Bonn, A., **Borges, P.A.V.**, Borja, A., Breeze, T., Brotons, L., ... & Kissling, W.D. (2024). EuropaBON EBV workflow templates. *Zenodo*. DOI:10.5281/zenodo.10971094.
3. MacCartney, A.M., Formenti, G.,...**Amorim, I.R.**,...**Borges, P.A.V.** et al., & Mazzoni, C.J. (2024). The European Reference Genome Atlas: Piloting a decentralised approach to equitable biodiversity genomics. *npj Biodiversity*, **3**, 28. DOI:10.1038/s44185-024-00054-6.
4. Mammola, S., Altermatt, F., Alther, R., **Amorim, I.R.**, Băncilă, R.I., **Borges, P.A.V.**, Brad, T., Brankovits, D., Cardoso, P., Cerasoli, F., Chauveau, C.A., Di Lorenzo, T., Faille, F., Fišer, C., Flot, J.-F., **Gabriel, R.**, Galassi, D.M.P., Garzoli, J., Griebler, C., Konecny-Dupré, L., Martínez, A., Mori, N., Nanni, V., Ogorelec, Z., Pallarés, S., Salussolia, A., Saccò, M., Sarbu, S.M., Stoch, F., Taiti, S., Vaccarelli, I., Zagmajster, M., Delić, T., Zittra, C., Meierhofer, M.B., Sánchez-Fernández, D., & Malard, F. (2024). Perspectives and pitfalls in preserving subterranean biodiversity through protected areas. *npj Biodiversity*, **3**, 2. DOI:10.1038/s44185-023-000351.
5. Marques, J.P., Alves, P.C., **Amorim, I.R.**,...**Borges, P.A.V.**,...**Pereira, F.**, et al., & Sousa, C. (2024). Building a Portuguese coalition for biodiversity genomics. *npj Biodiversity*, **3**, 27. DOI:10.1038/s44185-024-00061-7.
6. **Oyarzabal, G.**, Guimarães, M., & Hebets, E. (2024). What do plants tell spiders about disturbances in grasslands?. *Arachnology*, **19(9)**, 1211-1217. DOI:10.13156/arac.2024.19.9.1211.

OUTREACH PUBLICATIONS

2024. PAPERS IN PERIODICALS WRITTEN BY AT LEAST ONE INTEGRATED MEMBER (N=10)

1. **Amorim, I.R., Pereira, F., & Borges, P.A.V.** (2024). Pseudo-escorpião-cavernícola, *Pseudoblothrus oromii* Mahnert, 1990. *Pingo de Lava*, **46**, 100-101.
2. **Barcelos, L.M.D.**, Borges, A., & Ázera, S. (2024). Oito anos da Campanha pedaços de Mar & Ambiente. *Pingo de Lava*, **46**, 114-118.
3. **Barreiros J.P.** (2024). Como poderá ser a vida na Terra daqui a 5; 100 e 200 milhões de anos? Um exercício de imaginação científica. Atlântida, Revista de Cultura, **69**, 123-131.
4. **Barreto, M.C.** (2024). À procura de valor acrescentado – na extração é que está o ganho. *UAcientia, Açores Magazine*, 6-7. Dezembro.
5. **Borges, P.A.V.** (2024). A fauna de artrópodes das florestas nativas dos Açores: 1. Terra-Brava (Terceira-Açores). *Pingo de Lava*, **46**, 102-104.
6. Coelho, N., **Garcia, P.V.**, & Rodrigues, A. (2024) Para Além da falta de iodo: o papel do ambiente no hipotiroidismo. *UAcientia, Açores Magazine*, 6-7. Maio.
7. **Pereira, E.**, Castellano, S.M., Meneguzzi, M.J.R., Sousa, M.A., **Borges, P.A.V.**, & **Gabriel R.** (2024). Ouro para as sentinelas! Explorar a biodiversidade num evento de fotografia ambiental. *Pingo de Lava*, **46**, 114-118.
8. **Raposo, V.B., & Soares, A.O.** (2024). Em linha com os objetivos da União Europeia. Açoriano Oriental, *Açores Magazine, UAcientia*: 6-7.
9. **Raposo, V.B., & Soares, A.O.** (2024). Investigar para combater: o caso da lapinha do ananás. *UAcientia, Açores Magazine*, p. 6-7. Fevereiro.
10. **Viveiros, M.M.** (2024) Aplicação de Ingredientes Endógenos dos Açores na Cosmética. *UAcientia, Açores Magazine*, 6-7. 8 de Dezembro.

