

Your Publisher's Report 2020

Botanical Society of America

American Journal of Botany
Applications in Plant Sciences

The information and details provided in this report are proprietary and contain information provided in confidence by Wiley to the BSA. It is understood that both parties shall treat the contents of this report in strict confidence in perpetuity. © 2021 Wiley/BSA



WILEY

Your Publisher's Report 2020

In the last 12 months, you did some amazing things. You kept your organization going strong through huge changes. You helped members of your community come together when connection was most needed. And when it mattered most, you brought about new discoveries by helping researchers share their work with the world.

The development of a COVID vaccine within 12 months is a triumph which highlights the central contributions of science to the welfare of mankind.

The scholarly publishing industry was already in the middle of big changes before the coronavirus pandemic added new pressures. The demand for open access is growing, as more funders develop open access publishing mandates. Library budgets have been challenged for years, and now many librarians are facing even tighter budgets.

Meanwhile, researchers added homeschooling and other caregiving roles to the professional work already competing for their attention.

Around the world - and in the United States especially - 2020 also sparked long-overdue conversations about systemic biases against people and communities on the basis of race, gender, disability, and other facets of identity.

That means there are some important opportunities to make publishing itself work better, for everyone.

Already in this past year, we've developed technological and workflow solutions to publish research up to 14 days faster. Editors who refer manuscripts are helping papers find the right journal more quickly. Our new smart submission platform is making life easier for authors. And those are just a few of the ways we can save precious time for researchers.

Along with other publishers, we're also tackling systemic biases to make research publishing more equitable. From growing diversity on editorial boards to capturing demographic data, we now have a core group dedicated to embedding more inclusive practices into how we work. You'll hear from us as we learn along the way, because together, we can have an even bigger impact.

Last but not least, 2021 marks Wiley's 10th year of Gold open access publishing. So, it feels especially fitting that we also acquired major open access publisher Hindawi early this year. Our new combined strength includes some of the world's best thinking on open access strategy and the opportunity for us and our partners to reach deeper into the global research communities we serve.

It's likely that we'll continue to experience unexpected change – maybe not on the scale of 2020, but still significant – into 2021 and beyond. The work that we're doing together now will help you adapt to the unexpected, whatever the future might bring.

As we look back on this last historic year, we feel exceptionally grateful to have you alongside us as our partner. Societies support the journey of discovery, and that work moves our world forward.

Thank you for all that you do. We can't wait to see what we'll achieve together in 2021!

With all best wishes,



Allyn Molina

amolina@wiley.com

Vice President, Editorial

Context: Partnering for success

We're committed to providing you with the very best partnership in the industry. That commitment guides our behaviours and our strategies, and we believe it's one of the reasons our partners choose to remain with Wiley for years, and in some cases decades.

In 2020, 25 new society journals joined the Wiley publishing family, and we launched 12 new journals in collaboration with partners.

Positioning your journal and society for a successful future

We're committed to working with you collaboratively and proactively to support your ambitions and secure your success. With the fast pace of change in scholarly publishing it's crucial to use a wide range of different analytic tools to make data-driven decisions about development to address the needs of your community. The strategic plans we've worked on together focus on these goals:

- Publish more
- Be more efficient
- Diversify
- Embrace open research

Tracking progress against your goals

[Wiley Journal Insights](#) (WJI) gives you access to your journal data whenever you need it. You can explore the detail behind the metrics in this report, including top-cited authors, most-read articles by region and submissions by country.

New in 2020, you can see progress against your targets for open access articles, submissions, referrals and turnaround times. If you'd like help with accessing WJI or adding targets, your Journal Manager will be able to help.

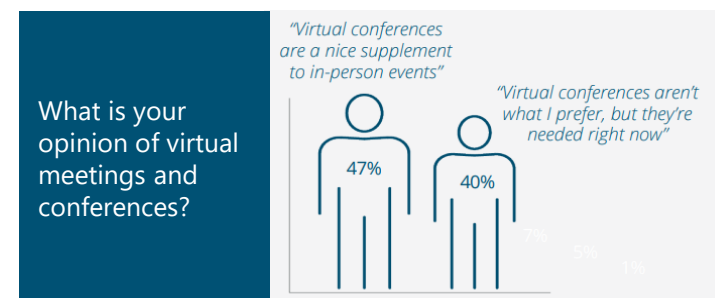
Learning, networking, and connecting at events

We continued learning together, despite the challenges, finding new ways to succeed. We welcomed over 600 society leaders to [Wiley Society Executive Seminars](#) hosted entirely virtually. You may also have seen us at the [AAAS Annual Meeting](#), at the [Society Street Virtual 2020 Conference](#), or at [OASPA 2020](#).

Open data and virtual events – what members say

Our annual **Wiley Member Survey** is the most comprehensive in the industry. We've surveyed over 50,000 current, former, and potential members over 6 years. This year we had responses from 146 countries across 45 subject areas - wider representation than ever before.

The survey tells us open research and open data are becoming more important. Interestingly, 51% say that open data is 'more' or 'much more' important to them now than it was 12 months ago, but almost half don't know whether their society supports open data or not. See more on page 4.



Members are used to connecting with society publications online. But how can you deliver the right value virtually when it comes to conferences and career development? Virtual conferences aren't seen as a replacement for in-person contact but members like the fact they're more inclusive.

In our whitepaper [Keeping Your Members Engaged in a Virtual World](#) we share insights on how to make virtual events work for you and your members. See also [Will Your 2021 Conference Be Virtual?](#)

Understanding your whole membership base


Understanding the differences between the needs of academic and practitioner members will help you better serve your whole community. [How to Delight Your Practitioner Members](#) gives highlights of our **second survey of practitioner and professional members**.


The survey points to lots of crossover, but also some key differences. Also see [Opportunities for open access: Insights from the Wiley Practitioner Survey](#), published in *Learned Publishing*.


You'll find trends and insights from all our member surveys at [Wiley Society Member Resources](#), along with practical advice on how to engage and build your membership, and templates and step-by-step guides on marketing to members. So that it's easy to find everything you'll need, we've also curated a selection of recent blogs [here](#).


Keeping up with changes in the industry


The academic world and publishing are changing faster than ever, and you can rely on us to keep you up-to-date in whatever ways work best for you:

 [Wiley Society Newsletter](#) - Look in your inbox for our monthly partner publication featuring news, case studies, and exclusive insights on engaging members. If you haven't received the newsletter, [subscribe here](#).

 [Wiley Society Executive Seminars](#) - Join experienced leaders from across the scholarly community at our live events to network, learn about publishing trends, and get inspired.

 [Special Issue podcast](#) - Listen in to lively conversations on research publishing. Recent episodes explored whether open access means equal access, and the role of preprints in the pandemic.

 [The Wiley Network: For Societies](#) - Explore our resource hub to find ideas and answers to your questions on engaging members, improving research impact, and publishing strategy.

 Join us on Twitter by following [@wileyinresearch](#) or connect on [Facebook](#) or [LinkedIn](#).

Context: Increasing your impact with open research

When we're all focused on helping researchers share their best work with more people, everyone benefits.

The open research movement is gaining momentum across the world. The pandemic has expedited the opening up of the discovery process to the world and we continue to advocate for the new future.

In 2020, across Gold OA and hybrid journals, we published nearly twice as many articles open access as in 2019.

During 2020, we expanded a range of new initiatives that will help you engage with the transition to openness and take full advantage of the opportunities to expand your audience and boost impact. We highlight some of those here.

Open access: Helping researchers share their work with the world

In 2021 we'll be celebrating ten years since we launched **our Gold open access** program with two new journals in the life and biomedical sciences. By 2020, the portfolio had grown to 232 titles.

13 Gold open access journals received their first Impact Factor last year, taking the total to 83.

Authors make more impact when they publish OA

In a comprehensive new study, we analysed 203,000 articles over a 4-year period and 459,000 articles over a 2-year period to look at the effect of publishing open access on readership, citations, and Altmetric attention scores.

The advantages are clear. Articles published open access have higher readership, are cited more often, and attract more media attention than articles published behind a paywall.



*Brave New World Study global survey of 10,000+ researchers, Nov-Dec 2020, led by Kudos, CACTUS, Royal Society of Chemistry, STM and Wiley

Across the Wiley program, articles published open access are on average downloaded more than three times more, cited 1.7 times more and attract more than five times more attention than articles that are not. Look out for detail on the findings soon.

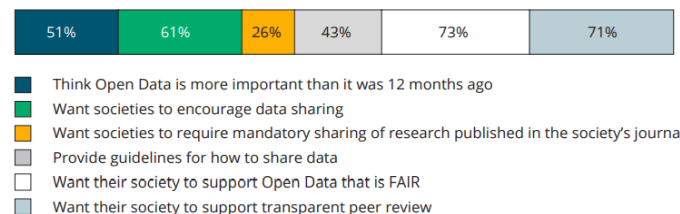
Open data: Encouraging sharing and reproducibility

We're committed to facilitating faster and more effective research discovery by enabling the reproducibility and verification of data, methodology and reporting standards.

Our **open data strategy** recommends adopting 'expects data sharing' as journal policy, where a **data availability statement** is included with the article, explaining where and how people can access the data or explaining why it isn't sharable. 25% of articles published in a Wiley journal now have a data availability statement, up from 8% in 2019.

Our Member Survey confirmed changing attitudes to open data.

Support for open data



Open practices: Developing greater transparency

In 2020 68 journals took part in our **transparent peer review pilot** in collaboration with Publons and ScholarOne. 86% of authors chose TPR for their article. Read what we've learned [here](#).

In November 2019 we launched a pilot for our new preprint service, [Under Review](#) on the Authorea platform. By the end of 2020, 37 journals were participating and around 5,000 preprints had been posted.

Our June webinar [Preprints, Publishing, And A Pandemic: An Evolving Story](#), part of the Wiley Society Executive Virtual Seminar Series, answers questions from society partners on all aspects of preprints.

The need for rapid dissemination of research related to the pandemic resulted in 610 preprints being posted in just three months. At the beginning of May, preprints represented more than a quarter of COVID-related output.

Open collaboration: Helping researchers work together

Researchers want to collaborate easily with their co-authors, pull citations, upload data, and submit to preprint services and journals, then easily share their work once it's published.

[Authorea](#) helps authors collaborate in real time with an unlimited number of colleagues in public or private groups.

Wiley Content Sharing enables authors to share the full text of their published article with other authorized users. Authors can do this during the authoring process via Author Services and via the article page on Wiley Online Library. There were more than 215,000 downloads of shared articles in 2020.

Open recognition and reward: Making sure researchers get credit for their work

- [Publons](#) connects researchers to their peer reviews, which can be used for grant and work applications, and added to an [ORCID](#) profile alongside authored papers. At the end of 2020 over 1.7 million reviews for over 1,100 Wiley journals have now been recorded by Publons, for more than 300,000 reviewers.
- [CRedit](#) recognizes the role each person plays in the creation of a scholarly output. Since we launched this in January 2020, 172 Wiley journals have started using CRedit, with the highest uptake in life sciences and medicine.
- Developed by the [Center for Open Science](#), [Open Science Badges](#) incentivize researchers to highlight shared data and materials, and signal to readers that more information is available. See [here](#) for an example article.

