An Acad Bras Cienc (2022) 94(Suppl. 4): e202294s4 DOI 10.1590/0001-3765202220294s4
Anais da Academia Brasileira de Ciências | *Annals of the Brazilian Academy of Sciences*
Printed ISSN 0001-3765 I Online ISSN 1678-2690
www.scielo.br/aabc | www.fb.com/aabcjournal

EDITORIAL NOTE

Special volume on Biodiversity at the AABC

ALEXANDER W.A. KELLNER

Evaluating the performance of journals, which is directly linked to the articles published by them, is not an easy task, but must be on the editors' radar. There are several questions and concerns about perceptions regarding bibliometric indicators (e.g., Hammarfelt & Haddow 2018) and how they affect scientists' choices as to where to publish the results of their research (e.g., Lemke et al. 2021). However, one way or another, every year editors look forward to the publication of the Journal Citations Reports (JCR) that measures the Impact Factor (IF) of the journal under their responsibility.

Having this in mind, I have been carrying out some brief surveys on the performance of the papers that the Annals of the Brazilian Academy of Sciences (AABC) – the sole comprehensive multidisciplinary journal edited in the country –, are publishing. I focused on published issues or specific areas (e.g., Kellner 2020a, b, c) that provided a general overview about the impact of the articles accepted by the AABC (Kellner 2020d). Some results of these analyses lead to the restructuring of the possibilities of submissions to new and more specific scientific fields in this journal (Kellner 2021).

Among the expectations on how to improve the overall impact of AABC are the special issues (e.g., Kellner 2020c), which have been published over the years. Among these, issue AABC 91 Suppl. 3 stands out, which brought together a selection of studies that were presented during the Brazil-France Biodiversity Symposium (Val & Moura 2019).

There is no doubt that biodiversity affects many aspects of life on our planet (e.g., Ellwanger et al. 2020), from the increasing impact of agriculture (e.g., Bacarji et al. 2020) to disease risks (e.g., Val 2020) that became quite evident in the recent pandemic (e.g., Melo et al. 2020), which, by the way, is not over yet. For these (and other) reasons, there seems little doubt that biodiversity will continue to be a hot topic for years to come. Here I will cover how the special edition AABC 91 Suppl. 3 impacted on both, the AABC IF-2020 (1,753) and the AABC IF-2021 (1,811), the highest ever for this magazine.

The issue AABC 91 Suppl. 3 comprises a total of 21 articles (plus editorial and foreword), covering four scientific fields. As somewhat expected, most fall into Biological Sciences (17). There are also two papers in Chemical Sciences and one each in Health Sciences and Biomedical Sciences. The data used here was acquired using the Journal Citations Reports (2022), applying the filters for the years 2020 and 2021.

All articles were retrieved in the present Journal Citation Reports (2022), with a Missing Article Index (MAI, Kellner 2020a) of zero. As I have already presented several times (e.g., Kellner 2020a, d)

the selection of articles can be evaluated by the ratio between cited articles and published articles (Article Citation Factor - ACF), which can be expanded into minimum number of citations (see Kellner 2022). Seven articles from AABC 91 Suppl. 3 were not cited in 2020 and the same number (but not always the same articles) were also not cited in 2021 (Table I), resulting in the same ACF for both years ($ACF_1$2019/2020 and $ACF_1$2019/2021 - 0.667). Four articles (19.0%) were not cited and did not contribute to the AABC IF-2020 and the AABC IF-2021. The Reescalated Article Impact Factor (RAIF, Kellner 2020a) was 3.571 ($RAIF_1$2019/2020) and 6.786 ($RAIF_1$2019/2021), respectively.

Table I. Citations and indexes concerning the articles on of the special issue 91 Supplement 3 of the Annals of the Brazilian Academy of Sciences considered in the Impact Factor of 2020 and 2021.