TECHNICAL REPORTS

2024. TECHNICAL REPORTS WRITTEN BY AT LEAST ONE INTEGRATED MEMBER (N=1)

1. Wilkins, V., & **Borges, P.A.V.** (2024). *2023 report of the IUCN SSC Mid-Atlantic Island Invertebrate Specialist Group*. IUCN-SSC. Reports.

OTHER TYPE OF PUBLICATIONS

This section includes the publications of different formats, namely datasets, contributions to newsletters, and pre-prints by members of the GBA-CE3C.

2024. DATASETS PUBLISHED BY AT LEAST ONE INTEGRATED MEMBER (N=12)

1. **Boieiro, M., & Borges, P.A.V.** (2024). New records of exotic arthropods for Azores. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/pj69hh.
2. **Boieiro, M., Oliveira, R., Costa, R., & Borges, P.A.V.** (2024) Unveiling Azorean pollinators: a critical step for biodiversity and conservation. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/bxh354.
3. **Borges, P.A.V., & Lhoumeau, S.** (2024). *Monitoring arthropods under the scope of LIFE-BEETLES project – Baseline Data*. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/gp4mfm.
4. **Calado, H.R.M.G., Borges, P.A.V., Heleno, R., & Soares, A.O.** (2024). *Arthropod communities of island vs. mainland coastal grasslands: São Miguel Island (Azores) and Mainland Portugal*. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/5jvtfw.
5. **Gabriel, R., Morgado, L., Henriques, D.S.G., Coelho, M.C.M., Hernández-Hernández, R., Pereira, F., & Borges, P.A.V.** (2024). *The MOVECLIM – AZORES project: Bryophytes from Terceira Island (2012)*. Version 1.1. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/ud4xhq.
6. Heber, S., Pereira, D.C., Lhoumeau, S., Fernandes, J.F.M., **Elias, R.B., & Borges, P.A.V.** (2024). Flora records in the Azores: LIFE IP Azores Natura. Version 1.1. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/a44q4.
7. Milla-Figueras, D., **Neto, A.I., Tempera, F., Moreu, I., Prestes, A.C.L., Resendes, R., Neto, R.M.A., Tittley, I., & Afonso, P.** (2024). *Marine algal (seaweed) flora of Faial Island, Azores*. Version 1.11. Universidade dos Açores. Sampling event dataset. DOI:10.15468/dsajcw.
8. **Pozsgai, G., Lhoumeau, S., Amorim, I.R., Boieiro, M., Cardoso, P., Ferreira, M.T., Leite, A., Malumbres-Olarte, J., Oyarzabal, G., Rigal, F., Ros-Prieto, A., Santos, A.M.C., Gabriel, R., & Borges, P.A.V** (2024). *Long-term monitoring of Azorean forest arthropods: the BALA Project (1997-2022)*. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/rpdkx9.
9. Rodrigues, A.F.F., Videira, S.I.R., Aptroot, A., & **Gabriel, R.** (2024). *Lichen novelties on Corvo island in the Azores archipelago, Portugal*. Version 1.1. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/m9rp2z.
10. Rodrigues, T., Almeida, D., Guardiola, F.A., Antunes, A., & **Borges, P.A.V.** (2024). *Medusozoans from the Iberian Peninsula and related archipelagos*. Version 1.0. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/j7349s.
11. Sousa, M., **Lamelas-López, L., Martins, B.S., Romão, J., Roxo, J., Elias, R.B., Gabriel, R., & Borges, P.A.V.** (2024). Biodiversity inventory of the Protected Area for the Management of Habitats or Species of Matela (Terceira, Azores, Portugal). Version 1.1. Universidade dos Açores. Samplingevent dataset. DOI:10.15468/qbj3rd.
12. Teixeira, M.B., **Soares, A.O., Lamelas-López, L., Lopes, D.H., Mota, J.A., Borges, P.A.V., & Simões, N.** (2024). Monitoring populations of *Popillia japonica* (Newman, 1838) over 16 years in the Azorean Islands. Version 1.3. Universidade dos Açores. Occurrence dataset. DOI:10.15468/gk6p48.

