

# COCCIA CRISTINA

## CURRICULUM VITAE

### PERSONAL DATA

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Date of Birth: 08 April 1978  
Nationality: Italian  
e-mail: cristina.coccia@uniroma3.it  
ORCID ID: ORCID.ORG/0000-0002-0832-2050

### EDUCATION

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10/2015 **PhD in Natural Resources and Environment.** Thesis: Invasion biology of *Trichocorixa verticalis* in Doñana, SW Spain. University of Seville & Doñana Biological Station (CSIC), Seville, Spain. Supervisors: Dr A. J. Green & Dr L. Boyero.  
12/2010 **MSc in Natural Resources and Environment.** Equivalent to Diploma of University Advanced Studies (DEA). Research for Pre-Doctoral studies. Thesis: Comparative Analysis of different sensors (satellite and aircraft) to control water quality in restored wetlands of Caracoles estate (Doñana). University of Seville, Seville, Spain.  
12/2005 **Combined BSc/MSc in Natural Sciences** (Laurea magistrale). Thesis: Macroinvertebrate of a temporary pond in Castelporziano Presidential Estate (Rome): composition, functional organization and microhabitat distribution". "La Sapienza" University of Rome, Rome, Italy.

### PREVIOUS AND CURRENT POSITION

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From 01/03/2023 RTDa researcher at the University of Roma Tre, Rome  
15/02/2021-28/02/2023: Postdoc researcher at Doñana Biological Station-CSIC, Seville-Spain  
01/12/20-31/01/21: FCT-Researcher at the University of Lisboa, Lisboa, Portugal  
01/08/2019-30/11/2020: Associate Professor at the Universidad Santo Tomás, Santiago Chile  
15/06/2019- 31/07/2019: Assistant Professor at the Universidad Bernardo O'Higgins, Santiago del Chile  
01/11/2015-31/10/2018: Post doctoral Fellow at CAPES-Pontificia Universidad Católica de Chile.  
01/10/2009-02/10/2015: JAE-pre doctoral Fellow at Doñana Biological Station (CSIC) Spain.

### GRANTS AND FUNDS

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15/02/21-15/02/24: Research contract from the Junta de Andalucía taking place at the Doñana Biological Station (CSIC), Seville-Spain  
  
01/12/20-30/11/26: FCT Individual call for young researcher taking place at the Ce3C at the Faculty of Sciences at the University of Lisbon. Declined for personal reasons.  
  
01/11/2018-31/10/2021: Research funds, CAPES-UC, Chile. Funded by Conicyt/Fondecyt Iniciación program. Total: ca. €97,131;  
  
01/11/2015-31/10/2018: Postdoc fellowship (salary+research funds), CAPES-UC, Chile. Conicyt/Fondecyt postdoc program. Total: ca. €100,826;  
  
10/2009 –09/2013: CSIC-JAE-predoc fellowship to conduct a PhD at University of Seville and Doñana Biological Station (CSIC);  
  
09/2012 - 12/2012: Visiting fellow, Australian Rivers Institute, Griffith University. Brisbane, QLD Australia. Funded by Spanish National Council for Scientific Research (CSIC);  
  
08/2011 - 11/2011: Visiting fellow, Laboratory of Aquatic Ecology, Evolution and Conservation, K.U. University. Leuven, Belgium. Funded by Spanish National Council for Scientific Research (CSIC);  
  
06/2010 - 09/2010: Visiting fellow, Faculty of Science & Technology, Marine Biology and Ecology Research Centre, University of Plymouth. Plymouth, UK. Funded by Spanish National Council for Scientific Research (CSIC);  
  
03/2008 - 07/2008: Research Internship, Ecolé d'Ingenieurs de Lullier, University of Applied Sciences of Western Switzerland, Genève, Switzerland. Funded by Ecolé d'Ingenieurs de Lullier, Genève, Switzerland;  
  
04/2007 - 12/2007: Research Internship, University Paul Sabatier, Toulouse, France. Funded by La Sapienza,

University of Rome, Italy.