Context: Achieving the highest quality publishing process

Our world is changing faster than ever.

As pressures in the publishing ecosystem increase, we're accelerating our ability to solve for them.

A high-quality publishing program needs to deliver a world-class experience for authors, which frees up time for them to focus on conducting research and sharing their work, and maximizes time for editors to develop the quality and integrity of the content.

Making publishing work better, for everyone

- We expanded **HTML-based online proofing**, and with it a new, '**Lean**' workflow, offering it to more journals more quickly to reduce the need for manual intervention and mitigate some of the pressures put on the process by the pandemic. 85% of authors are satisfied or very satisfied with the system and 88% agree it's easy to use.
- These changes have enabled **significant reductions in turnaround times** at multiple stages. On many titles, average time to despatch proofs decreased by 4 days, author proofing time by 7 days, and time to implement corrections by 3 days.
- **Contemporary journal design** - In 2020 we released the latest version, currently being used by over half of Wiley journals. It offers a range of style choices so journals can deliver content in a format that meets the needs of the subject community. Most importantly the design is 'future-ready' – optimized to take advantage of innovations that will enrich content, reduce errors, and improve publication speed further.

Simplifying the submission process

In 2020 we extended **Research Exchange (ReX)** our new smart, simple submission platform to 45 journals. A further cohort is getting ready to go live in 2021. Powered by machine learning, ReX reads the author's manuscript and auto-populates fields with information for the author to verify.

It's better for authors, and it's better for the journal - simpler submission makes the journal more attractive to authors looking for the right outlet to publish their work. Read more here: [Introducing Research Exchange \(ReX\)](#).



Research suggests that authors waste 52 hours annually formatting manuscripts - particularly frustrating if they need to submit to multiple journals. At the end of 2019 we launched **free-format submission** which means authors only need to follow formatting requirements for their specific journal at the revision stage. We've had overwhelmingly positive feedback from the 200 journals now offering free-format.

Transfer networks – helping more papers find the right journal

A growing number of [publishing transfer networks](#) help authors find the right home for their work, and as reviews travel with the paper, networks also save time for peer reviewers. Our [Transfer Desk Assistant](#) (TDA) tool is another powerful way to reduce the time it takes authors to find the right journal. It's a key tool in growing submissions and it can help to improve the overall experience for the author. If you'd like to adopt TDA for your journal, talk to your Journal Manager.

An expanded range of services for authors

[Wiley Editing Services](#) offer authors a range of services that help them to prepare their article for submission and promote it post-publication. New in 2020 were infographics, graphical abstracts, and lay summary writing. In April we offered authors working on

articles related to COVID-19 free language editing and help with lay summaries to help get research into the right hands quickly.

Supporting editors and peer reviewers

Last year we expanded our program of support for editors through our [Wiley Editor Seminar](#) webinar series and the newsletter **Editor Connection**. We published even more articles on [The Wiley Network: For Editors](#) on some of the most important issues for editors currently, including [plagiarism](#), [paper mills](#), [transfers and referrals](#), [transitional agreements](#), [helping early career researchers](#), and [fostering academic kindness in peer-review](#).

The '**Making Peer Review Better**' initiative is now in its third year. 200 journals have completed the [better peer review](#) self-assessment and are adopting new practices to ensure the highest standards of quality, integrity and transparency. The theme of 2020's [Peer Review Week](#) was 'Trust'. We were pleased to partner with Sense about Science to explore the theme [Trust in Peer Review: What it Means and Why it Matters](#).

Showcasing your research on Wiley Online Library

In 2020 we continued to develop Wiley Online Library to make sure it remains the market-leader in research communication, helping researchers the world over read and cite the best research available. A key priority was putting in place remote access options to make sure everyone could access what they needed from wherever they were. Also new in 2020:

- Video abstracts, video bytes, and audio clips can now appear within the article itself.
- Users can use the same sign-in credentials across all enabled publisher platforms via SeamlessAccess.
- We introduced **eReader** in place of ReadCube to offer an enhanced PDF reading experience.
- Library customers now have 'KBART' reports which display custom lists of their titles, simplify workflows and make it easier for readers to discover content.

Context: Maximum global reach for high readership

Our sales strategy is designed to deliver wide reach, sustainable revenue streams, and the greatest possible audience in the best institutions so your journal can achieve the high impact and high profile it deserves.

A team combining the expertise of colleagues across sales, marketing, government affairs, technology, analytics, and publishing work together to ensure maximum discoverability for your journal so that readers and researchers can find and access your research wherever they are.

Driving readership through global reach and discoverability

In 2020, readership of articles on Wiley Online Library increased by **20%**, following an increase of **35%** in 2019, and **9%** in 2018. Articles were downloaded **637 million** times in 2020, in more than **17,000 institutions** in more than **245 countries** and territories.

At the beginning of the global lockdown period readership declined sharply. In the week of March 16, usage was down 14% year on year, due in large part to challenges with access as much of the global community moved out of their academic or corporate settings to work from home. We worked quickly with our library partners to expand remote access via VPN or proxy server, extended IP range, or Shibboleth/OpenAthens log-in. From April usage picked up overall – with solid year-on-year increases in most countries each month.

Keeping close to customers

We kept in constant contact with our library customers. We responded to market concerns by keeping subscription and license prices flat for 2021 – even for customers with multi-year agreements with built-in pricing increases. The move was well received. In the independent 'Brave New World' study which looked at impacts of COVID-19 on the research ecosystem, 49% felt it was a positive factor in their wider budget decisions, and 33% said it enabled them to renew without further negotiation.

Our sales teams started the renewal process two months earlier than usual, and we helped them to adapt to virtual selling with new training and resources.

Maximizing your reach with the 'All Journals' license

In 2020, just under 3,000 institutions, buying as part of 58 consortia in 38 countries, offered access to journals under the Wiley 'All Journals' License. Customers in **Japan, Canada, France, Italy** and the **US** converted to this new license in 2020.

Opening up new audiences globally

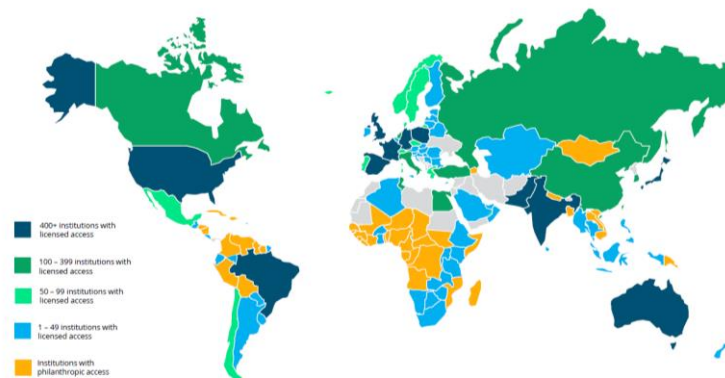
The scale of our sales team means that for many years we've played a pioneering role in partnering with consortia and governments to design new licenses that meet their strategic ambitions.

We see the power of our work in our results. In 2020 we signed new subscription licenses and extended existing ones in markets as diverse as **India, Poland, Ghana, Pakistan** and **Croatia**.

In March we renewed our license with NKRC in **India**. The consortium has 63 research institutions accounting for 20% of all output in India. Over the eight years of the license readership has increased significantly – a positive influence on the renewal. Up 11% from 2018 to 2019, and 37% from 2019 to 2020.

Wide access to journals worldwide via Wiley licenses

Click [here](#) to see the full-size version.



- In **Poland** we renewed the license covering all academic and research institutions. 512 member institutions offer access. Readership continues to grow - up 27% in 2020.
- Our license with CARLIGH in **Ghana** grew and opened up access in a further 12 sites. 47 now have access.
- A further 63 institutions joined the **Pakistan** agreement. Readership has grown by 43% since 2018.
- In **Croatia**, we signed a new deal for 36 top universities and the best research institutes. We've run workshops for authors and sessions on how to get the best out of Wiley content.

Access for everyone via philanthropic initiatives

Researchers in more countries than ever before were able to access research via philanthropic initiatives when **Colombia, Cuba, Peru** and **Venezuela** joined the Research4Life/INASP program.

Close to 7,000 institutions in 87 countries had philanthropic access to 1,303 Wiley journals in 2020 – 13% more institutions than in 2019. These initiatives open up access to research in developing countries where it's needed most. Further institutions in **Ecuador, Nepal** and **Bangladesh** also got access via these programs for the first time last year.

GetFTR – enabling easier access to research

We want to make it as easy as possible for researchers to access the research their institution offers, however they usually search for content.

We're proud to be working with four other leading publishers on a pilot for GetFTR – a free service which integrates with scholarly discovery platforms to provide direct, authenticated links to the most up-to-date and best version of an article. It's being trialled on a number of scholarly platforms like Figshare and Mendeley currently. You can see updates as it's rolled out to more at [GetFTR](#) and see how it works [here](#).

Context: Key policy impacts around the world

Globally, funders responded to the pandemic with immediate policies to increase flexibility, extend deadlines and grants, and provide emergency funding.

Our policy team is deeply engaged on all fronts and we continue to have discussions with senior officials across governments and their agencies to stay abreast of developments and work to shape policy favorably.

Connecting societies with policy decisions

We need to be ready to respond and adapt – sometimes quickly.

Your participation really does make a difference, and we've seen that in a number of decisions over the past few years. We'll continue to brief you on key issues and opportunities for discussion, and engagement and action planning.

Here we include highlights:

Data Policy - CERN announced their open data policy, committing to releasing level 3 scientific data, with the aim of releasing the full dataset by the close of the experiment. In **India**, the Department of Science and Technology (DST) released a draft policy, detailing an Open Science Framework allowing access to a repository of scientific data among other information and resources.

Preprints - Preprint policies to encourage early sharing of manuscripts have been on the rise. Several funders updated policies to encourage or mandate that submitted manuscripts are available on a preprint server. **Bill & Melinda Gates Foundation** updated their policy to encourage preprints of submitted manuscripts from 2021.

Plan S - Plan S, which mandates that all publications resulting from member funders be published immediately open access, with appropriate licensing, commenced for many of its member funders on January 1 this year. Plan S also announced a Rights Retention Strategy (RRS) during 2020, creating another route to compliance.

The RRS requires authors to make their accepted manuscript openly available immediately the final article is published, with an open license. Read our blog [here](#).

United Nations - UNESCO is working to form an international standard on Open Science. Their first draft was released to members in 2020 and extensive stakeholder consultation is underway. Once finalized we expect swift adoption by member states in 2021.

United States - The administration introduced the idea of an executive order mandating federally funded research to be made freely available. We were involved in stakeholder meetings and consultation throughout the year and provided guidance to society partners on forming a response individually or collectively.

Under the new administration, we will keep a watchful eye on any substantial progress on the executive order and other policies, such as steps to balancing and repairing relations with China and Chinese researchers as it relates to the Secure Campus Act, which hindered Chinese citizens from receiving student or research visas.

United Kingdom - UK Research and Innovation (UKRI), the body that administers all public funding and oversees university block funding, conducted a stakeholder consultation as it works to finalize their new open access policy. As part of this stakeholder consultation, we issued a detailed response and worked to encourage our society partners to respond as well. We continue to engage with UKRI both directly and through our membership of the Publishers Association. We expect the new policy to be announced by the second quarter of 2021.