2024. NEWSLETTERS PUBLISHED BY AT LEAST ONE INTEGRATED MEMBER (N=1)

1. Teixeira, D., Wilkins, V., & **Borges, P.A.V.** (2024). Atlantic Islands Invertebrate Specialist Group newsletter nº11. December 2024.

2024. PREPRINTS PUBLISHED BY AT LEAST ONE INTEGRATED MEMBER (N=2)

1. Varga-Szilay, Z., Barsevskis, A., Benedek, K., Bevk, D., Jojczyk, A., Kristin, A., Ruzickova, J., Jelaska, L. S., Veromann, E., Vilumets, S., Fetyko, K., Szovenyi, G., & **Pozsgai, G.** (2024). Improving biodiversity in Central and Eastern European domestic gardens needs regionally scaled strategies. *bioRxiv*. DOI:10.1101/2024.07.12.603327.
2. Varga-Szilay, Z., Szovenyi, G., & **Pozsgai, G.** (2024). Flower visitation through the lens: Exploring the foraging behaviour of *Bombus terrestris* with a computer vision-based application. *bioRxiv*. DOI:10.1101/2024.07.10.602888.

APPENDIX 4. SCIENTIFIC MEETINGS: ORGANIZATION AND PARTICIPATION

The following tables provide data regarding the organization (Table 6) and participation (Table 7) in scientific meetings by members of the Azorean Biodiversity Group in 2024.

Table 6. Organization of scientific meetings from GBA-CE3C members throughout 2024.

Type	Scientific Meeting	Country	Researcher(s)
Member of the Scientific Committee	10th Frontiers in E3, CE3C's Annual Meeting	Lisbon, Portugal	António Onofre Soares
	10th Frontiers in E3, CE3C's Annual Meeting	Lisbon, Portugal	Guilherme Oyarzabal da Silva
	19th Meeting of the IOBC/WPRS	Ponta Delgada, Portugal	David H. Lopes
	19th Meeting of the IOBC-WPRS WG "Microbial and Nematode Control of Invertebrate Pests".	Ponta Delgada, Portugal	António Onofre Soares
	23rd National Ecology Meeting (ENE)	Porto, Portugal	Isabel R. Amorim
	Science and Art Meeting: Life and Work of Angrense Maria Ramos Valadares	Angra do Heroísmo, Portugal	Rosalina Gabriel & Isabel R. Amorim
	National Soil Science Meeting (EACS2024)	Porto, Portugal	Patricia Garcia
	10th International Congress of Agroecology	Viseu, Portugal	David H. Lopes
	20th National Meeting of Evolutionary Biology	Vila do Conde, Portugal	Isabel R. Amorim

Type	Scientific Meeting	Country	Researcher(s)
Member of the Organizing Committee	10th Frontiers in E3, CE3C's Annual Meeting	Lisbon, Portugal	Ricardo Costa
	66th IAVS Annual Symposium 2024 & 32nd Conference of the IAVS Working Group European Vegetation	Funchal, Portugal	Rui Bento Elias
	Science and Art Meeting: Life and Work of Angrense Maria Ramos Valadares	Angra do Heroísmo, Portugal	Rosalina Gabriel & Isabel R. Amorim
	Workshops: "Conservation of Invertebrates on Oceanic Islands" and "Conservation Strategy for the Longhorn Beetle <i>Deucalion oceanicum</i> "	Funchal, Portugal	Mário Boieiro

Table 7. Participation in scientific meetings by GBA-CE3C members, including oral presentations (keynote, regular) and poster presentations (with/without flash talks), throughout 2024.

