

Editorial: upcoming ICOM11 and more

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With some delay, we are releasing our seventh issue of the International Mycorrhiza Society -IMS- Newsletter. Starting in 2020, we enter a third year of our increasingly read publication, which enables outreach and communication within and outside the mycorrhizologist community. We happily welcome Pedro M. Antunes, PhD, Professor and Canada Research Chair of the Department of Biology, in Algoma University, Canada, as our *Applications Editor*. His expertise will strongly enrich our Newsletter specifically dedicated to apply mycorrhiza to forestry, restoration, and for enhancing the sustainability of agroecosystems. As always, we encourage our readers to please continue give us feedback, suggestions, and/or advice in order to improve our content.

11th International Conference on Mycorrhiza (ICOM11) in Beijing, China, July 31 to August 5, 2022 (hybrid congress) – Registration and Abstract Submission

We would like to announce that the schedule of the 11th International Conference on Mycorrhiza has been announced and an exciting program with excellent speakers and workshops has been prepared (see: <https://icom11.casconf.cn>). This year ICOM is organized together with the 5th International Molecular Mycorrhiza

Meeting (iMMM5) which complement each other very well. **Please register or submit your abstract until the 1st of May 2022 and register until the 20th of July 2022.** Note that ICOM11 is a hybrid meeting and registration as domestic visitors or online is possible. Domestic visitors attending the conference in Beijing should register at <https://icom11.casconf.cn>. For those attending online it is already possible to obtain ICOM11 virtual event tickets at: <https://mycorrhizas.org/home/join/>. Please note that if you are from outside China, there is currently a two-week quarantine period before you can enter China.

IMS awards

The International Mycorrhiza Society offers four prestigious awards at the next meeting in Beijing, China. If you know a person which you feel deserves an award or if you like to nominate yourself because you feel you made a ground breaking discover (for students and early career awards), please check out the terms of reference and register (<https://mycorrhizas.org/ims-awards-icom-11/>). **Deadline for nomination or application of IMS awards: 31st of May 2022.** We have four awards:

- AWARD 1: Student Award for Excellence in Mycorrhiza Research Publication (including self-nominations).

- AWARD 2: Early Career Award for Excellence in Mycorrhiza Research Publication (include self-nominations).
- AWARD 3: Mid-Career Mycorrhiza Research Excellence Award (on recommendation by colleague mycorrhizal researchers).
- AWARD 4: Eminent Mycorrhiza Researcher Award (on recommendation by colleague mycorrhizal researchers).

Applications must be submitted to Marcel G.A. van der Heijden (marcel.vanderheijden@agroscope.admin.ch).

Election for a vice President and new IMS Board members

The IMS is looking for nominations for Vice President and Director (focus social media and website communication).

Candidates are suggested by members of the mycorrhizal community and may include self-nominations (**application until 6th April 2022**; contact Jonathan M. Plett: J.Plett@westernsydney.edu.au). The suggested candidates are contacted by the nomination committee members. The list of candidates is then circulated within the community before and during the ICOM, and candidates can be elected until the 3rd of August 2022. The elected new Vice President and Director will be announced at the final session of ICOM.

According to the IMS bylaw for the election of Directors and Term:

(a) Subject to the Articles, Directors shall be elected by the Members by Ordinary Resolution at an annual meeting of Members at which an election of Directors is required.

(c) One Director shall be elected to the Office of Vice-President.

(e) The terms of office of Directors shall be two years or as determined by Ordinary Resolution of the Members.

Top Ten Mycorrhizal articles and short articles

In this issue, we present a list of the Top 10 mycorrhizal articles for the last four months (September to December, 2021). We congratulate Camille S. Delavaux (University of Kansas) and co-authors for the first place with their paper "Mycorrhizal types influence island biogeography of plants" (*Commun Biol*). They found that arbuscular mycorrhizal (AM) plants have a stronger mycorrhizal filter than other mycorrhizal or non-mycorrhizal (NM) plant species when colonizing islands, i.e. lower proportions of native AM plant species were found on islands relative to mainlands. The second rank was for the study "A phosphate starvation response-centered network regulates mycorrhizal symbiosis" (*Cell*) by Jincai Shi (Chinese Academy of Sciences) and colleagues, who developed a new map of the rice mycorrhizal symbiosis transcriptional regulatory network. This network deciphers extensive regulation of mycorrhizal symbiosis by endogenous and exogenous signals and highlights co-option of the conserved P-sensing pathway for the mycorrhizal symbiosis. Carlos P. Carmona (University of Tartu) and co-authors take the third place with their *Nature* article "Fine-root traits in the global spectrum of plant form and function". The authors compiled data from different aboveground (TRY) and belowground (GRooT) global datasets, and found that that the aboveground and fine-root traits are mostly decoupled, thus, the aboveground functional strategies tell almost nothing of the fine-root strategies, and vice versa.

This issue includes two research commentaries. The first one by Matthias

J. Salomon (University of Adelaide), with a recent article entitled “Global evaluation of commercial arbuscular mycorrhizal (AM) inoculants under greenhouse and field conditions” published in *Applied Soil Ecology*. They tested several dozens of commercial inoculants in Australia, Europe, and North America. They found that most of the inoculants did not contain viable propagules and did not colonize plant roots or enhance plant yield (less than 10% mycorrhizal colonisation), especially compared to pure cultures. The article includes a series of recommendations to counteract this worrisome issue. The second commentary by Pierre-Luc Chagnon (Université de Montréal) highlights different research priorities for trait-based mycorrhizal ecology, a topic that despite being called for more than 15 years, is still in its infancy, according to Pierre-Luc. He suggests to expand culture-based work (i.e. by identifying relevant traits and measuring them in a reproducible manner) and reassess trait phylogenetic conservatism to strengthen this discipline.

