

Jordi Bascompte¹ – *the architecture of biodiversity*

Research Profile and Impact

Bascompte's research combines theory and the analysis of large data sets to address basic and applied problems in ecology. During the early stages of his research, he studied the spatial dimension of population and community dynamics. This provided novel approximations to attempt to answer unresolved questions in conservation biology such as how many patches are necessary for the persistence of a metapopulation. More recently, his application of network theory to the study of mutualisms has allowed him to identify general laws that determine the way in which species interactions shape biodiversity. Bascompte's work has also had a clear influence on other fields such as in the study of systemic risk on finance and other man-made cooperative networks. Bascompte has been recognized by Thompson Reuters as one of the most influential scientists. He has an h-index of 63, has authored several highly cited papers, and regularly publishes his work in the top scientific journals including *Nature* (8 papers), *Science* (8 papers), and *PNAS* (11 papers).

Education

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| 1991–1994 | | PhD in Ecology, University of Barcelona, Spain |
| 1985–1991 | | BS and MS in Biology, University of Barcelona, Spain |

Professional Experience

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| 2015– | | Full Professor of Ecology, Department of Evolutionary Biology and Environmental Studies, University of Zurich, Switzerland |
| 2000–2014 | | Associate (–2007) and Full Professor , Spanish Research Council, Sevilla, Spain |
| 1998–1999 | | Postdoctoral Fellow , National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara, USA |
| 1996–1997 | | Postdoctoral Fellow , Department of Ecology and Evolutionary Biology, University of California, Irvine, USA |

Main Awards and Nominations

Ramon Margalef Prize in Ecology (2021)
British Ecological Society's Marsh Book Award (2016)
Highly cited scientist (Thomson Reuters, 2014–)
European Research Council's Advanced Grant (2011)
Spanish National Research Award in Environmental Sciences (2011)
Board of Reviewing Editors at *Science* (2010-2016)
Ideas and Perspectives Editor, *Ecology Letters* (2008–2014)
Ecological Society of America's George Mercer Award (2007)
European Young Investigator Award (2004)

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Books

4. **Bascompte J.** and Jordano P.
*Mutualistic Networks*²
Princeton University Press (2014)
3. **Bascompte J.** and Luque B.
Evolución y Complejidad
Universidad de Valencia (2012). Language: Catalán and Spanish
2. Solé R.V. and **Bascompte J.**
Self-Organization in Complex Ecosystems
Princeton University Press (2006)
1. **Bascompte J.** and Solé R.V. editors.
Modeling Spatiotemporal Dynamics in Ecology
Springer-Verlag, Berlin (1998)

Selected Papers³

7. Barbour, M.A., Kliebenstein, D.J., and **Bascompte, J.**
A keystone gene underlies the persistence of an experimental food web
Science 376: 70–73 (2022)
6. Cámara-Leret, R., and **Bascompte, J.**
Language extinction triggers the loss of unique medicinal knowledge⁴
Proceedings of the National Academy of Sciences USA 118: e2103683118 (2021)
5. Rohr, R.P., Saavedra, S. and **Bascompte, J.**
On the structural stability of mutualistic systems
Science 345: 1253497 (2014)
4. **Bascompte, J.**
Disentangling the web of life
Science 325: 416-419 (2009)
3. Rezende, E., Lavabre, J.E., Guimarães, P.R. Jr., Jordano, P. and **Bascompte J.**
Non-random coextinctions in phylogenetically structured mutualistic networks
Nature 448: 925–928 (2007)
2. **Bascompte, J.**, Jordano, P. and Olesen, J.M.
Asymmetric coevolutionary networks facilitate biodiversity maintenance⁵
Science 312: 431–433 (2006)
1. **Bascompte, J.**, Jordano, P., Melián, C.J., and Olesen, J.M.
The nested assembly of plant-animal mutualistic networks⁶
Proceedings of the National Academy of Sciences USA 100: 9383–9387 (2003)

²It received the Marsh Book of the Year Award of the British Ecological Society in 2016.

³for the complete list of papers see www.bascompte.es.

⁴This paper had a big media impact, with more than 1,000 tweets and articles in leading newspapers and magazines such as *The Guardian*, *El País*, *Corriere della Sera*, *El Espectador*, and *Popular Science*. It was highlighted in *Nature's Daily Briefing* (21 September 2021)

⁵Among the "all time top papers" in the category of Ecology of Faculty of 1000 Biology. It received the George Mercer Award of the Ecological Society of America for the best paper published in the previous two years by an author below 40 years.

⁶Most cited research paper with 1,387 citations (Web of Science, April 1, 2022). Included in the series *Reflections on Papers Past*.