Type	Local	Complete reference
Oral presentations	Lisbon, Portugal	Boieiro, M. , Oliveira, R., Costa, R. , Leite, A., & Rego, C. (2024). Plant-pollinator interactions and pollinator diversity across a disturbance gradient in an oceanic island (Terceira, Azores). <i>10th cE3c Annual Meeting – Frontiers in E3</i> , Lisbon, Portugal, December 12–14, 2024.
	Porto, Portugal	Boieiro, M. , Oliveira, R., Costa, R. , Leite, A., Rego, C., & Borges, P. A. V. (2024). Pollinator diversity and plant-pollinator interactions across different land uses on Terceira Island (Azores). <i>23rd National Ecology Meeting (SPECO)</i> , University of Porto, Portugal, November 24–26, 2024.
	Azores, Portugal	Cancela, J. P. , Carvalheiro, L. G., Dias, T., & Borges, P. A. V. (2024). Nutrient enrichment affects plant-flower visitor assemblage interaction patterns in a Mediterranean grassland. <i>3Bs Seminar – Biodiversity, Biomedicine, Biotechnology</i> , Azores, Portugal.
	Loftus, Norway	Cancela, J. P. , Carvalheiro, L. G., Dias, T., Caldeira, M. C., Bugalho, M. N., & Borges, P. A. V. (2024). Nutrient enrichment affects plant-flower visitor assemblage interaction patterns in a Mediterranean grassland. <i>38th Annual Meeting of the Scandinavian Association for Pollination Ecology</i> , Loftus, Norway.

Type	Local	Complete reference
	Alicante, Espanha	Costa, R. , Macías-Hernández, N., Rigal, F. , Borges, P. A. V. , & Cardoso, P. (2024). Do island spiders descend from trees? – A tale of island colonization and niche expansion. <i>XXIII Iberian Arachnology Meeting</i> , University of Alicante, Spain, July 4–6, 2024.
	Lisbon, Portugal	Costa, R. , Macías-Hernández, N., Rigal, F. , Borges, P. A. V. , & Cardoso, P. (2024). Do island spiders descend from trees? – Colonization and niche expansion according to vertical microhabitat. <i>10th cE3c Annual Meeting – Frontiers in E3</i> , Lisbon, Portugal, December 12–14, 2024.
	Online	Garcia, P. V. , & Rodrigues, A. (2024). Sleeping volcanoes, awaking health issues: The hazardous health effects of hydrothermal emissions on volcanic islands. <i>EUNICOAST Online Conference</i> , September 27, 2024. <i>Abstract Book</i> (preprint), p. 74.
	Lisbon, Portugal	Lhoumeau, S. , Elias, R. B. , Seidel, D., Gabriel, R. , & Borges, P. A. V. (2024). Landscape to microhabitat: Uncovering the multiscale complexity of Azorean forests. <i>10th cE3c Annual Meeting – Frontiers in E3</i> , Lisbon, Portugal.
	Londres, Inglaterra	Lhoumeau, S. , Pinelo, J., & Borges, P. A. V. (2024). Artificial intelligence for biodiversity: Exploring the potential of recurrent neural networks in forecasting arthropod dynamics based on time series. <i>IA in Entomology Congress</i> , London, UK.
	Aveiro, Portugal	Lucas, M. F. F. S. A., Tavares, W. R. , Rosa, G. P. , Viveiros, M. M. , Pinto, D. C. G. A., Seca, A. M. L. , & Barreto, M. C. (2024). From the Azores to the lab: Bioactive natural products targeting health issues. <i>4th International Conference on Natural Products and Human Health</i> , p. 78.
	Cagliari, Italy	Mammola, S., Amorim, I. R. , Borges, P. A. V. , Crespo, L. C. , Gabriel, R. , et al. (2024). The DARCO project: A cost-effective plan to incorporate subterranean ecosystems in post-2020 biodiversity and climate change agendas. <i>26th International Conference on Subterranean Biology</i> , Cagliari, Italy, September 9–14, 2024.
	Bologna	Mammola, S., Amorim, I. R. , Borges, P. A. V. , Crespo, L. C. , Gabriel, R. , et al. (2024). Safeguarding the future of subterranean biodiversity in Europe. <i>7th European Congress of Conservation Biology – Biodiversity Positive by 2030 (ECCB 2024)</i> , Bologna, Italy.
	Online	Oyarzabal, G. , Cardoso, P., Rigal, F. , Boieiro, M. , Santos, A. M. C., Amorim, I. R. , Malumbres-Olarte, J. , Costa, R. , Lhoumeau, S. , Pozsgai, G. , Gabriel, R. , & Borges, P. A. V. (2024). Arthropod traits as proxies for abundance trends in the Azorean Islands. <i>1st EUNICOAST Online Conference</i> .
	Bogotá, Colombia	Oyarzabal, G. , Cardoso, P., Rigal, F. , Boieiro, M. , Santos, A. M. C. , Amorim, I. R. , Malumbres-Olarte, J. , Costa, R. , Lhoumeau, S. , Pozsgai, G. , Gabriel, R. , & Borges, P. A. V. (2024). Spider traits unravel abundance trends and threat levels in the Azorean Islands.

