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### The first 10 years of JPE

Bernhard Schmid, Pu Wang, Lijuan Liu, Shiqiang Wan and Yao Huang

Ten years ago, the Botanical Society of China together with the Institute of Botany of the Chinese Academy of Sciences decided to launch the new international Journal of Plant Ecology, or in short JPE, to introduce the works of Chinese ecologists to the international community and promote ecological research in China. The new journal, which could be considered as an offspring of the corresponding Chinese-language journal, offers authors from all over the world, but also specifically from China, a platform to publish peer-reviewed original research and reviews in the broad field of plant ecology. During initial discussions in the editorial board and with Oxford University Press we decided that it would be best if the authors with their submissions are allowed to define the scope of the journal, because in this way we could gain a unique profile with least overlap with other international journals. The prime goal was to publish good and relevant science, which would produce long-term impact as a secondary result.

Table 1: Development of issue, article and page numbers of JPE during the first 10 years 2008–2017.

Year	No. of issues	No. of published articles <sup>1</sup>	No. of pages	No. of submissions	No. of accepted articles <sup>1</sup>	Acceptance rate in %
2008	4	29	270	113	34	30.1
2009	4	22	231	117	44	37.6
2010	4	32	293	163	40	24.5
2011	4	30	312	180	50	27.8
2012	4	44	441	217	54	24.9
2013	6	53	506	240	51	21.2
2014	6	57	575	234	66	28.2
2015	6	66	650	334	111	33.2
2016	6	77	813	308	107	34.7
2017	6	98	1021	220	50 <sup>2</sup>	22.7 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Note that, due to limited pages available per issue, fewer papers were published than accepted in each year except in 2013 and 2017. This backlog created a problem which is now being resolved thanks to the increased page numbers per issue.

Over the first 10 years, JPE has now published 50 issues with on average slightly more than 10 papers of an average length of 10 pages (Table 1). Almost all of the contributions reported original research. Although we had also allowed submissions of reviews and short communications, only very few of these have been published. Among the fields in which we had expected most submissions, community ecology has been a clear leader followed by population biology and plant ecophysiology/ecosystems ecology. We received only few submissions in conservation ecology, evolutionary ecology, theoretical ecology and landscape ecology (but remain open to publish such research). The frequency of title words further reflects that many papers focus on the ecology of sets of species occurring together but differing in their traits and growth responses to soil and environmental variables, thus allowing diversity effects

<sup>&</sup>lt;sup>2</sup> Three papers are still under review as of 22 Nov. 2018.

to emerge in communities (Fig. 1). Among ecosystems, forests are most often named in titles and many titles refer to research localities in China, from tropical to subtropical to alpine regions.



Fig. 1: Frequency of title words during the first 10 years in JPE ("species" occurred more than 100 times, "plant" slightly less than 100 times, "soil" more than 50 times and "plants" slightly more than 25 times).

Considering the top-cited articles so far (without correction for publication year), it is interesting that they mostly report methods or are reviews (Table 2). This is even more striking considering that only few of the articles published fall into these two categories. As indicated above, the major focus of JPE, however, deliberately is on research reporting original work in subject-matter fields of plant ecology.

Table 2: Top-cited articles published in JPE during the first 10 years 2008–2017. None of the articles published after 2012 could make it into the top twelve so far.

				Total	Type of
Rank	Title	Authors	Year	citations <sup>1</sup>	article
	Models and estimators linking individual-based and				
1	sample-based rarefaction, extrapolation and comparison of assemblages	Colwell et al	2012	685	Methods
	Remote sensing imagery in vegetation mapping: a	.,, .,			
2	review	Xie, Sha, Yu	2008	357	Review
	Rates of litter decomposition in terrestrial ecosystems:	Zhang, Hui, Luo,			
3	global patterns and controlling factors	Zhou	2008	355	
4	Studying beta diversity: ecological variation partitioning by multiple regression and canonical analysis	Legendre	2008	155	Methods
<u> </u>	Ecohydrological advances and applications in plant-	203011010		.50	
5	water relations research: a review	Asbjornsen et al.	2011	124	Review
	Little left to lose: deforestation and forest degradation				
6	in Australia since European colonization	Bradshaw	2012	111	

7	Towards a trait-based quantification of species niche	Violle & Jiang	2009	109	Methods
		Schmid, Hector,			
8	Biodiversity effects and transgressive overyielding	Saha, Loreau	2008	72	Methods
	Recent progresses in mangrove conservation,	Chen, Wang,			
9	restoration and research in China	Zhang, Lin	2009	71	
	Use of N-15 stable isotope to quantify nitrogen transfer	He, Xu, Qiu,			
10	between mycorrhizal plants	Zhou	2009	56	Methods
	Soil microbial biomass carbon and nitrogen in forest	Yang, Zhu,			
	ecosystems of Northeast China: a comparison	Zhang, Yan,			
11	between natural secondary forest and larch plantation	Sun	2010	53	
	Dealing with detection error in site occupancy surveys:	Lele, Moreno,			
12	what can we do with a single survey?	Bayne	2012	47	Methods

<sup>&</sup>lt;sup>1</sup> Counts are from Web of Science on 22 Nov. 2018. Out of more than two-hundred papers from each China and the rest of the world published so far, a similar number of top-cited articles have been senior-authored by Chinese and non-Chinese researchers, demonstrating JPE's success in promoting ecological research in China.