European Union - As Horizon 2020 ends, we look to Horizon Europe, a new research program spanning 2021–2027 with a budget of around €95.5 billion.

Research priorities and missions focus on interdisciplinary research targeted towards some of the largest challenges facing

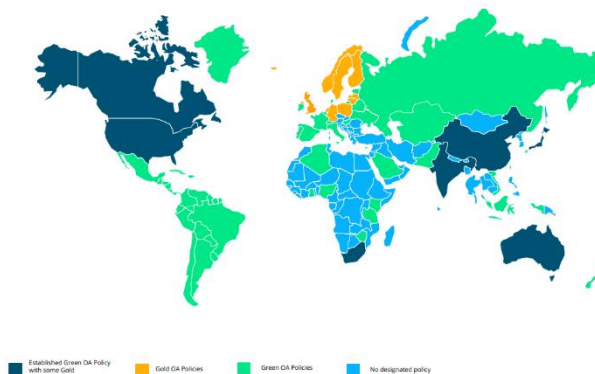
Society – climate and the environment, healthy land and food, energy, cancer and more.

Horizon Europe grants are likely to be subject to OA conditions similar to those implemented by cOAlition S. We now await formal approval from Parliament and Council.

Now that the UK has formally left the EU and the transition period ended at the end of 2020, negotiations about the relationship between the UK and EU in areas of scientific and research cooperation begin early in 2021 and will shape research collaboration for the period of the program.

Open access policies around the world

You can see the full version [here](#).



China - China is the second largest spender on R&D and has been closing the gap with the largest R&D spender, the US. Over the long term, as evidenced in President Xi Jinping's September address to the Chinese science community, we expect emphasis on R&D spending and innovation to remain high.

Last year, CPC, MOE, MOST, and CAST jointly released government guidelines that specify the direction of Chinese STM journal development, specifically objectives to increase the number of first-class journals, and raise the quality and influence of those journals.

Context: The changing world - impacts on our community

(Key policy impacts around the world continued)

Japan - In July, Japan released the Integrated Innovation Strategy 2020, addressing policy around foreign interference, protecting intellectual property, preserving research integrity and safeguarding national security from foreign interference.

An influential special committee of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) released an interim report highlighting the urgent need for Japan to consider funding for university libraries for journal subscriptions and APCs. The report recognizes Japan has embraced a Green OA policy while the rest of the world is starting to place more emphasis on Gold OA.

India - The Ministry of Science and Technology released a draft of India's Science, Technology and Innovation Policy. In it the government proposed a "one nation, one subscription" policy with the intention of making research and data more freely available. The policy has been released to the public for comments and suggestions.

A focus on science

Because of the pandemic, our global research community is collaborating and sharing more information than ever. This global collaboration, combined with a renewed public interest and trust in research, speaks to a more inclusive, supported, and sustainable future for the research community.

Connecting the media and public to research

We're committed to supporting science and bridging the communications gap between research, the media, policy makers and the general public.

By partnering with charities like **Sense about Science** and major media organizations like the **World Federation of Science Journalists** we're able to help educate the public and policy makers about topics that impact our society through initiatives like [Wiley Science Talks](#).

In June we launched series 2 of our podcast **This Study Shows**. In [Many ways to communicate the facts: A COVID-19 Special Episode](#) we looked at how empathy and trust can make for more effective science communication. All episodes are [here](#), or you can listen wherever you normally find your podcasts.

Supporting the research community during the pandemic

We moved quickly to collect and share articles related to COVID-19, which we made freely available on [Wiley Online Library](#). We gathered relevant preprints in the [Wiley Open Research Special Collection](#) and, to get topical research in front of the researchers who needed it quickly, we promoted both initiatives widely online, by email and on social media.

As well as providing free access to this critical research, we launched a dedicated [COVID-19 resource site](#) for researchers that featured sections on teaching online, working from home, and lighter content for those seeking a break from COVID-19 news.

We worked with governments to deposit all existing and forthcoming COVID-19 content into PubMedCentral and made it easier to deposit research into the [World Health Organization database](#).

Understanding the impacts on our community

As we move into the next phase, we'll all need to understand the impacts on all parts of the research community. We're pleased to have partnered with Kudos on the 'Brave New World' study which incorporates interlocking perspectives from researchers, institutions, libraries, and funders, which will give us a holistic view of the research ecosystem.

You'll see highlights of the survey peppered throughout this report. Look out for more detail over the coming months.

Working together to make a difference

2020 prompted long-overdue conversations to address systemic biases against individuals and communities. These biases continue to plague both society as a whole and our immediate academic community.

We're prioritizing listening and learning so we can build a greater awareness and stronger understanding of the issues closest to our community members. Key areas of focus include supporting our editors and society partners to build more diversity in editorial boards, reviewing and improving our editorial processes, capturing demographic data, and practising multi-cultural marketing.



We've been hearing from society leaders, editors and researchers on what they're doing to promote equity:

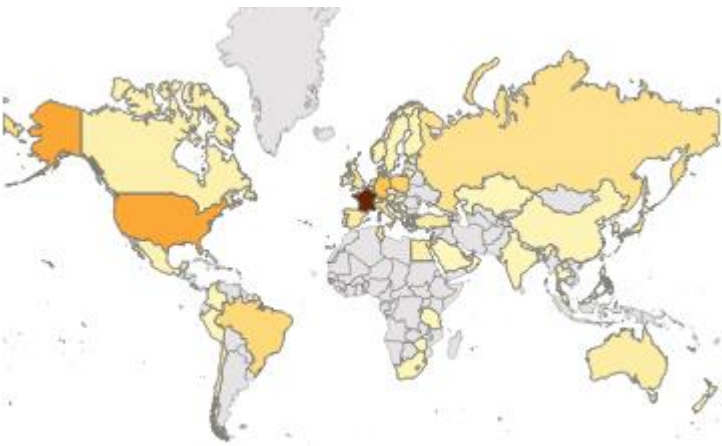
- [How societies can help create more diverse, equitable, and inclusive research communities](#)
- [Inclusive Research Communication](#)
- [What's Diversity Got To Do With It? Reflections On Editorial Board Diversity](#)

Your input and collaboration will allow us to make a bigger impact and we hope we can all share our learnings and outcomes throughout this journey.

We're excited to begin exploring these conversations with you.

Circulation - AJB

Global reach



In 2020, 7,765 institutions offered access to the latest content in your journal via either a Wiley license or a traditional (title-by-title) subscription. On this map, darker shading shows where circulation is highest. Countries shaded in gray may be covered by philanthropic initiatives.

In 2020, our philanthropic initiatives extended low-cost or free access to current content to 6,696 developingworld institutions.

Additional reach: EBSCO

Wiley’s arrangement with EBSCO allows us to extend the reach of your journal beyond core academic libraries. In 2020, 11 institutions accessed embargoed content of at least one year old from your journal via EBSCO databases. This is a 57.1% change from 2019.

Reach by region

Region	2018	2019	2020
Australia & NZ	172	170	173
Canada	70	77	90
China	24	35	38
Europe	3,111	4,129	4,863
Japan	56	63	167
Rest of World	886	950	1,361
UK	36	35	192
USA	768	801	881
Grand Total	5,123	6,260	7,765

This table shows the number of institutions, by region, with access to the latest content in your journal via either a Wiley license or a traditional (title-by-title) subscription.

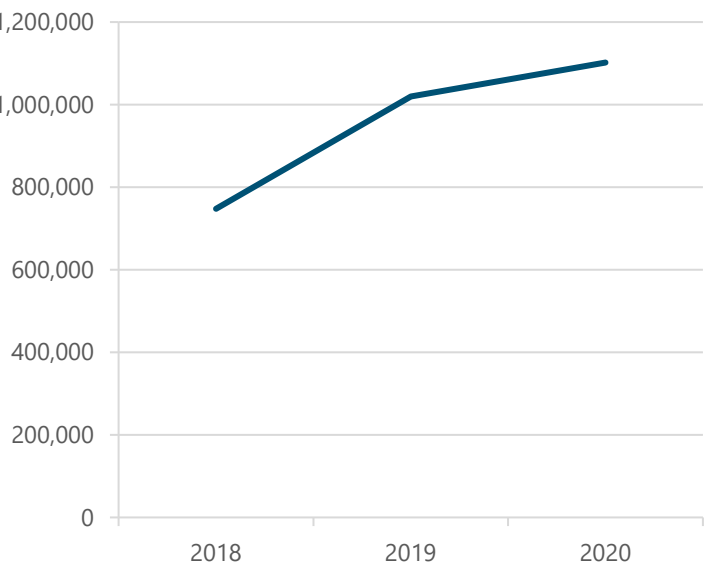
Reach by access type

Sales Model	2018	2019	2020
Institutions with access via a Wiley license	4,888	6,110	7,637
All Journals license	2,571	2,994	2,954
Transitional agreements		619	961
Other licenses	2,317	2,497	3,722
Institutions with access via traditional subscriptions	235	150	128
Online	235	150	128
Print and online	0	0	0
Print	0	0	0
Total	5,123	6,260	7,765

In 2020, 7,637 institutions offered access to your journal via a Wiley license, often through a consortium. Of these institutions, 2,954 had access via the “All Journals license”. 961 institutions had access via “Transitional agreements” which cover both subscription access and open access publishing. In addition, 128 institutions offered access via traditional (online or print) subscriptions.

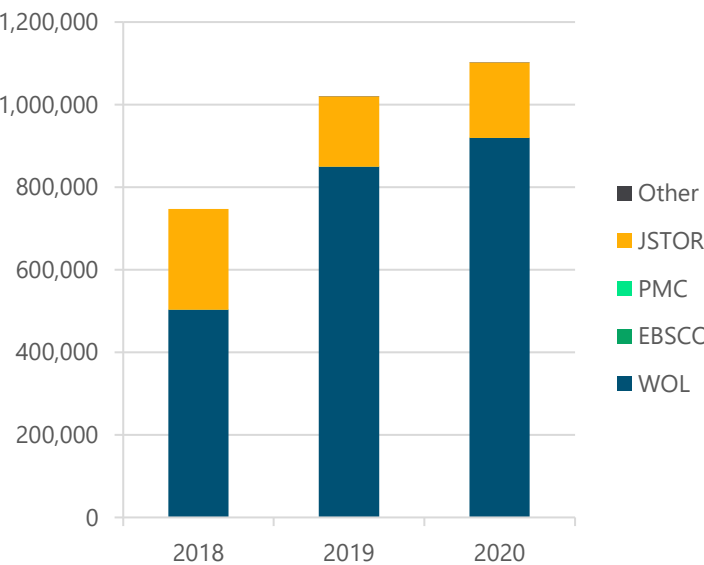
Readership - AJB

Article downloads trend



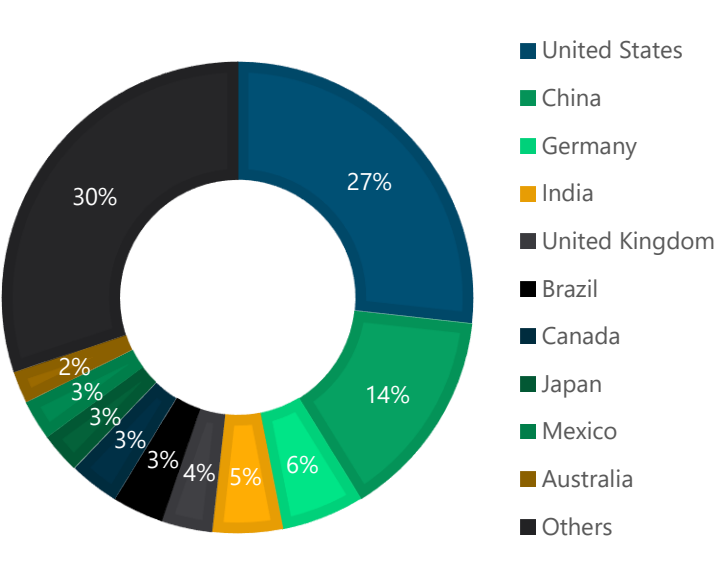
This chart shows the increase in the number of full-text article downloads for your journal in the period 2018 to 2020. The total includes usage on Wiley Online Library, EBSCO, and other third-party databases. Downloads via Wiley Online Library increased by 8.2% in 2020. This compares with an increase of 13.2% across all Wiley journals in the Plant Science subject area.