Art Pub 2019	21
Cit $Art_1$2019/2020	14
Cit $Art_2$2019/2020	07
Cit $Art_1$2019/2021	14
Cit $Art_2$2019/2021	11
NoCit/2012-2021	04
Cit 2019/2020	50
Cit 2019/2021	95
Cit MCAr 2019-2020	23+07+04
Cit MCAr 2019-2021	53+07+05
$ACF_1$2019/2020	0.667
$ACF_2$2019/2020	0.333
$ACF_1$2019/2021	0.667
$ACF_2$2019/2021	0.524
91 Suppl. 3 IF-2020	2.381
$RAIF_1$2019/2020	3.571
$RAIF_1$2019/2020-2	2.077
$RAIF_2$2019/2020	6.143
$RAIF_2$2019/2020-2	3.333
91 Suppl. 3 IF-2021	4.524
$RAIF_1$2019/2021	6.786
$RAIF_1$2019/2021-2	3.231
$RAIF_2$2019/2021	8.364
$RAIF_2$2019/2021-2	4.200

Abbreviations: Art Pub 2019 – number of articles published in AABC 91 Supplement 3, $ACF_1$2019/2020 – Article Citation Factor of articles published in AABC 91 Supplement 3 cited at least once in 2020, $ACF_2$2019/2020 – Article Citation Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2020, $ACF_1$2019/2021 – Article Citation Factor of articles published in AABC 91 Supplement 3 cited at least once in 2021, $ACF_2$2019/2021 – Article Citation Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2021, Cit 2019/2020- number of citations in 2020 of articles published in AABC 91 Supplement 3, Cit 2019/2021- number of citations in 2021 of articles published in AABC 91 Supplement 3, Cit $Art_1$2019/2020 – number of articles published in AABC 91 Supplement 3 cited at least once in 2020, Cit $Art_2$2019/2020 – number of articles published in AABC 91 Supplement 3 cited at least twice in 2020, Cit $Art_1$2019/2021 – number of articles published in AABC 91 Supplement 3 cited at least once in 2021, Cit $Art_2$2019/2021 – number of articles published in AABC 91 Supplement 3 cited at least twice in 2021, Cit MCAr 2019/2020 – number of citations in 2020 of the three most cited articles published in AABC 91 Supplement 3, Cit MCAr 2019/2021 – number of citations in 2021 of the three most cited articles articles published in AABC 91 Supplement 3, NoCit/2012-2021 - articles published in AABC 91 Supplement 3 not cited in 2020 and 2021, $RAIF_1$2019/2020 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited in 2020, $RAIF_1$2019/2020-2 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited in 2020 excluding the most cited article, $RAIF_2$2019/2020 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2020, $RAIF_2$2019/2020-2 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2020 excluding the most cited article, $RAIF_1$2019/2021 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited in 2021, $RAIF_1$2019/2021-2 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited in 2021 excluding the most cited article, $RAIF_2$2019/2021 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2021, $RAIF_2$2019/2022 – Reescalated Article Impact Factor of articles published in AABC 91 Supplement 3 cited at least twice in 2021 excluding the most cited article, 91 Suppl. 3 IF 2020 – Impact Factor of 2020 of articles published in AABC 91 Supplement 3, 91 Suppl. 3 IF 2021 – Impact Factor of 2021 of articles published in AABC 91 Supplement 3.

Regarding the three most cited articles, there is a great difference between the most cited in 2019 and in 2020 (Table I), influencing the numbers obtained for this publication. If this article is excluded, $RAIF_1$2019/2020-2 and $RAIF_1$2019/2021-2 decrease to 2.077 and 3.231, respectively. The same is true regarding articles cited at least twice for both years (see Table I). Considering only the articles published in AABC 91 Suppl. 3, the 91 Suppl. 3 IF-2020 and 91 Suppl. 3 IF-2021 would be 2.361 and 4.524, respectively, both considerable higher than the AABC IF-2020 (1,753) and AABC IF-2021 (1,811).

Among the main conclusions of this short exercise is that although almost a fifth of the articles selected for the AABC´s biodiversity issue did not receive citations in 2020 and 2021 (years on which the AABC IF is based), this publication has contributed to the IF of the AABC. In addition, there is an article that stands out (Calixto 2019) and received 23 citations in 2020 and 53 in 2021. Such successful articles can obscure the general understanding of the contribution of a given issue (e.g., Kellner 2020d), as is the case here (see Table I). Nonetheless, highly cited articles are always very welcome and, perhaps if this issue (AABC 91 Suppl. 3) had not been organized, it is possible that this paper would not have been published, at least not in this context. In summary, the present analysis confirms that special issues tend to aggregate articles with greater potential for impact and, therefore, contribute to increase bibliometric indicators of a journal such as the IF.

