Development history and publishing experiences of the Journal of Animal Science and Biotechnology

Changhua Lai¹², Defa Li¹²

¹Editorial Office of Journal of Animal Science and Biotechnology, Beijing; ²College of Animal Science and Technology, China Agricultural University, Beijing, China

Introduction

The Chinese Association of Animal Science and Veterinary Medicine (CAASVM) was established in 1936. In its 85 years, the CAASVM has become one of the largest academic organizations in China. The First National Member Congress was held in Nanjing in 1937. The CAASVM's activities soon stalled due to World War II and did not resume until 1950. The 80th anniversary of the founding of the CAASVM and the 14th National Member Congress was held in Shaoxing, Zhejiang, in November 2016. The CAASVM joined the World Conference on Animal Production (WCAP) as a national member in 1993, and Professor Defa Li was elected the vice-president of WCAP in 2008. The CAASVM hosted the 11th WCAP in Beijing in October 2013.

One of the main functions of the CAASVM is to organize scientific and technological workers in the field of animal science and veterinary medicine to carry out international and domestic academic exchange activities. The CAASVM sponsors six science and technology journals, and Journal of Animal Science and Biotechnology (JASB) is the first English-language journal among them.

Development History of JASB

Before 2005, although research on animal science and technology in China was fruitful, few animal husbandry researchers had published English-language papers in relevant journals indexed in the Science Citation Index (SCI) [1], and many researchers were not even aware of the benefits of publishing in English. At the time, Professor Defa Li at China Agricultural University had already begun to act on her idea to create an English-language journal in the field. However, JASB was not approved by the government until October 2009 due to difficulties related to launching a new journal, including a lack of experts and personnel, a lack of funding, and difficulties with timing. For these reasons, the first issue of JASB was finally published in June 2010, and only three issues and 23 papers were published in total that same year. In the
first 2 years (from 2010 to 2011), a website was built for JASB and the journal's content began to be published online. Since 2012, JASB has cooperated with BioMed Central—now Springer Nature—to publish JASB on an open-access basis. All JASB articles are published online first and then later in print. The number of papers published annually has increased every year, reaching 110 newly published articles in 2020 (Fig. 1). In addition, JASB was indexed in the SCI Expanded (SCIE) in 2014, and its first reported impact factor in 2015 was 1.681. In the following years, the impact factor continued to grow steadily, reaching 4.143 by 2020 (Fig. 2). JASB’s ranking in the field of agriculture, dairy, and animal science has simultaneously risen year by year as well (Table 1).

**Publishing Strategies of JASB**

After 10 years of development, JASB has achieved substantial success, to a degree that people in the field had not previously thought possible. The following aspects are likely the primary factors that led to the journal’s success.

**Determining a clear purpose for the journal and setting concrete goals**

A journal is a platform for academic exchange, and a journal’s development is better served when it reaches the attention of higher numbers of domestic and foreign scholars. It is also known that indexation in SCI or SCIE leads to wider recognition. Thus, the journal, from the beginning, was intended to have international reach, and the short-term goal of being indexed in SCIE within 5 years was set at the journal’s inception, along with a long-term goal of becoming a well-respected journal internationally.

**Achieving the internationalization of JASB**

First, the editorial board was designed to consist of international scholars. The editorial board plays a tremendous role in determining a journal’s quality and influence. Initially, four professors with international reputations from the United States who were famous in the fields of animal genetics and breeding, animal reproduction, animal nutrition, and feed science, respectively, were invited to serve as associate editors. The first editorial board in 2010 comprised scholars from 10 different countries around the world, and 21 countries were represented on the editorial board by 2020. Every 2 years, the journal holds an editorial board meeting that associate editors and some editorial board members are invited to attend. Second, manuscripts are solicited on an international basis. One of the hardest tasks for a new journal is to receive enough manuscripts, especially high-quality manuscripts. Although manuscript submissions were extremely scarce toward the beginning of the journal’s establishment, it was determined that at least half of the manuscripts accepted by JASB would be international by inviting international authors and international editorial board members to contribute. International manuscripts accounted for approximately 51% of all manuscripts published in JASB in 2020. Third, reviewers were also sought on an international basis. Peer review ensures a journal’s academic quality. JASB conducts a single-blind peer-review system, in which manuscripts are generally reviewed by two or more experts from various countries who are asked to evaluate whether the manuscript is scientifically sound and coherent, whether it duplicates already published work, and whether the manuscript is suitable for publication. After peer review, the editor-in-chief makes the final decision regarding