Article downloads by source



This chart shows the origin of full-text downloads of your journal across Wiley Online Library and other major third party providers.

Top 10 downloading countries



This chart shows the top 10 countries from which articles in your journal were downloaded via Wiley Online Library in 2020, and the percentage each country contributed to total usage. All other countries are combined under "Others."

Readership - AJB

Most downloaded articles on Wiley Online Library

Rank	Author(s)	Article Title	Volume	Issue	No. of Accesses
1	Nisbet, M. & Scheufele, D.	What's next for science communication? Promising directions and lingering distractions	96	10	5,568
2	Blackwell, M.	The Fungi: 1, 2, 3 ... 5.1 million species?	98	3	5,112
3	Smith, S. & Brown, J.	Constructing a broadly inclusive seed plant phylogeny	105	3	5,088
4	Aubriot, X. et al.	Shedding new light on the origin and spread of the brinjal eggplant (<i>Solanum melongena</i> L.) and its wild relatives	105	7	4,582
5	Lewis, L. & McCourt, R.	Green algae and the origin of land plants	91	10	3,750
6	Hillig, K. & Mahlberg, P.	A chemotaxonomic analysis of cannabinoid variation in <i>Cannabis</i> (Cannabaceae)	91	6	3,454
7	Kutschera, U. & Niklas, K.	Julius Sachs (1868): The father of plant physiology	105	4	2,845
8	Gaiero, J. et al.	Inside the root microbiome: Bacterial root endophytes and plant growth promotion	100	9	2,799
9	Bell, D. et al.	Organellomic data sets confirm a cryptic consensus on (unrooted) land-plant relationships and provide new insights into bryophyte molecular evolution	107	1	2,626
10	Cardinale, B. et al.	The functional role of producer diversity in ecosystems	98	3	2,596

This table includes details of the 10 most-downloaded articles of 2020. The average number of downloads per article published in your journal in 2020 was 402. Across all journals that Wiley publishes in the same subject area, the average number of downloads per article was 507.

Top referrers

Rank	Referrer Service	% of Downloads
1	Google Scholar	33.8%
2	Google Search	21.2%
3	PubMed/PMC	4.0%
4	Institutions and Library Services	1.8%
5	Bing	1.6%

Open search continues to play a key role in driving readership. This table shows the % of total downloads resulting from referrals from each site.

Article downloads via Wiley Content Sharing

In 2020, 64 sharing links were generated via the Wiley Content Sharing service, resulting in 10 full-text downloads. In addition, links shared by authors resulted in 34 downloads. Links shared by media sites generated a further 12 downloads.

Top Cited Papers – AJB IF Cites

This table shows the top cited papers in AMERICAN JOURNAL OF BOTANY in the 2019 Impact Factor period ranked by Impact Factor citations.

DOI	Article	Lead Author	Institute	Country	Issue	Year	2019 Cites
10.1002/AJB2.1048	Plastid phylogenomic analysis of green plants: A billion years of evolutionary history	GITZENDANNER, M	University of Florida	United States	105:3	2018	32
10.1002/AJB2.1019	Constructing a broadly inclusive seed plant phylogeny	SMITH, S	University of Michigan	United States	105:3	2018	24
10.1002/AJB2.1060	Impact of whole-genome duplication events on diversification rates in angiosperms	LANDIS, J	University of California Riverside	United States	105:3	2018	21
10.1002/AJB2.1018	New prospects in the detection and comparative analysis of hybridization in the tree of life	FOLK, R	University of Florida	United States	105:3	2018	15
10.3732/AJB.1600453	Recombination-dependent replication and gene conversion homogenize repeat sequences and diversify plastid genome structure	RUHLMAN, T	The University of Texas at Austin	United States	104:4	2017	14
10.3732/AJB.1600227	Anchored phylogenomics improves the resolution of evolutionary relationships in the rapid radiation of Protea L.	MITCHELL, N	University of Connecticut	United States	104:1	2017	14
10.1002/AJB2.1069	From cacti to carnivores: Improved phylotranscriptomic sampling and hierarchical homology inference provide further insight into the evolution of Caryophyllales	WALKER, J	University of Michigan	United States	105:3	2018	12
10.1002/AJB2.1017	Shifts in gene expression profiles are associated with weak and strong Crassulacean acid metabolism	HEYDUK, K	University of Georgia	United States	105:3	2018	12
10.1002/AJB2.1016	Quartet Sampling distinguishes lack of support from conflicting support in the green plant tree of life	PEASE, J	Wake Forest University	United States	105:3	2018	11
10.1002/AJB2.1143	An overview of extant conifer evolution from the perspective of the fossil record	LESLIE, A	Brown University	United States	105:9	2018	11

Altmetric Analysis - AJB

Top ten articles published in 2020



Limits and constraints to crop domestication
Article in **American Journal of Botany**, December 2020



Small herbaria contribute unique biogeographic records to county, locality, and...
Article in **American Journal of Botany**, November 2020



Eocene Araucaria Sect. Eutacta from Patagonia and floristic turnover during the...
Article in **American Journal of Botany**, May 2020



Anatomical and hydraulic responses to desiccation in emergent conifer seedlings
Article in **American Journal of Botany**, August 2020



Specialized cockroach pollination in the rare and endangered plant Vincetoxicum...
Article in **American Journal of Botany**, October 2020



Fossil evidence for a Cretaceous rise of the mahogany family
Article in **American Journal of Botany**, January 2020



Phylogenetic analysis of fossil flowers using an angiosperm-wide data set:...
Article in **American Journal of Botany**, October 2020



Sexual and natural selection on pollen morphology in Taraxacum
Article in **American Journal of Botany**, February 2020



Herbarium-based measurements reliably estimate three functional traits
Article in **American Journal of Botany**, September 2020



When the going gets tough, the tough turn female: injury and sex expression in...
Article in **American Journal of Botany**, February 2020

Altmetric Analysis - AJB

Top ten articles published in 2016 - 2020



Limits and constraints to crop domestication
Article in **American Journal of Botany**, December 2020



First discovery of the charophycean green alga *Lychnothamnus*...
Article in **American Journal of Botany**, July 2017



Small herbaria contribute unique biogeographic records to county, locality, and...
Article in **American Journal of Botany**, November 2020



Eocene *Araucaria* Sect. *Eutacta* from Patagonia and floristic turnover during the...
Article in **American Journal of Botany**, May 2020



Shedding new light on the origin and spread of the brinjal eggplant (*Solanum*...
Article in **American Journal of Botany**, August 2018



Rapid range expansion of a newly formed allopolyploid weed in the genus *Salsola*
Article in **American Journal of Botany**, March 2016



An overview of extant conifer evolution from the perspective of the fossil...
Article in **American Journal of Botany**, August 2018



Two fossil species of *Metrosideros* (Myrtaceae) from the...
Article in **American Journal of Botany**, June 2017



Anatomical and hydraulic responses to desiccation in emergent conifer seedlings
Article in **American Journal of Botany**, August 2020



Specialized cockroach pollination in the rare and endangered plant *Vincetoxicum*...
Article in **American Journal of Botany**, October 2020

Marketing

Your 2020 marketing objectives

At the start of the year, we agreed upon the following marketing objectives and priorities for *American Journal of Botany* and *Applications in Plant Sciences*:

- **Increase author engagement**
- **Expand brand awareness**
- **Grow readership**

In 2020, through ongoing data analysis, discussion, and collaboration with you, we have achieved these objectives using a series of marketing tools and tactics. Outlined below are some of the key initiatives used to promote *American Journal of Botany* and *Applications in Plant Sciences*.



8
Author
Campaigns



AJB
3
Readership
Campaigns

APPS
1
Readership
Campaigns



Promoted at 1
Conference



AJB
17,011
Social Media
Followers Reached

APPS
61,808
Social Media
Followers Reached

Innovative marketing strategy

Adapting to change

2020 has been a year of challenges, but opportunities too. With a focus on reader and author needs, our marketing has quickly adapted to support researchers as they find themselves away from their normal workplace. Here are a few examples of how we have remained engaged with researchers to ensure the maximum impact for your journal:

- **Virtual Conferences** - Conference hosts have offered a variety of formats and we've experimented to find out which methods will create the greatest visibility for your journal.
- **Webinars** - To replace the in-person workshops we planned to run at institutions, we've been hosting webinars on topics of interest to authors. These have also helped us reach new authors to invite them to submit to your journal.
- **Guides to Publishing Open Access** - Authors often want to publish open access but don't know where to start. Through digital guides, videos, social posts and webinars we've been able to explain how to publish open access papers in your journal as well as others.
- **Coronavirus Hub** - To support the research community, we continue to post all new COVID-19 articles as they publish and make them free to read. We're promoting those with a general audience appeal to global media outlets via our bi-weekly updates, **Wiley Research Headlines**.

Making sure your articles can be found

Search engines remain the main way to access your content. Our team of dedicated marketers works closely with Google and other search engine platforms to ensure every article published on Wiley Online Library ranks highly in search results. In addition to ongoing Search Engine Optimization (SEO) work, including webpage design and staying abreast of Google changes, we have implemented the following:

- The addition of Google Scholar 'Quick Previews' which displays your article abstracts to mobile users of Google Scholar.
- Google CASA for off-campus users accessing full-text scholarly content licensed by their organizations.

Marketing - AJB

Engaging your authors

The ability to attract and retain more of the top authors in the field is a priority for long-term success of *American Journal of Botany*. Our marketing efforts support this goal through actively targeting authors, encouraging them to submit – and keep submitting – their best work to *American Journal of Botany*. Initiatives to reach relevant authors in key disciplines are listed below.