## Participation to Project Execution

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2022-2025

Project Title: “Assessing and monitoring terrestrial and freshwater biodiversity and its evolution: from taxonomy to genomics and citizen science” PNRR-Biodiversity

Degree of contribution: Collaborator

Entity where the project take place: University of Roma Tre

2021-2025

Project title: WATERZOO: Plant dispersal across Europe by WATERbird endoZOOchory: how effective are waterbirds at establishing plant populations and connecting those in different habitats?

Funding entity : *Ministerio de Ciencia y Innovación (Spain)*

Degree of contribution: Collaborator

Entity where the project take place: Doñana Biological Station (CSIC)-Spain

2021-2023

Project title: Aves acuáticas como vectores de plásticos y nutrientes entre vertederos y humedales andaluces: GuanoPlastic

Funding entity : *Junta de Andalucía (Spain)*

Degree of contribution: Collaborator

Entity where the project take place: Doñana Biological Station (CSIC)-Spain

01/11/2018 – 31/10/2021

Project title: “Size spectra of coastland wetland invertebrate communities in Chile: the role of disturbance”

Funding entity : Conicyt-Fondecyt Iniciación

Degree of contribution: **Principal Investigator**

Entity where the project take place: CAPES- Pontificia Universidad Católica de Chile, Santiago- Chile

01/11/2015 – 31/10/2018

Project title: “Latitudinal variation on species diversity and trophic organization of Chilean salt marsh macroinvertebrates: understanding the role of habitat characteristics and complexity”

Funding entity : Conicyt-Fondecyt postdoc program.

Degree of contribution: **Principal Investigator**

Entity where the project take place: CAPES- Pontificia Universidad Católica de Chile, Santiago- Chile

2009-2013

Project title: “Structure and dynamics of macroinvertebrate meta-communities in temporal wetlands and the role of the invasive species *Trichocorixa verticalis* (Hemiptera; Corixidae)”.

Funding entity: Junta de Andalucía

P.I. Andrew J. Green

Degree of contribution: Collaborator

Entity where the project take place: Doñana Biological Station-CSIC (Spain)

## STAY IN INTERNATIONAL CENTRE

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09/2012 - 12/2012: **Visiting fellow**, Australian Rivers Institute, Griffith University. Brisbane, QLD Australia. Responsible Researcher: Dr Stuart Bunn and Dr Brian Fry

08/2011 - 11/2011: **Visiting fellow**, Laboratory of Aquatic Ecology, Evolution and Conservation, K.U. University. Leuven, Belgium. Responsible Researcher: Luc Brendonck

06/2010 - 09/2010: **Visiting fellow**, Faculty of Science & Technology, Marine Biology and Ecology Research Centre, University of Plymouth. Plymouth, UK. Responsible Researcher: Dr David Bilton and Dr Piero Calosi.

03/2008 - 07/2008: **Research Internship**, Ecolé d’Ingenieurs de Lullier, University of Applied Sciences of Western Switzerland, Genève, Switzerland. Responsible Researcher: Dr Beat Oertli.

04/2007 - 12/2007: **Research Internship**, University Paul Sabatier, Toulouse, France.. Responsible Researcher: Dr Regis Ceréghino

05/2006 - 07/2006: **Research Internship**, ISPRA, Rome, Italy. Responsible Researcher: Dr Nicola Pacini.

## LANGUAGES

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Italian - (native speaker)  
English – average level: B2  
Spanish - average level: C1  
French- average level: B1

## TEACHING ACTIVITY

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A.A. 2022 – 2023: CORSO INTEGRATO DI ECOLOGIA E SOSTENIBILITA' AMBIENTALE (3CFU) AUREA IN SCIENZE PER LA PROTEZIONE DELLA NATURA E LA SOSTENIBILITÀ AMBIENTALE  
A.A. 2022 – 2023. ECOLOGIA APPLICATA (2CFU). LAUREA MAGISTRALE IN BIODIVERSITÀ E TUTELA DELL'AMBIENTE  
A.A. 2022 – 2023: LABORATORIO DI BIODIVERSITÀ ED ECOLOGIA DELLE ACQUE INTERNE (2CFU). LAUREA MAGISTRALE IN BIODIVERSITÀ E TUTELA DELL'AMBIENTE