JPE includes special issues or special sections organized by guest editors. These may result from conferences or from large research networks who decide to assemble a number of articles around a particular topic. Examples of such topics during the first 10 years of JPE include global change, invasive species and biodiversity—ecosystem functioning relationships. Special issues are most effective if articles relate to each other, thereby creating synergisms and raising the profile of the journal with regard to the particular topic.

Submissions to JPE come from all continents except Antarctica but most of the accepted articles so far are from authors in the northern hemisphere with 222 from China followed by 100 from the United States, 44 from Germany, 31 from Spain, 26 from Canada and 25 from Switzerland. Among the countries from the southern hemisphere Brazil has the lead with 16 papers, followed by 14 from Australia and 8 from Argentina. While this distribution of authorship is probably still more diverse than that of many other international journals, the papers citing articles from JPE are published in the typical North American and European journals, namely Ecology (306 citations, counted on 26 June 2018), Journal of Ecology (282 citations), Oecologia (222), New Phytologist (182), Ecology Letters (144), Forest Ecology and Management (137), Oikos (121), Global Change Biology (120), Nature (114), Functional Ecology (100) and Science (100).

Over the first 10 years JPE has established a solid international standing as indicated by the number of citations its articles are receiving. Despite the increase in the number of published articles, the 2- and 5-year impact factors could be maintained at close to 2.0 and 3.0, respectively (Fig. 2), placing JPE on rank 90 out of 160 journals in ecology and on rank 80 out of 223 journals in the plant sciences according to Journal Citation Reports in 2017.

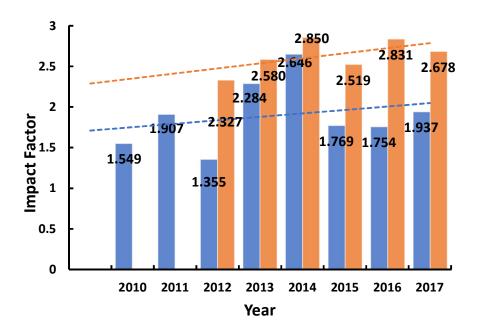


Fig. 2: Development of citations of the articles published in JPE from 2008–2016 as reflected by the 2-year impact factor from 2010–2017 (average number of citations received by articles published in the previous two years; blue) and by the 5-year impact factor from 2012–2017 (average citations received by articles published in the previous five years; orange).

The "making" of the JPE rests on an international board of 50 associate editors, who handle the submissions by soliciting reviews, and these reviewers, who do the major work for the journal. Associate editors and reviewers mainly come from China, North America and Europe in about equal numbers but with a strong male bias, as unfortunately is typical for most international journals. The initial screening of submissions is done by our two managing editors, Lijuan Liu and Pu Wang, in the editorial office at the Institute of Botany of the Chinese Academy of Sciences in Beijing. Lijuan and Pu are also helping authors with questions that arise during the entire process from submission to publication. Currently, two editors-in-chief assess all submissions for general quality and appropriateness of topic for JPE and assign each manuscript that passes this step to an associate editor. They also make the final decision about acceptance of a paper based on the recommendation of the associate editor. After a start with three editorsin-chief, including for the first three years Guanghui Lin (Institute of Botany), Shiqiang Wan (Institute of Botany) and Bernhard Schmid (University of Zurich, Switzerland) continued for the first five years and Yao Huang (Institute of Botany) and Bernhard for the second five years. The peer review process at JPE takes on average 40 days from submission to first decision and about the same time from the first decision to final acceptance (or rejection) of a paper. Delays are about equally caused by editors, reviewers and authors, who are all busy people with many other tasks, including traveling and field work. Nevertheless, it is one of the main goals of JPE for the next phase to speed up the reviewing process.

JPE has been present at and helped sponsoring annual meetings of ecological societies in China, USA and UK, congresses and workshops. An example for the latter was the workshop "Next-generation biodiversity—ecosystem functioning research in Chinese subtropical forests" held in 2015 in Jingdezhen, China, which led to the publication of the corresponding special issue 10(1)

of JPE in 2017. JPE is always open for suggestions of new topics for special issues or sections and can help facilitating the making of these in any conceivable way.

Looking forward to the next ten years, JPE will try to continue publishing research of broad relevance to plant ecologists and beyond, focusing on scientific quality as the main criterium. By doing so, it hopes to achieve impact factors above 3.0 and to establish itself as one of the major international journals in the fields of ecology and plant sciences. Biases such as the ones indicated in Fig. 1 toward community ecology, China and forests may shift depending on submissions. Currently, often this research comes form large comparative studies detecting patterns and inferring potential causal relationship from these. It is foreseeable that experimental ecology will become more prominent in the next phase as many research groups in China and beyond will more often try to directly test hypothesized causal relationships and to unravel the underlying biological mechanisms. In this context, it would also be desirable if more work on the theoretical underpinnings of basic ecological phenomena and relationships would be submitted to JPE in the coming years.

JPE will try to reduce the gender bias among its editorial board and reviewers by appointing more female associate editors. As indicated in a recent survey carried out for articles published in the journal eLife, gender bias is stronger among reviewers than among authors and can cause gender biases in acceptance rates (Murray *et al.* 2018). To encourage more early-career scientists to submit their work to JPE, a new paper award will be introduced, named after the late ecologist Xueyu Hou (1912–1991). This award will be given annually to one or two first author(s) who had completed graduate studies not more than five years before submission of the paper. It will come with a price money and free open access for the paper.

#### Reference

Murray, D., Siler, K., Larivière, V., Chan, W.M., Collings, A.M., Raymond, J., Sugimoto, C.R. (2018). Gender and international diversity improves equity in peer review. bioRxiv, 400515.