Initiative	Results
Top Downloaded Author #TopDownloadedArticle We recognized authors from your journal’s top 10% of most-downloaded papers from the previous two years for their contribution to the journal through a journal-branded email and social media campaign.	The email campaign had a 69% Unique Open Rate. This email was sent to 85 of your authors.
Rejected Article Our team provided resources for authors whose articles have recently been rejected and highlighted options for resubmission.	The email campaign had an overall Open Rate of 49% and Click-to-Open Rate of 17%.Your journal received 6 submissions from this campaign. We anticipate this number will grow in the coming months.
Home For Your Next Paper A personalized campaign that helps prospective authors choose to submit their research to your journal. This campaign uses marketing automation to create customized journeys tailored to their needs.	The email campaign had an overall Open Rate of 32% and Click-to-Open Rate of 8%. Your journal received 2 submissions from this campaign. We anticipate this number will grow in the coming months.
Publish With Us Again A personalized campaign that encourages loyalty from your authors and encourages them to publish their research in your journal again. This campaign uses marketing automation to create customized journeys tailored to their needs.	The email campaign had an overall Open Rate of 46% and Click-to-Open Rate of 6%.Your journal received 0 submissions from this campaign. We anticipate this number will grow in the coming months.

Initiative	Results
Top Cited Author #TopCitedArticle An email and social media campaign aimed at congratulating authors of top cited articles. This campaign generates interest around highly cited content and nurtures author relationships to encourage them to publish in your journal again.	The email had a 67% Unique Open Rate. This email was sent to 9 of your authors.
Impact Factor Announcement We sent a journal-branded email to recently published authors within 48 hours of the Impact Factor release.	The email announcement had a 37% Unique Open Rate and a 63% Total Open Rate. This notification was sent to 956 of your journal's authors.
Open Access Week A dedicated week in October where we promote publishing open access in journals across the Wiley program.	Four posts from Wiley in Research generated particularly strong results of between 95 and 123 link clicks. One of our main targets for the event was to increase our social media share of voice against five top competitors. We achieved 33% share of voice, which is up from 28% in 2019.
Paid Social Media - Submissions A bespoke, society- and journal-branded campaign aimed at increasing submissions to your journal.	The paid social campaign resulted in 730 page views, 442 visits, 365 unique visits and 153 full text accesses.

Marketing - APPS

Engaging your authors

The ability to attract and retain more of the top authors in the field is a priority for long-term success of *Applications in Plant Sciences*. Our marketing efforts support this goal through actively targeting authors, encouraging them to submit – and keep submitting – their best work to *Applications in Plant Sciences*. Initiatives to reach relevant authors in key disciplines are listed below.

Initiative	Results
Top Downloaded Author #TopDownloadedArticle We recognized authors from your journal's top 10% of most-downloaded papers from the previous two years for their contribution to the journal through a journal-branded email and social media campaign.	The email campaign had a 65% Unique Open Rate. This email was sent to 69 of your authors.
Rejected Article Our team provided resources for authors whose articles have recently been rejected and highlighted options for resubmission.	The email campaign had an overall Open Rate of 49% and Click-to-Open Rate of 17%.Your journal received 0 submissions from this campaign. We anticipate this number will grow in the coming months.
Home For Your Next Paper A personalized campaign that helps prospective authors choose to submit their research to your journal. This campaign uses marketing automation to create customized journeys tailored to their needs.	The email campaign had an overall Open Rate of 32% and Click-to-Open Rate of 8%. Your journal received 1 submission from this campaign. We anticipate this number will grow in the coming months.
Publish With Us Again A personalized campaign that encourages loyalty from your authors and encourages them to publish their research in your journal again. This campaign uses marketing automation to create customized journeys tailored to their needs.	The email campaign had an overall Open Rate of 46% and Click-to-Open Rate of 6%.Your journal received 0 submissions from this campaign. We anticipate this number will grow in the coming months.

Initiative	Results
Top Cited Author #TopCitedArticle An email and social media campaign aimed at congratulating authors of top cited articles. This campaign generates interest around highly cited content and nurtures author relationships to encourage them to publish in your journal again.	The email had a 58% Unique Open Rate. This email was sent to 45 of your authors.
Impact Factor Announcement We sent a journal-branded email to recently published authors within 48 hours of the Impact Factor release.	The email announcement had a 37% Unique Open Rate and a 63% Total Open Rate. This notification was sent to 355 of your journal's authors.
Paid Social Media - Submissions A bespoke, society- and journal-branded campaign aimed at increasing submissions to your journal.	The paid social campaign resulted in 115 Page Views, 73 Visits, 72 Unique Visitors and 22 Full Text Accesses.

Marketing

Engaging your authors

Leading the way in open access

We raise awareness of, and promote, open access publication to current and potential authors of *American Journal of Botany* and *Applications in Plant Sciences* in the following ways:

- **Targeted emails** to inform authors of Wiley Open Access Accounts (WOAA) through their funder or institution.
- **Online advertising** via Wiley Online Library, Google, and social media channels.
- **Live events and online webinars** to educate faculty, librarians, and authors, with emphasis on transitional deal countries.

Open Access Initiative	Results
Wiley Open Access Accounts (WOAA) Program A multichannel email, web, and social media program which targets researchers eligible for support with open access fees from their institution or funder. Institutions and funders that have transitional agreements with us are also included in this program.	Results are pending, will be delivered by end of March.
Open Access Week A dedicated week in October where we promote publishing open access in journals across the Wiley program through a social media campaign.	Four posts from Wiley in Research generated particularly strong results of between 95 and 123 link clicks. One of our main targets for the event was to increase our social media share of voice against five top competitors. We achieved 33% share of voice, which is up from 28% in 2019.

Focusing on growth in China

In 2018, China became the world’s leading country in terms of research output, overtaking the US for the first time. We have wide-reaching and growing networks in China that give us access to researchers so that we can all benefit from the opportunity.

Below are some activities we have pursued in this region to grow a strong and high-quality research community in China:

- **Author workshops** at Chinese universities and research institutes
- **Wiley China Blog**, averaging 30,000 – 50,000 visits per month
- **Wiley WeChat** account, reaching Chinese academic and public circles, with a focus on life science, materials science, chemistry, and health science

Regional Growth Initiative	Results
China Submission Campaign 2020 Impact Factor Campaign. A targeted campaign aimed to promote your journal and encourage submissions from authors based in China.	The campaign received 19,193 Page Views.

Marketing - AJB

Expanding brand awareness

Social media

Social media is a valuable channel for engaging with readers and authors. Used effectively, it can expand your reach, increase engagement, generate web traffic, and drive brand awareness among target audiences.

In 2020, we used our community social media feeds to actively engage with influencers and promote research published in *American Journal of Botany*. Throughout the year, the following social media account @wileyplantsci saw positive growth, inviting new followers to engage with your content.

The articles below were among the most liked or shared posts in 2020, as measured by Altmetric, which tracks the online attention that research outputs receive by pulling in data from three main sources: social media, traditional media, and online reference managers.

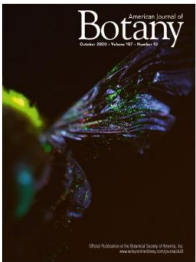
Article Title	Highest Altmetric Attention Score 2020	All Mentions	Mentions from Social Media	Mentions from News & Blogs	Mentions from Policy Documents & Patents
Small herbaria contribute unique biogeographic ...	112	187	186	1	0
Eocene Araucaria Sect. Eutacta from ...	108	95	85	9	0
Anatomical and hydraulic responses ...	87	73	66	7	0
Evidence for the persistence of wild ...	84	71	60	8	1
Specialized cockroach pollination in ...	83	99	94	5	0

Conference engagement

2020 was a year like no other, with the impact of COVID-19 forcing many conference organizers to cancel or switch to virtual events at short notice. On the positive side, this gave us the opportunity to experiment with new formats and tools to expand brand awareness of your journal. In some cases, we were able to communicate the benefits of *American Journal of Botany* to a larger and wider audience than had been possible at in-person conferences. In 2020, your journal was promoted at this event:

- **BRITISH ECOLOGICAL SOCIETY (BES) ANNUAL MEETING 2020 (FESTIVAL OF ECOLOGY)**

Your society and journal featured on Wiley's event website www.wileyecologyevolution.com



American Journal of Botany
IF: 3.038
Society: Botanical Society of America

FREE SAMPLE



WILEY

Marketing - APPS

Expanding brand awareness

Social media

Social media is a valuable channel for engaging with readers and authors. Used effectively, it can expand your reach, increase engagement, generate web traffic, and drive brand awareness among target audiences.

In 2020, we used our community social media feeds to actively engage with influencers and promote research published in *Applications in Plant Sciences*. Throughout the year, the following social media accounts @wileyplantsci saw positive growth, inviting new followers to engage with your content.

The articles below were among the most liked or shared posts in 2020, as measured by Altmetric, which tracks the online attention that research outputs receive by pulling in data from three main sources: social media, traditional media, and online reference managers.

Article Title	Highest Altmetric Attention Score 2020	All Mentions	Mentions from Social Media	Mentions from News & Blogs	Mentions from Policy Documents & Patents
Using clear plastic CD cases as low-cost ...	138	192	190	2	0
WorldFlora: An R package for exact ...	77	147	147	0	0
Methods for broad-scale plant phenology ...	69	115	114	1	0
LeafMachine: Using machine learning ...	66	118	117	1	0
Composite modeling of leaf shape along ...	57	106	106	0	0

Conference engagement

2020 was a year like no other, with the impact of COVID-19 forcing many conference organizers to cancel or switch to virtual events at short notice. On the positive side, this gave us the opportunity to experiment with new formats and tools to expand brand awareness of your journal. In some cases, we were able to communicate the benefits of *Applications in Plant Sciences* to a larger and wider audience than had been possible at in-person conferences. In 2020, your journal was promoted at these events:

- **British Ecological Society (BES) Annual Meeting 2020 (Festival of Ecology)**

Your society and journal featured on the website: <https://www.wileyecologyevolution.com>



WILEY

Marketing

Growing readership

Growing readership through awareness events

We featured content and news from *American Journal of Botany* and *Applications in Plant Sciences*. in outreach campaigns across multiple relevant subject disciplines. Throughout 2020, your journal was included in a range of initiatives to encourage usage.

Initiative	Results
World Earth Day An organic social media campaign and a Google AdWords campaign highlighting recent research related to climate action.	There were 1,421 visits to the Earth Day collection, and we collected 98 contacts email addresses for future marketing activity.



Growing readership through social media

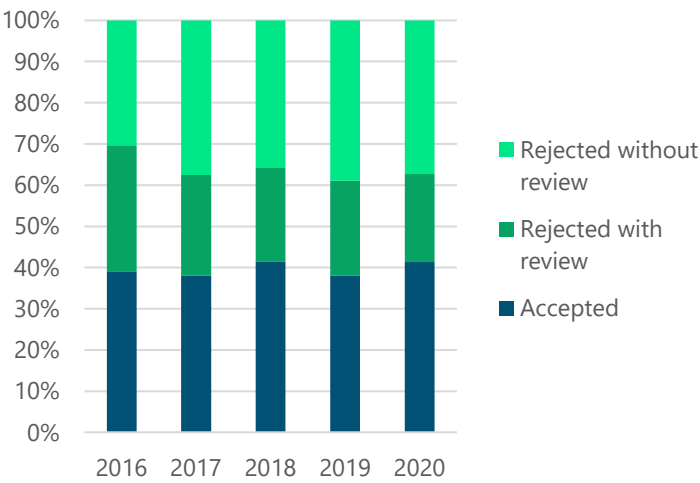
In 2020, *American Journal of Botany* and *Applications in Plant Sciences*. was featured in a Special Issue paid social media campaign on Facebook through Wiley's ecology channel, as well as regularly timed posts on Wiley's organic social media feeds through the @WileyPlantSci channel.