---

**Table 1.** Ranking of the *Journal of Animal Science and Biotechnology* in the field of agriculture, dairy, and animal science

<table>
<thead>
<tr>
<th>Year</th>
<th>Rank</th>
<th>Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>9/55</td>
<td>Q1</td>
</tr>
<tr>
<td>2015</td>
<td>5/58</td>
<td>Q1</td>
</tr>
<tr>
<td>2016</td>
<td>4/58</td>
<td>Q1</td>
</tr>
<tr>
<td>2017</td>
<td>3/60</td>
<td>Q1</td>
</tr>
<tr>
<td>2018</td>
<td>2/61</td>
<td>Q1</td>
</tr>
<tr>
<td>2019</td>
<td>3/63</td>
<td>Q1</td>
</tr>
</tbody>
</table>

**Fig. 1.** The number of articles published and manuscript submissions received by the *Journal of Animal Sciences and Biotechnology* (2010–2020).

**Fig. 2.** Trend of the impact factor of the *Journal of Animal Science and Biotechnology* (2014–2019).
the publication of the revised manuscript. Finally, JASB's publishing is also international in scope. Different countries have different publishing standards and specifications. JASB adheres to international publication ethics and standards. It is also published on an open-access basis, which is in line with international publishing trends and meets the requirements of all researchers.

Improving the quality of JASB

The quality of manuscripts is the foundation of journal development. One of the important duties of our editors is to invite contributors to submit their manuscripts and publish special issues. JASB invites many famous experts in the field of animal husbandry to write review articles. The number of downloads and citations of these review papers is usually higher than those of regular submissions. Thus, they increase the influence of and bring more attention to the journal. Special issues tend to focus on trending research areas or are related to an academic conference topic (S1). For instance, JASB published two special issues titled ‘Special issue for Chinese Swine Industry Symposium’ and ‘Special issue for WCAP 2013’ after inviting the plenary speakers to contribute their research to the journal. These two special issues brought great attention and influence to JASB, which also laid the foundation for JASB to be indexed in SCIE in 2014. In addition, JASB improved the acceptance criteria for all submissions in order to more strictly control the academic level of the manuscripts accepted by the journal. The acceptance rate was about 54% when JASB was launched, whereas the acceptance rate now is approximately 12%, which ensures the academic quality of the journal. In addition, all articles are polished by a part-time editor who is a native English speaker to ensure the quality of each manuscript.

Expanding the international influence of JASB

As an academic journal, JASB can only attract more authors and readers and further enhance its quality and influence by improving its reputation and increasing its degree of recognition among researchers. Cooperating with BioMed Central to publish JASB as an open-access publication can expand the journal’s influence based on the reach of international publishers. Another way to enhance the journal’s influence is to visit research teams or researchers at universities and distribute leaflets about the journal to editors attending international and domestic academic conferences. In the first few years of JASB’s existence, published articles were sent via email to JASB authors, reviewers, and authors for other journals to let more people know about JASB’s activities. In recent years, papers published in JASB have been shared on social media platforms such as WeChat, Twitter, and LinkedIn to further expand the reach of the journal.

Conclusion

It is difficult to publish a science journal, and it is even more difficult to publish a high-quality science journal. Even though JASB has been a success over the past 11 years, it will face great challenges that will require greater efforts in the future. First, close contact must be maintained with well-known research teams in order to solicit the latest manuscripts in the field. Second, the editorial board members must remain enthusiastic about the journal, and they should be encouraged to contribute more high-quality manuscripts to improve the journal’s offerings. Third, shortening the publication time could attract more authors. Fourth, communicating with authors, readers, and reviewers through various modern media channels can help to expand the influence of the journal. Finally, the most important factor for JASB’s reach and influence is to attract and retain an editor-in-chief who specializes in animal science and maintains a strong interest in actively publishing papers.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Funding

The authors received no financial support for this article.

Reference