## STUDENT Supervision

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### • Erasmus student

- 2022 Millicent Payne
- 2022 Rhianna Rhicardson
- 2022 Beatrice Luzi

### • Undergraduate students

2013	Clara Venus Estevez	Universidad Pablo de Olavide, Seville – Spain
2017	Stefany Navarrette	Pontificia Universidad Católica de Chile, Santiago - Chile
2017	Aylin Rivas	Pontificia Universidad Católica de Chile, Santiago - Chile
2019	Carlos Vega Vega	Universidad Austral, Valdivia, Santiago - Chile (completed)
2020	Isidora Vega Alvarez	Universidad Santo Tomás, Santiago - Chile (completed)
2022	Beatrice Luzi	Universidad de Roma Tre-Italy (completed)

### • Graduate students

2019	Alexis Santibañez Barra	Universidad Santo Tomás, Santiago - Chile (in progress)
2020	Belén Gutiérrez Román	Universidad Pablo de Olavide, Sevilla –Spain (completed)
2021	Catarina Quadrado	University of Lisbon- Portugal (in progress)

## PAPERS SUBMITTED OR IN PREPARATION

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**Coccia C**, Pintado E, Paredes A.L., Aragonés D., O’Ryan D.C., Green A.J., Bustamante J & Diaz-Delgado R. Modelling water depth, turbidity and chlorophyll using airborne hyperspectral remote sensing in a restored pond complex of Doñana National Park (Spain). (In prep).  
Gallitelli L., Cera A., Scalici M., Sodo A., Di Gioacchino M., Luzi B., Hortas F. , Green A.J., **Coccia C**. Birds and landfills affect the plastic ingestion in aquatic insects (submitted STOTEN).  
**Coccia C** & Scalici M. Current knowledge, gaps and conservation priorities for Mediterranean Temporary Ponds in Central-Southern Italy. (In prep).

## ARTICLES IN PEER-REVIEWED JOURNALS

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Pietrelli, L., Dodaro, G., Pelosi, I., Menegoni, P., Battisti, C., **Coccia, C.**, & Scalici, M. (2024). Microplastic in an apex predator: evidence from Barn owl (*Tyto alba*) pellets in two sites with different levels of anthropization. *Environmental Science and Pollution Research*, 1-8.  
**Coccia, C.**, Almeida, B.A., Badosa, A., Diniz, L.P., Brendonck, L., Frisch, D., & Green, A. J. (2024). Hydroperiod length, not pond age, determines zooplankton taxonomic and functional diversity in temporary ponds. *Ecological Indicators* 159, 111632.  
Santibañez, A., Barría, E. M., Barros, M., **Coccia, C.**, & Medina-Vogel, G. (2024). First Detection of *Lontra provocax* in an Unexplored Hydrological Basin of Central-Southern Chile. *Aquatic Mammals* 50 (1).  
**Coccia, C.** Vega, C. & Fierro, P. (2022). Macroinvertebrate-Based Biomonitoring of Coastal Wetlands in Mediterranean Chile: Testing Potential Metrics Able to Detect Anthropogenic Impacts. *Water* 14(21) 3449.