Initiative	Results
Paid Social Readership Special Issue A campaign, including paid social media to promote the content of the <i>Plant-Environment Interactions: Integrating Across Levels and Scales</i> .	Paid social resulted in 479 Visits, 634 Page Views and 421 Full Text Accesses



Author Experience: Submissions - AJB

Accepted and rejected articles



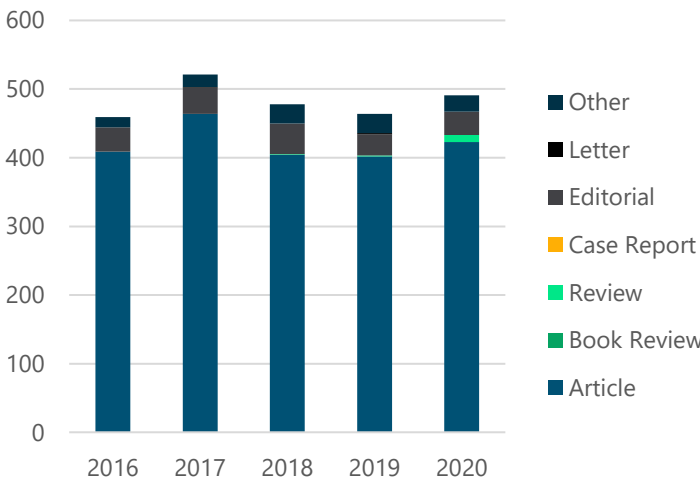
This chart shows the proportion of accepted and rejected articles listed in the year the final decision was taken. The accept rate was 41.4% in 2020, an increase from 38.0% in 2019. This compares with an accept rate of 28.8% across all Wiley journals in the PLANT SCIENCE subject area.

Quantity and speed of reviews

	2016	2017	2018	2019	2020
Number of review invitations sent	1,515	1,681	1,484	1,440	1,609
Number of reviews invitations accepted	662	753	607	591	711
Number of reviews completed	707	770	634	623	718
Median days to review completion	15	15	15	14	21

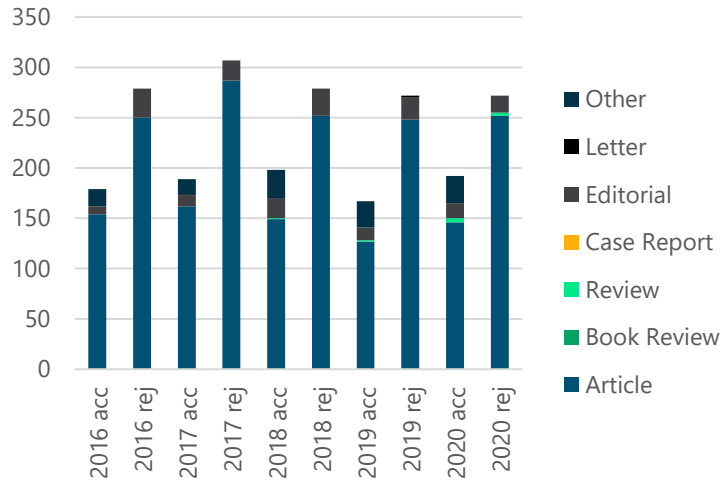
This chart shows review data for original submissions only for the past five years. Additionally, 90 reviews were claimed on Publons in 2020 by 70 reviewers, a 36.4% uptake.

New submissions by type



The total number of submissions in 2020 increased by 5.8% compared with 2019. This compares with an increase of 11.4% across all Wiley journals in the PLANT SCIENCE subject area.

Accepted and rejected articles by type



This chart shows the number of accepted and rejected articles by article type.

Author Experience: Submissions - AJB

Speed of review process

Includes all articles, including those that were rejected without peer review

Median number of days (min-max)	2016	2017	2018	2019	2020
Submission to first decision	36 (1-136)	31 (1-157)	30 (1-148)	30 (1-142)	34 (1-223)
Submission to final decision	48 (1-283)	43 (1-290)	48 (1-348)	40 (1-325)	58 (1-400)
Submission to acceptance	102 (1-283)	93 (8-290)	98 (1-348)	108 (1-325)	122 (1-400)

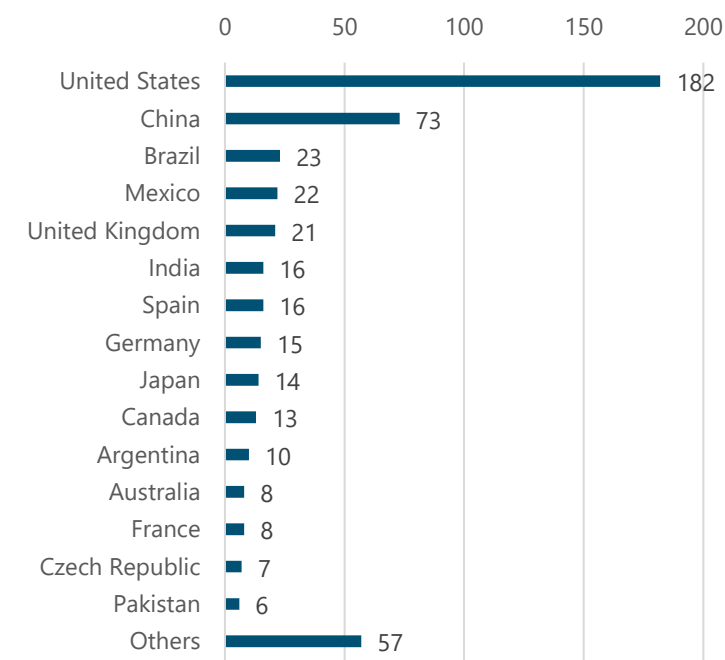
Articles are included in the year the decision was made, and data includes all articles, whether or not they were sent out to peer review. The number of days from submission to acceptance in 2020 was a median of 122 days, up from 108 days in 2019. This compares with a median of 117 in 2020 across all Wiley journals in the PLANT SCIENCE subject area.

Excluding articles that were rejected without peer review

Median number of days (min-max)	2016	2017	2018	2019	2020
Submission to first decision	48 (9-136)	46 (3-157)	49 (5-148)	50 (10-142)	59 (10-223)
Submission to final decision	75 (17-283)	75 (8-290)	88 (16-348)	88 (15-325)	98 (19-400)
Submission to acceptance	105 (26-283)	94 (8-290)	107 (16-348)	120 (25-325)	126 (31-400)

Articles are included in the year the decision was made, and data excludes articles that were rejected without review. The number of days from submission to acceptance in 2020 was a median of 126 days, up from 120 days in 2019. This compares with a median of 121 in 2020 across all Wiley journals in the PLANT SCIENCE subject area.

Country of submission



This chart shows the top 15 countries ranked by the number of submissions to the journal. All submissions counted were submitted in 2020. The remaining countries are grouped into "Others."

Author Experience: Publication

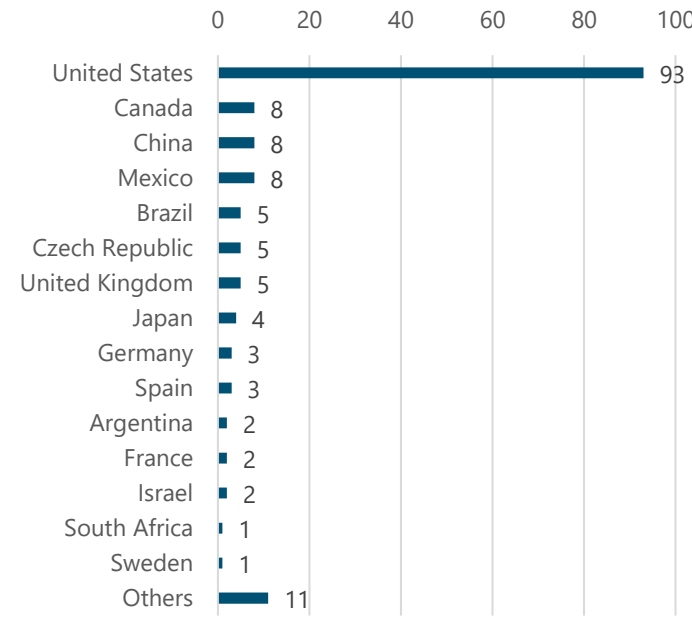
Publication Trend

Year	Volume	Number of Issues	Number of pages (by article)	Number of pages (by issue)	Number of articles	Average days from receipt at Wiley to Early View publication	Median days from receipt at Wiley to Early View publication
2020	107	12	1,834	1,886	175	25	24
2019	106	12	1,634	1,652	164	21	21
2018	105	12	2,076	1,933	196	26	26

In 2020 the average number of days from receipt at Wiley to Early View for *American Journal of Botany* was 25. This is faster than the Life Sciences average, which was 32, and the average across Wiley, which was 34.

In 2020 the median number of days from receipt at Wiley to Early View for *American Journal of Botany* was 24. This is faster than the Life Sciences average, which was 26, and the average across Wiley, which was 27.

Top 15 Author Contributing Countries



Open access ('OnlineOpen') articles

In 2020, your journal published 32 open access ('OnlineOpen') articles, an increase from 17 (88.in 2019). In the PLANY SCIENCES WoS subject category, the number of articles published open access across all publishers increased by 21.7% in the same period.