Type	Local	Complete reference
	Lisbon, Portugal	Oyarzabal, G., Pozsgai, G., Tsafack, N., Cardoso, P., Rigal, F., Boieiro, M., Santos, A. M. C., Amorim, I., Malumbres-Olarte, J., Costa, R., Lhoumeau, S., Gabriel, R., & Borges, P. A. V. (2024). Assessing threats and conservation strategies for endemic terrestrial arthropods in the Azores. <i>10th Frontiers in E3, CE3C's Annual Meeting</i> .
	Faro, Portugal	Rosa, G. P., Lucas, M. F. F. S. A., Barreto, M. C., Seca, A. M. L., & Pinto, D. C. G. A. (2024). Exploring the hyaluronidase inhibitory activity of phytosterol derivatives. <i>15th National Organic Chemistry Meeting & 8th National Medicinal Chemistry Meeting</i> , p. 96.
	S. José, Costa Rica	Soares, A. O., Oliveira, L., Borges, I., Arruda, P., Barbosa, F., Durão, A. C., Figueiredo, E., Franco, J. C., Lucas, E., Dutra, T. M., Batista, M. G., Teixeira, J. C. A., Todorova, S., & Tavares, J. (2024). Ecological and economic feasibility of mass production of biological agents to control tomato moth, <i>Tuta absoluta</i> (Meyrick) (Lepidoptera: Gelechiidae) in protected cultures.
Invited keynote presentations	Ponta Delgada, Portugal	Arroz, A. M., Gabriel, R., Fuentes Sánchez, A., & Albergaria, I. S. (2024, March 22). Contemporary modalities of garden appropriation: From anthropological places to contexts promoting health, socialization, and personal time. <i>Green Gardens Fest 2024 – Colloquium “Use and Leisure in Gardens”</i> , University of the Azores, Ponta Delgada, São Miguel, Azores, Portugal.
	Itajaí, Brasil	Barreiros, J. P. (2024). Legal and illegal trade of marine organisms: A global scourge. <i>Plenary lecture presented at the XX Latin American Congress of Marine Sciences (COLACMAR) and 8th Brazilian Oceanography Congress (CBO)</i> , Itajaí, SC, Brazil.
	Funchal, Portugal	Boieiro, M. (2024). <i>Biodiversity and conservation of arthropods in the Madeira archipelago and the RESCUE project</i> .
	Funchal, Portugal	Boieiro, M. (2024). <i>Conservation plan for the Selvagens longhorn beetle (Deucalion oceanicum)</i> .
	Angra do Heroísmo, Portugal	Gabriel, R. (2024, March 18). <i>Biodiversity of the Azores: Exploring the unknown at our doorstep</i> . XX Science Week of Escola Básica Integrada de Angra do Heroísmo [Escola Ciprião de Figueiredo], Department of Sciences, EBIAH, Angra do Heroísmo, Terceira, Azores, Portugal.
	Lisbon, Portugal	Garcia, P. V. (2024). <i>Sleeping volcanoes, awakening health issues: Lessons learned from wild mice</i> . IABEP - International Association for Biomonitoring Environmental Pollution.
	Hanoi, Vietnam	Soares, A. O., Oliveira, L., Borges, I., Arruda, P., Barbosa, F., Durão, A. C., Figueiredo, E., Franco, J. C., Lucas, E., Dutra, T. M., Batista, M. G., Teixeira, J. C. A., Todorova, S., & Tavares, J. (2024). <i>Biological control of Phthorimaea absoluta (Meyrick) (Lepidoptera, Gelechiidae) in protected cultures: Ecological and economic feasibility of mass production of natural enemies</i> .