- Coccia, C.**, Contreras-Lopez, M., Fariña, J.M. and A.J. Green (2022). Comparisons of taxonomic and size based approaches to determine the effect of environment and disturbance on invertebrate communities in coastal Chile. *Ecological Indicators* 143-109356.
- Coccia, C.**, & Fariña, J. M. (2022). Responses of plant-arthropod communities to nutrient enrichment in hyper-arid and semi-arid zones. *Estuarine, Coastal and Shelf Science*, 107884.
- Barros, M., Pons, D. J., Moreno, A., Vianna, J., Ramos, B., Dueñas, F., **Coccia, C.**, & Medina-Vogel, G. (2022). Domestic dog and alien North American mink as reservoirs of infectious diseases in the endangered Southern river otter. *Austral journal of veterinary sciences*, 54(2), 65-75.
- Coccia, C.**, Almeida, B., Green, A., Gutierrez, A.B., Carbonell, J. (2021). Functional diversity of macroinvertebrates as a tool to evaluate wetland restoration. *Journal of Applied Ecology*, 58(12), 2999-3011. DOI: 10.1111/1365-2664.14038.
- Carbonell, J.C, Céspedes V., **Coccia, C.** & Green A.J. (2020). An experimental test of interspecific competition between the alien boatman *Trichocorixa verticalis* and the native corixid *Sigara lateralis* (Hemiptera, Corixidae). *Aquatic Invasions* 15, 318-334.
- Campodonico, JF & **Coccia, C.** (2019) New genus and species of Delphacini (Hemiptera: Delphacidae) from a salt marsh in northern Chile. *Zootaxa* 4550, 146-150. IF 0.95,
- Coccia, C.** & JM Fariña (2019). Partitioning the effects of regional, spatial and environmental variables on the beta diversity of salt marsh arthropods in Chile. *Ecology and Evolution* 9, 2575-2587.
- Céspedes, V., **Coccia, C.**, Carbonell, J.A., Sánchez, M & A. Green (2019). The life cycle of the alien boatman *Trichocorixa verticalis verticalis* (Hemiptera, Corixidae) in saline and hypersaline wetlands of south-west Spain. *Hydrobiologia* 827, 309–324.
- Pérez-Schultheiss, J., Ayala, K., Fariña, J.M. & **Coccia, C.** (2018). Exotic terrestrial isopods (Crustacea: Isopoda: Oniscidea) in coastal wetlands: first record of the families Halophilosciidae and Platyarthridae in Continental Chile. *New Zealand Journal of Zoology* 46, 225-235.
- Carbonell, J.A., Velasco, J., Millán A., Green, A.J., **Coccia, C.**, Guareschi, S. & Gutiérrez-Cánovas, C. (2017). Biological invasion modifies the co-occurrence patterns of insects along a stress gradient. *Functional Ecology* 31: 1957-1968.
- Coccia, C.**, Boyero, L., Vanschoenwinkel, B., Brendonck, L. and Green A.J. (2016). Newly created ponds complement natural waterbodies for restoration of macroinvertebrate assemblages. *Freshwater Biology* 61,1640-1654.
- Coccia, C.**, Fry, B., Ramirez, F., Boyero, L., Bunn, S., Diz-Salgado, C., Walton, M., Le Vay, L. and Green, A.J. (2016). Niche partitioning between invasive and native corixids (Hemiptera, Corixidae) in South West Spain. *Aquatic Sciences* 78, 779-791.
- Carbonell, J.A., Millán, A., Green, A.J., Céspedes, V., **Coccia, C.** and Velasco, J. (2016). What traits underpin the establishment and spread success of the invasive water bug *Trichocorixa verticalis* (Fieber, 1851)? *Hydrobiologia* 768, 273-286.
- Walton, M.E.M., Vilas, C., **Coccia, C.**, Green, A.J, Cañavete, J.P., Prieto A., van Bergeijk, S.A. Medialdea, J.M., Kennedy, H., King, J. and Le Vay, L. (2015) The effect of water management on extensive aquaculture food webs in the reconstructed wetlands of the Doñana Natural Park, Southern Spain. *Aquaculture* 448: 451-463.
- Sanchez, M., **Coccia, C.**, Boyero, L., Valdecasas, A. and Green A.J. (2015) Parasitism by water mites in native and exotic Corixidae in south-west Spain. Are mites limiting the invasion of the water boatman *Trichocorixa verticalis verticalis*? *Journal of Insect Conservation* 19: 433-447.
- Coccia, C.**, Boyero, L. and Green, A.J. (2014). Can differential predation of native and alien corixids by fish and dragonflies explain the success of *Trichocorixa verticalis verticalis* in the Iberian Peninsula? *Hydrobiologia* 743: 115-123.
- Guareschi S., **Coccia C.**, Sánchez-Fernández D., Carbonell J.A., Velasco J., Boyero L., Green A.J. and Millán A. (2013). How far could the alien boatman *Trichocorixa verticalis verticalis* spread? Global estimation of its current and future potential distribution. *PLoS One* 8(3): e59757.
- Coccia C.**, Calosi P., Boyero L., Green A.J. and Bilton D.T. (2013). Does ecophysiology determine invasion success? a comparison between the invasive boatman *Trichocorixa verticalis verticalis* and the native *Sigara lateralis* (Hemiptera, Corixidae) in South-West Spain *PLoS ONE* 8(5): e63105.
- Céréghino, R., Oertli, B., Bazzanti, M., **Coccia C.**, Compin, A., Biggs, J., Bressi, N., Grillas, P., Hull, A., Kalettka, T. and Scher, O. (2012). Biological traits of European pond macroinvertebrates. *Hydrobiologia* 689: 51-61.
- Bazzanti, M., **Coccia, C.** and Dowgiallo, M.G. (2010). Microdistribution of macroinvertebrates in a temporary pond of Central Italy: taxonomic and functional analyses. *Limnologia Ecology and Management of Inland Waters* 40: 291-299.