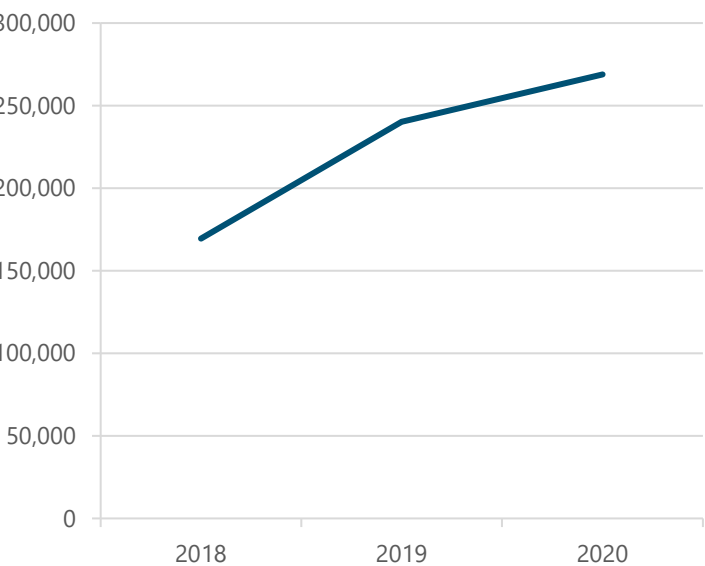
Author Experience: Publication

Issue Publication Data for 2020

Volume: Issue	Online publication date	Online lateness measure	Number of pages (by article)	Number of pages (by issue)	Number of articles	Average number of days from receipt at Wiley to Early View publication	Median number of days from receipt at Wiley to Early View publication	Average number of days from receipt at Wiley to online issue publication	Median number of days from receipt at Wiley to online issue publication
107:1	22 Jan 2020	On Schedule	173	174	17	20	20	44	42
107:2	22 Feb 2020	On Schedule	208	208	20	30	29	63	43
107:3	22 Mar 2020	On Schedule	156	156	15	23	23	46	41
107:4	24 Apr 2020	On Schedule	161	160	16	25	25	47	50
107:5	25 May 2020	On Schedule	143	148	11	22	19	39	40
107:6	26 Jun 2020	On Schedule	108	108	12	23	22	45	45
107:7	30 Jul 2020	Late	144	144	12	26	26	44	43
107:8	31 Aug 2020	Late	114	118	12	26	25	43	46
107:9	01 Oct 2020	Late	111	114	12	26	24	44	50
107:10	29 Oct 2020	Late	144	148	15	26	24	48	43
107:11	30 Nov 2020	Late	149	174	15	26	26	47	49
107:12	28 Dec 2020	Late	223	234	18	26	26	47	44

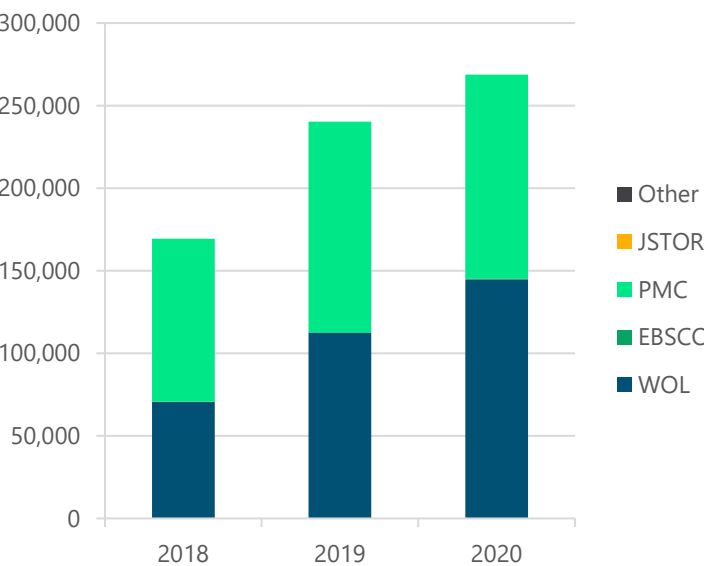
Readership - APPS

Article downloads trend



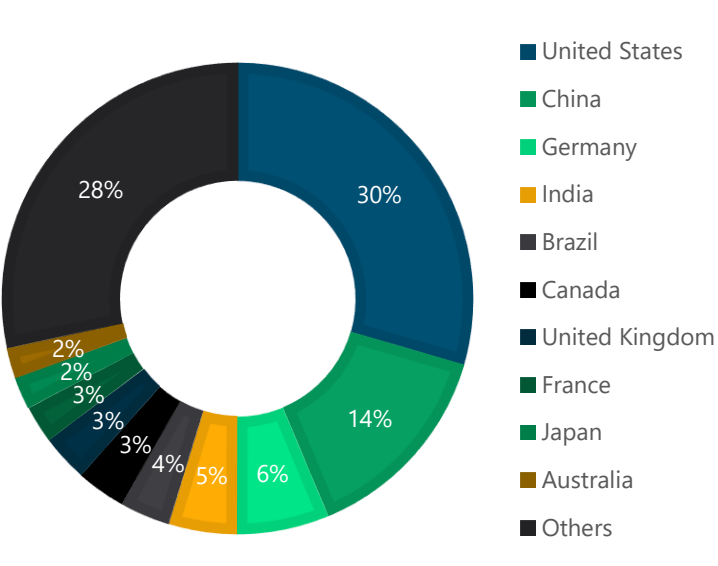
This chart shows the increase in the number of full-text article downloads for your journal in the period 2018 to 2020. The total includes usage on Wiley Online Library, EBSCO, and other third-party databases. Downloads via Wiley Online Library increased by 28.7% in 2020. This compares with an increase of 13.2% across all Wiley journals in the Plant Science subject area.

Article downloads by source



This chart shows the origin of full-text downloads of your journal across Wiley Online Library and other major third party providers.

Top 10 downloading countries



This chart shows the top 10 countries from which articles in your journal were downloaded via Wiley Online Library in 2020, and the percentage each country contributed to total usage. All other countries are combined under "Others."

Readership - APPS

Most downloaded articles on Wiley Online Library

Rank	Author(s)	Article Title	Volume	Issue	No. of Accesses
1	Li, F. & Harkess, A.	A guide to sequence your favorite plant genomes	6	3	4,012
2	Cassidy, S. et al.	Using clear plastic CD cases as low-cost mini-rhizotrons to phenotype root traits	8	4	2,845
3	Shan, S. et al.	Considerations in adapting CRISPR/Cas9 in nongenetic model plant systems	8	1	2,773
4	Easlon, H. & Bloom, A.	Easy Leaf Area: Automated digital image analysis for rapid and accurate measurement of leaf area	2	7	2,423
5	Dean, G. et al.	Conducting botanical research with limited resources: Low-cost methods in the plant sciences	8	4	2,164
6	Hale, H. et al.	Strategies for reducing per-sample costs in target capture sequencing for phylogenomics and population genomics in plants	8	4	2,146
7	Barve, V. et al.	Methods for broad-scale plant phenology assessments using citizen scientists' photographs	8	1	2,097
8	Tovar, J. et al.	Raspberry Pi-powered imaging for plant phenotyping	6	3	1,643
9	Weaver, W. et al.	LeafMachine: Using machine learning to automate leaf trait extraction from digitized herbarium specimens	8	6	1,493
10	Mahood, E. et al.	Machine learning: A powerful tool for gene function prediction in plants	8	7	1,383

This table includes details of the 10 most-downloaded articles of 2020. The average number of downloads per article published in your journal in 2020 was 584. Across all journals that Wiley publishes in the same subject area, the average number of downloads per article was 507.

Top referrers

Rank	Referrer Service	% of Downloads
1	Google Scholar	25.0%
2	Google Search	14.7%
3	Twitter	5.1%
4	Facebook	2.6%
5	PubMed/PMC	2.0%

Open search continues to play a key role in driving readership. This table shows the % of total downloads resulting from referrals from each site.

Top Cited Papers – APPS IF Cites

This table shows the top cited papers in APPLICATIONS IN PLANT SCIENCES in the 2019 Impact Factor period ranked by Impact Factor citations.

DOI	Article	Lead Author	Institute	Country	Issue	Year	2019 Cites
10.3732/APPS.1600094	IS BIOMASS A RELIABLE ESTIMATE OF PLANT FITNESS?	YOUNGINGER, B	Portland State University	United States	5:2	2017	24
10.1002/APS3.1038	Practical considerations for plant phylogenomics	MCKAIN, M	The University of Alabama	United States	6:3	2018	13
10.1002/APS3.1022	Digitization protocol for scoring reproductive phenology from herbarium specimens of seed plants	YOST, J	California Polytechnic State University	United States	6:2	2018	11
10.3732/APPS.1700079	USING HERBARIUM-DERIVED DNAs TO ASSEMBLE A LARGE-SCALE DNA BARCODE LIBRARY FOR THE VASCULAR PLANTS OF CANADA	KUZMINA, M	University of Guelph	Canada	5:12	2017	9
10.1002/APS3.1031	Raspberry Pi-powered imaging for plant phenotyping	GEHAN, M	Donald Danforth Plant Science Center	United States	6:3	2018	8
10.1002/APS3.1036	Targeting legume loci: A comparison of three methods for target enrichment bait design in Leguminosae phylogenomics	VATANPARAST, M	Smithsonian Institution	United States	6:3	2018	8
10.1002/APS3.1148	Target sequence capture of nuclear-encoded genes for phylogenetic analysis in ferns	WOLF, P	Utah State University	United States	6:5	2018	6
10.1002/APS3.1030	A guide to sequence your favorite plant genomes	LI, F	Boyce Thompson Institute for Plant Research	United States	6:3	2018	6
10.3732/APPS.1600123	THE SMELL OF ENVIRONMENTAL CHANGE: USING FLORAL SCENT TO EXPLAIN SHIFTS IN POLLINATOR ATTRACTION	BURKLE, L	Montana State University Bozeman	United States	5:6	2017	5
10.1002/APS3.1028	Green digitization: Online botanical collections data answering real-world questions	SOLTIS, P	University of Florida	United States	6:2	2018	5

Altmetric Analysis - APPS

Top ten articles published in 2020



Using clear plastic CD cases as low-cost mini-rhizotrons to phenotype root...

Article in **Applications in Plant Sciences**, April 2020



Composite modeling of leaf shape along shoots discriminates *Vitis* species...

Article in **Applications in Plant Sciences**, December 2020



WorldFlora: An R package for exact and fuzzy matching of plant names against...

Article in **Applications in Plant Sciences**, September 2020



SSRgenotyper: A simple sequence repeat genotyping application for whole-genome...

Article in **Applications in Plant Sciences**, December 2020



Application of remote sensing technology to estimate productivity and assess...

Article in **Applications in Plant Sciences**, November 2020



Methods for broad-scale plant phenology assessments using citizen scientists'...

Article in **Applications in Plant Sciences**, January 2020



LeafMachine: Using machine learning to automate leaf trait extraction from...

Article in **Applications in Plant Sciences**, July 2020



Conducting botanical research with limited resources: Low-cost methods in the...

Article in **Applications in Plant Sciences**, April 2020



Strategies for reducing per-sample costs in target capture sequencing for...

Article in **Applications in Plant Sciences**, April 2020



Considerations in adapting CRISPR/Cas9 in nongenetic model plant systems

Article in **Applications in Plant Sciences**, January 2020

Altmetric Analysis - APPS

Top ten articles published in 2016 - 2020



Comparing RNA-Seq and microarray gene expression data in two zones of the...

Article in **Applications in Plant Sciences**, November 2018



The Use of Laser Light to Enhance the Uptake of Foliar-Applied Substances into...

Article in **Applications in Plant Sciences**, January 2016



Source Identification of Western Oregon Douglas-Fir Wood Cores Using Mass...

Article in **Applications in Plant Sciences**, May 2017



Composite modeling of leaf shape along shoots discriminates Vitis species...

Article in **Applications in Plant Sciences**, December 2020



SSRgenotyper: A simple sequence repeat genotyping application for whole-genome...

Article in **Applications in Plant Sciences**, December 2020



Using clear plastic CD cases as low-cost mini-rhizotrons to phenotype root...

Article in **Applications in Plant Sciences**, April 2020



Utilizing herbarium specimens to quantify historical mycorrhizal communities

Article in **Applications in Plant Sciences**, February 2019



iNaturalist as a tool to expand the research value of museum specimens

Article in **Applications in Plant Sciences**, November 2018



WorldFlora: An R package for exact and fuzzy matching of plant names against...