REFERENCES

BACARJI AG, VILPOUX OF & PARANHOS FILHO AC. 2020. Field and remote observations to determine the environmental impact of agrarian reform in the Brazilian Midwest. An Acad Bras Cienc 92: e20180973. DOI 10.1590/0001-3765202020180973.

CALIXTO JB. 2019. The role of natural products in modern drug discovery. An Acad Bras Cienc 91: e20190105. DOI 10.1590/0001-3765201920190105.

ELLWANGER JH ET AL. 2020. Beyond diversity loss and climate change: Impacts of Amazon deforestation on infectious diseases and public health. An Acad Bras Cienc 92: e20191375. DOI 10.1590/0001-3765202020191375.

HAMMARFELT B & HADDOW G. 2018. Conflicting Measures and Values: How Humanities Scholars in Australia and Sweden Use and React to Bibliometric Indicators. J Assoc Inf Sci Technol 69(7): 924-935. DOI: 10.1002/asi.24043.

JOURNAL CITATION REPORTS. 2022. Journal Citation Reports Science Edition 2021, Clarivate Analytics. https://jcr-clarivate.ez29.periodicos.capes.gov.br/jcr-jp/journal-profile?journal=AN%20ACAD%20BRAS%20CIENC&year=2021&fromPage=%2Fjcr%2Fhome. Accessed on October 5, 2022.

KELLNER AWA. 2020a. Development of Agrarian Sciences at the AABC with comments on impact and performance evaluations. An Acad Bras Cienc 92: e202092S1. DOI 10.1590/0001-3765202092S1.

KELLNER AWA. 2020b. Development of Biological Sciences at the AABC. An Acad Bras Cienc 92: e202092S2. DOI 10.1590/0001-3765202092S2.

KELLNER AWA. 2020c. Impact and performances of different scientific fields at the AABC. An Acad Bras Cienc 92: e2020923. DOI 10.1590/0001-37652020923.

KELLNER AWA. 2020d. A brief summary of the impact and performance of different scientific fields at the AABC. An Acad Bras Cienc 92: e2020924. DOI 10.1590/0001-37652020924.

KELLNER AWA. 2021. New scientific fields in the Annals of the Brazilian Academy of Sciences. An Acad Bras Cienc 93: e202193s3. DOI 10.1590/0001-37652021202193s3.

KELLNER AWA. 2022. Special volume on Paleontology at the AABC. An Acad Bras Cienc 94: e202294s3. DOI 10.1590/0001-376520222022294S3.

LEMKE S, MAZARAKIS A & PETERS I. 2021. Conjoint analysis of researchers' hidden preferences for bibliometrics, altimetrics, and usagemetrics. J Assoc Inf Sci Technol. 72: 777-792. DOI 10.1002/asi.24445.

MELO CML, SILVA GAS, MELO ARS & FREITAS AC. 2020. COVID-19 pandemic outbreak: the Brazilian reality from the first case to the collapse of health services. An Acad Bras Cienc 92: e20200709. DOI 10.1590/0001-3765202020200709.

VAL AL. 2020. Biodiversity – the hidden risks. An Acad Bras Cienc 92:e20200699. DOI 10.1590/0001-3765202020200699.

VAL AL & MOURA NETO V. 2019. Biodiversity: Brazil-France Bilateral Symposium. An Acad Bras Cienc 91: e20190867. DOI 10.1590/0001-3765201920190867.

How to cite

KELLNER AWA. 2022. Special volume on Biodiversity at the AABC. An Acad Bras Cienc 94: e202294S4. DOI 10.1590/0001-376520222022 94S4.

ALEXANDER W.A. KELLNER

https://orcid.org/0000-0001-7174-9447

Universidade Federal do Rio de Janeiro, Museu Nacional, Laboratório de Sistemática e Tafonomia de Vertebrados Fósseis, Departamento de Geologia e Paleontologia, Quinta da Boa Vista, s/n, São Cristóvão, 20940-040 Rio de Janeiro, RJ, Brazil

E-mail: kellner@mn.ufrj.br