- Coccia C.**, Gallitelli L., Luzi B., Cera A., Green A., Scalici M. First evidence of microplastic pollution in water, sediments and macroinvertebrates in Mediterranean wetlands in south-west Spain. XXXII Congresso Italiano di Ecologia. Catania 6-8 Settembre 2023.
- Gutierrez-Canovas, C., Abellan, P., Almeida, B., .....**Coccia, C.**,.....The Iberian River Observatory (IberRios): a collaborative project to explore global change impacts on Iberian River biodiversity and ecosystem functions. SIBECOL 20220. Aveiro 3-8 July 2022.
- Almeida, B., **Coccia, C.**, Pereira, L., Badosa, A., Frisch, D., Green, A.J. Zooplankton succession and yearly variation of functional diversity in new Mediterranean temporary ponds. SIBECOL 20220. Aveiro 3-8 July 2022.
- Coccia C.**, Almeida, B., Rodriguez, A.B., Green, A & Carbonell, J.A (2021). Macroinvertebrate functional diversity of new mediterranean pond. ASLO 2021, Aquatic Science Meeting, June 2021.
- Carbonell, J.A., Céspedes, V., **Coccia, C.**, Sánchez, M.I., Velasco, J., Millán, A. (2020). Invasion biology of the American Boatman *Trichocorixa verticalis verticalis* (Fieber, 1851) in Western Europe: The role of ecophysiology and biological interactions. XX Congress of the Iberian Association of Limnology (AIL-2020), Murcia (Spain) 26-29 October 2020.
- Coccia C.**, Fry B., Boyero L. & Green A.J. Using stable isotopes to determine diet and isotopic niche width differences between invasive and native corixids (Hemiptera, Corixidae) in South West Spain. Aquatic Sciences: Global and Regional Perspectives - North meets South. ASLO 2015, Aquatic Science Meeting, Granada, Spain. 22-27 February 2015.
- Céspedes V.; **Coccia C.**; Valdecasas A; Sanchez M; Green A. Influence of watermites on a hemipteran community in Spanish wetlands: enemies that limit the invasion of *Trichocorixa verticalis*? Aquatic Sciences: Global and Regional Perspectives - North meets South ASLO 2015, Aquatic Science Meeting, Granada, Spain. 22-27 February 2015.
- Green A.J., **Coccia C.**, Carbonell J.A., Céspedes V., Sanchez M.I., Velasco J., & Millán A. The invasion of an American boatman *Trichocorixa verticalis verticalis* in Europe; consequences for native species, and the role of the salinity gradient. NEOBIOTA 8th European Conference on Biological Invasions, Antalya-Turkey. November 2014
- Green A.; **Coccia C.**; Sebastian Gonzalez, E.; Badosa A.; Frisch D. Restauración en la finca caracoles(Doñana):consecuencias para las aves acuáticas y los invertebrados acuáticos. Congreso Nacional de Conservación y Restauración de Humedales. Jerez, Spain 12- 14 November 2015
- Fariña J.M; **Coccia C.** <sup>(SEP)</sup>Ensamblajes de plantas en Humedales Costeros de Chile:evidencias de interacción entre perturbaciones naturales y antrópicas. Seminario Humedales costero en Chile, Argentina y Mexico. Valparaiso, Chile 07/08/2018

