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Cultivating integrity: Addressing the impact of predatory publishing on agricultural research

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Abstract

Predatory publishers (PP) pose a significant threat to the credibility and reliability of scientific research, i.e., by allowing the seep of pseudoscience into scholarly literature. It is critical to keep the highest standards in academic publishing to ensure that only quality science is published. There is not a clear pathway for determining if a publisher is predatory, because the lines are blurred. However, PP often use deceptive tactics to appear legitimate, such as creating fake impact factors and indexing services. Such tactics create a breeding ground for scholars and scientists, who are under pressure to advance in their careers, which is often based on the number of publications. However, this is driven by the greed of PP and the more they publish, the bigger their profit, creating a vicious circle. These practices have led to an increase in the number of low-quality or even misleading papers being published, with significant costs for the credibility of scientific research. PP do not only have serious impacts on the scientific community but also on environmental sustainability. Agricultural science is no stranger to this phenomenon with the aggravating circumstance of certain topics with special sensitivity, such as climate change, GMOs, or use of agricultural inputs. Since articles published by PP have not undergone rigorous review or do not comply with scientific standards, their results may mislead other researchers that validate them as references in their research. Furthermore, these results may be used by policymakers to make decisions, in the context of implementing agricultural practices, or for creating fake narratives among the public opinion. Agricultural science should lead a change in this stalemate: Authors, the organisations they belong to, and the funders of their research should be committed to prevail quality over quantity and protect the integrity of research and the reputation of the academic community by being vigilant in selecting reputable publishers. It is recommended to review a publisher's reputation, editorial policies, and peer-review process before submitting a manuscript. Likewise, it should be avoided to make hasty, pressure-based decisions on where to publish that could harm the credibility of research and the scientific community.

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