Type	Local	Complete reference
Author/co-author of poster	Vila do Conde, Portugal	Alves, J. S., Farelo, L., Melo-Ferreira, J., Salces-Ortiz, J., Fernández, R., Ciofi, C., Natali, C., Morselli, M., Fernandes, C. R., Sousa, V., Pereira, F., Borges, P. A. V. , Marques, J. P., & Amorim, I. R. (2024). <i>From darkness to data: Genomic insights into the evolution and conservation of the Azorean cave ground beetle Trechus terceiranus</i> . XX National Meeting of Evolutionary Biology, December 19–20, 2024.
	Tarragona, Spain	Blomberg, A. S., Valanne, V., Meierhofer, M. B., Garzoli, L., Oromí, P., Pereira, F. , Amorim, I. R. , Zagmajster, M., Lilley, T. M., & Mammola, S. (2024). <i>Unearthing European bat roosts – An expert-curated, comprehensive database for conservation and management</i> . 16th European Bat Research Symposium, Tarragona, Spain, September 2–6, 2024.
	Ponta Delgada, Portugal	Calado, H. R. M. G. , Borges, P. A. V. , Heleno, R., & Soares, A. O. (2024). <i>A comparative analysis of island vs. mainland arthropod communities in coastal grasslands belonging to two distinct regions: São Miguel Island (Azores) and mainland Portugal</i> .
	Lisbon, Portugal	Calado, H. R. M. G. , Borges, P. A. V. , Heleno, R., & Soares, A. O. (2024). <i>A comparative analysis of island vs. mainland arthropod communities in coastal grasslands belonging to two distinct regions: São Miguel Island (Azores) and mainland Portugal</i> . 10th cE3c Annual Meeting – <i>Frontiers in E3</i> , Lisbon, December 12–14, 2024.
	Cagliari, Italy	Crespo, L. , Gabriel, R. , Amorim, I. R. , Pereira, F. , & Borges, P. A. V. (2024). <i>Diversity and conservation of arthropods and bryophytes in the volcanic caves of the Azores</i> . 26th International Conference on Subterranean Biology, Cagliari, Italy, September 9–14, 2024.
	Vila do Conde, Portugal	Nunes, J., Pinto, J., Ferreira, S., Paulo, O., Rego, C., Boieiro, M. , Amorim, I. R. , Melo-Ferreira, J., & Pimenta, J. (2024). <i>The genetic landscape and the adaptation of the bumblebee Bombus terrestris to distinct Portuguese biomes</i> . XX National Meeting of Evolutionary Biology, Vila do Conde, December 19–20, 2024.
	Budapest, Hungary	Pozsgai, G. (2024). <i>How does AI see carabids? The morphological accuracy of image-generating models on realistic ground beetle images</i> . 21st European Carabidologists Meeting, Budapest, Hungary.
	Kigali, Rwanda	Pozsgai, G. , & Ben Fekih (2024). <i>Differences in the architecture of aphid-fungus interaction networks across continental and island environments in tropical areas</i> . 60th Annual Meeting of the Association for Tropical Biology and Conservation, Kigali, Rwanda.
	Liverpool, UK	Rademaker, M., Oudejans, M. G., Guilpin, M., Barcelos, L. M. D. , & Visser, F. (2024). <i>Sperm whales are drawn (back) to the shores of Terceira, the question is why?</i> [Poster abstract]. British Ecological Society Annual Meeting, Liverpool, UK.