#### Poster

- Coccia C.** & Scalici M. Temporary ponds in central-southern Italy, research trends and gaps. Forum Nazionale della Biodiversità Palermo 20 - 22 Maggio 2024.
- Coccia C.** & J.M. Fariña. Salt marsh arthropod assemblages along the Chilean coast: the role of habitat characteristics and complexity. The 2017 Ecological Society of America annual meeting in Portland Oregon 6 -11 August 2017.
- Guareschi S., **Coccia C.**, Sánchez-Fernández D., Carbonell J.A., Velasco, J., Boyero L., Green A.J. & Millán A. Predicting the worldwide potential distribution of the boatman *Trichocorixa verticalis verticalis* (Fieber, 1851) (Order: Heteroptera; Fam: Corixidae). NEOBIOTA 7th European Conference on Biological Invasions, Pontevedra, Spain. 12-14 September 2012.
- Bazzanti M., **Coccia C.** and Dowgiallo M. G. Microdistribution of macroinvertebrates in a temporary pond in Central Italy. 3<sup>rd</sup> EPCN- European Pond Conservation Network, Valencia, Spain. 14-16 May 2008.
- Bazzanti M., Della Bella V., Grezzi F., **Coccia C.** Macroinvertebrate ecology and conservation in temporary and permanent ponds in central Italy. SEFS 5-Symposium for European Freshwater Sciences. Palermo, Italy. July 2007.
- Bazzanti M., Della Bella V., Grezzi F., **Coccia C.** Aspetti ecologici e conservazione dei macroinvertebrati in stagni temporanei e perenni dell'Italia centrale. Simposi científic sobre gestió i conservació de llacunes temporànies mediterrànies. Banjoles, Spain. 19-21 March 2007.

#### TRAINING COURSES

- Statistic One. Online course. November 2013.
- Computing for Data Analysis Online course. September-October 2013.
- Ecological data in R. Seville, Spain. July 2011.
- ArcGIS 9.3 (introduction). Seville, Spain. February 2010.
- ArcGIS 9.3 (advanced). Seville, Spain. March 2013.
- QGIS (introduction). Seville, Spain. June 2013.

#### OUTREACH ACTIVITIES

- 2023 European Researchers' Night: Life in plastic it is not so fantastic

2022 European Researchers' Night: TaxiBird

Divulgatore 20ª Feria de la Ciencia- Palacio de las exposiciones y Congreso de Sevilla. 12-14 Mayo 2022

Reportage Espacio protegido trasmesso in canalsur il giorno 02/04/2022  
<https://www.youtube.com/watch?v=tdzgJCZ2-jw>

9 Feria Científica y Tecnológica de Osorno- exposicion de la charla: Que son las especies invasoras?  
25/08/2020

Nota: <https://www.elagoradiario.com/chile/lluvias-en-chile-un-regalo-para-los-humedales/> publicada el dia  
21/07/20

Colonna di opinione nella rivista el Pinguino (<http://portal.nexnews.cl/showN?valor=dfytc>)  
diario de Conce, la estrela de Iquique, el Austral de Osorno, El centro, Diario de Atacama y el Lider-  
25/01/2020.

Partecipacion in the citizen science project: Ants of Chile funded by Red Observadores de aves y vida  
silvestres de Chile, 2018.

Open laboratory on Chilean native birds at the National week of Science and Technology organized by  
Conicyt-Explora. October (2018)

**Coccia, C.** & Fariña, J.M. (2018). Drivers of beta diversity of salt marsh arthropods in Chile. Society of  
Wetland Scientists Symposium on Twitter. 18 October 2018.

Carbonell, J.A., Guareschi, S., **Coccia, C.**, Sánchez-Fernández, D., Velasco, J., Boyero, L., Green, A.J. &  
Millán, A. 2012. Distribución de *Tricochorixa verticalis verticalis* (Fieber 1851) (Heteroptera: Corixidae) a  
nivel mundial y su expansion en la Península Ibérica.

In: GEIB Grupo Especialista de Invasiones Biológicas (ed) EEI 2012 Notas Científicas. pp 148-152. 4º  
Congreso Nacional sobre Especies Exóticas Invasoras "EEI 2012". GEIB, Serie Técnica nº 5, Leon, Spain.

#### **REVIEWER AND EDITORIAL BOARD**

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Reviewer: Freshwater Biology, Functional Ecology, Science of the Total Environment, Limnologia,  
Hydrobiologia, Global Ecology and Conservation, Ecological Indicators, Agriculture Ecosystems and  
Environment.

Review Editor: Frontiers in Environmental Science

Roma 28/05/24

In Fede

Cristina Coccia