Article in **Applications in Plant Sciences**, September 2020

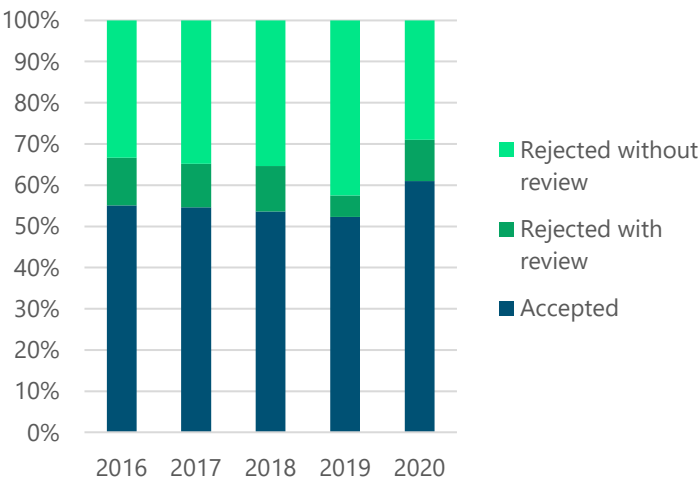


A guide to sequence your favorite plant genomes

Article in **Applications in Plant Sciences**, March 2018

Author Experience: Submissions - APPS

Accepted and rejected articles



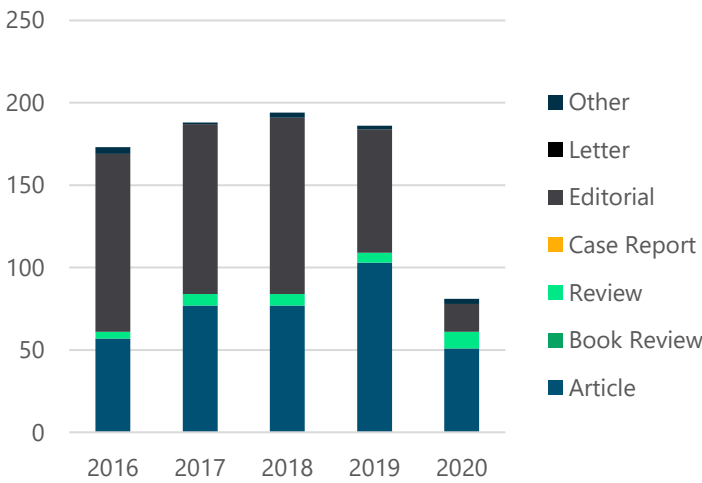
This chart shows the proportion of accepted and rejected articles listed in the year the final decision was taken. The accept rate was 61.0% in 2020, an increase from 52.3% in 2019. This compares with an accept rate of 28.8% across all Wiley journals in the PLANT SCIENCE subject area.

Quantity and speed of reviews

	2016	2017	2018	2019	2020
Number of review invitations sent	284	309	425	449	334
Number of reviews invitations accepted	157	150	206	196	144
Number of reviews completed	160	148	200	190	168
Median days to review completion	13	14	14	14	15

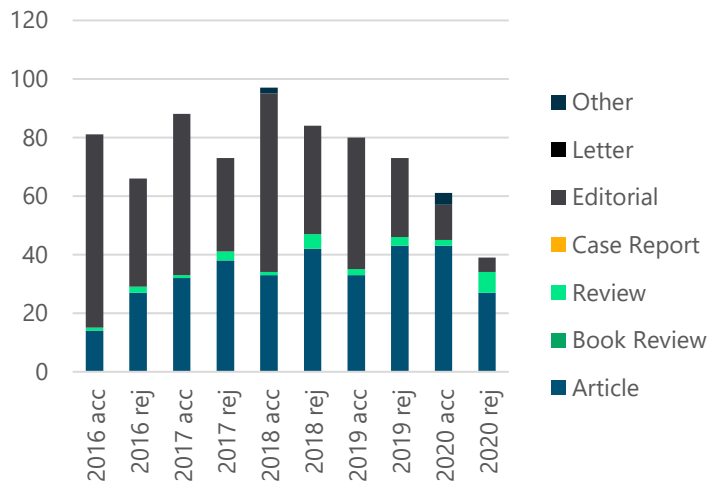
This chart shows review data for original submissions only for the past five years. Additionally, 33 reviews were claimed on Publons in 2020 by 11 reviewers, a 0.0% uptake.

New submissions by type



The total number of submissions in 2020 decreased by -56.5% compared with 2019. This compares with an increase of 11.4% across all Wiley journals in the PLANT SCIENCE subject area.

Accepted and rejected articles by type



This chart shows the number of accepted and rejected articles by article type.

Author Experience: Submissions - APPS

Speed of review process

Includes all articles, including those that were rejected without peer review

Median number of days (min-max)	2016	2017	2018	2019	2020
Submission to first decision	22 (1-120)	21 (1-133)	25 (1-101)	23 (1-144)	42 (1-178)
Submission to final decision	41 (1-180)	42 (1-194)	47 (1-259)	41 (1-362)	82 (1-306)
Submission to acceptance	59 (21-164)	72 (8-194)	69 (2-259)	73 (1-362)	125 (1-306)

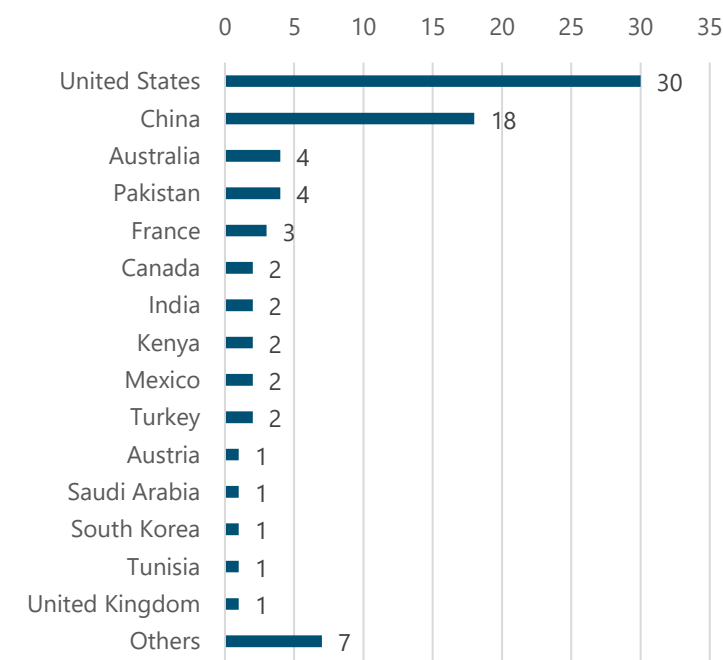
Articles are included in the year the decision was made, and data includes all articles, whether or not they were sent out to peer review. The number of days from submission to acceptance in 2020 was a median of 125 days, up from 73 days in 2019. This compares with a median of 117 in 2020 across all Wiley journals in the PLANT SCIENCE subject area.

Excluding articles that were rejected without peer review

Median number of days (min-max)	2016	2017	2018	2019	2020
Submission to first decision	46 (16-120)	55 (19-133)	51 (21-101)	56 (21-144)	74 (21-178)
Submission to final decision	82 (16-180)	88 (19-194)	88 (21-259)	97 (38-362)	124 (29-306)
Submission to acceptance	110 (36-164)	99 (53-194)	100 (37-259)	101 (52-362)	129 (54-306)

Articles are included in the year the decision was made, and data excludes articles that were rejected without review. The number of days from submission to acceptance in 2020 was a median of 129 days, up from 101 days in 2019. This compares with a median of 121 in 2020 across all Wiley journals in the PLANT SCIENCE subject area.

Country of submission



This chart shows the top 15 countries ranked by the number of submissions to the journal. All submissions counted were submitted in 2020. The remaining countries are grouped into "Others."

Author Experience: Publication

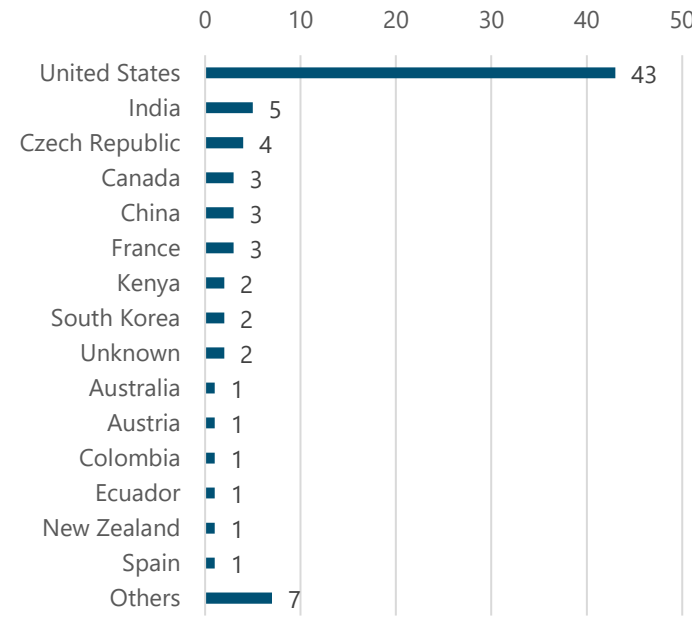
Publication Trend

Year	Volume	Number of Issues	Number of pages (by article)	Number of pages (by issue)	Number of articles	Average days from receipt at Wiley to Early View publication	Median days from receipt at Wiley to Early View publication
2020	8	12	622	667	80	27	24
2019	7	12	578	600	82	19	20
2018	6	12	624	642	93	23	23

In 2020 the average number of days from receipt at Wiley to Early View for *Applications in Plant Sciences* was 27. This is faster than the Life Sciences average, which was 32, and the average across Wiley, which was 34.

In 2020 the median number of days from receipt at Wiley to Early View for *Applications in Plant Sciences* was 24. This is faster than the Life Sciences average, which was 26, and the average across Wiley, which was 27.

Top 15 Author Contributing Countries



Author Experience: Publication

Issue Publication Data for 2020

Volume: Issue	Online publication date	Online lateness measure	Number of pages (by article)	Number of pages (by issue)	Number of articles	Average number of days from receipt at Wiley to Early View publication	Median number of days from receipt at Wiley to Early View publication	Average number of days from receipt at Wiley to online issue publication	Median number of days from receipt at Wiley to online issue publication
8:1	23 Jan 2020	On Schedule	51	54	7	22	23	30	31
8:2	22 Feb 2020	On Schedule	40	44	7	21	20	30	29
8:3	15 Mar 2020	On Schedule	40	44	6	19	16	30	30
8:4	28 Apr 2020	Late	103	104	12	32	29	40	40
8:5	26 May 2020	Late	39	50	6	21	22	29	27
8:6	01 Jul 2020	Late	73	74	9	30	23	32	28
8:7	31 Jul 2020	Late	73	73	9	34	34	28	24
8:8	10 Sep 2020	Very late	75	80	7	29	27	45	31
8:9	30 Sep 2020	Late	32	36	5	28	27	30	29
8:10	30 Oct 2020	Late	27	30	5	23	22	27	22
8:11	01 Dec 2020	Late	44	48	4	31	32	37	40
8:12	16 Dec 2020	On Schedule	25	30	3	25	23	38	36