Type	Local	Complete reference
	Aveiro, Portugal	Rosa, G. P. , Peixoto, A. F., Barreto, M. C. , Seca, A. M. L. , & Pinto, D. C. G. A. (2024). <i>Bioguided extraction and identification of compounds with cosmeceutical value from Cystoseira abies-marina</i> . 4th International Conference on Natural Products and Human Health, p. 97.
	Lisbon, Portugal	Tavares, W. R. , Barreto, M. C. , Seca, A. M. L. , Rodríguez-Mejías, F. J., Varela, R. M., & Macías, F. A. (2024). <i>Understanding the aggressive invasion by Gunnera tinctoria (Molina) Mirbel and Hedychium gardnerianum Sheph. ex Ker Gawl. in the Azorean ecosystem – Allelopathy as a weapon of choice</i> . Frontiers in E3 - 10th CE3C Annual Meeting - Rings of Experience: Growing Towards Tomorrow.
	Ponta Delgada, Portugal	Tavares, W. R. , Barreto, M. C. , Seca, A. M. L. , Rodríguez-Mejías, F. J., Varela, R. M., & Macías, F. A. (2024). <i>Understanding the aggressive invasion by Gunnera tinctoria (Molina) Mirbel and Hedychium gardnerianum Sheph. ex Ker Gawl. in the Azorean ecosystem – Allelopathy as a weapon of choice</i> . Doctoral Seminar Ana Neto.
	Ponta Delgada, Portugal	Teixeira, M., Soares, A. O. , Borges, P. A. V., Monteiro, H., Frias, J., & Simões, N. (2024). <i>Biocontrol potential of insect soil assemblages associated with Popillia japonica in Azorean crop fields</i> .
	Ponta Delgada, Portugal	Viveiros, M. , Medeiros, V., Seca, A. M. L. , & Barreto, M. C. (2024). <i>Anti-aging potential of extracts from Morella faya and Laurus azorica leaves</i> . Doctoral Seminar Ana Neto.

APPENDIX 5. SCIENTIFIC MISSIONS: ORGANIZATION AND PARTICIPATION

The following tables provide data regarding the organization and participation (Table 8) in scientific missions organized by and/or including members of the Azorean Biodiversity Group in 2024.

Table 8. Organization of field scientific missions

<i>Local</i>	<i>Date</i>	<i>PI</i>	<i>Members</i>	<i>Project</i>
Pico Island	June-July, 2024	Rui Bento Elias & Rosalina Gabriel	Rui Andrade Lucie Fatková Léa Pichon Xenia Davide	BioMonI
Terceira Island	September- November, 2024	Rui Bento Elias & Rosalina Gabriel	Rui Andrade Lucie Fatková Léa Pichon Xenia Davide	BioMonI
Terceira Island	March, June, September, December, 2024	Paulo A.V. Borges	Sebastien Lhoumeau Ricardo Costa Abrão Leite Laurine Parmentier	SLAM traps