



Tree Water Physiology and Ecology - Xylem Structure and Function

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Message from the Guest Editors

The elaborate structure of xylem conduits ensures the supply of large amounts of water to the photosynthetic organs, which will have a significant impact on plant performance, forest community/ecosystem processes, and global water/carbon cycle. Research on xylem structure and function has been active for decades, and has become a hot topic of plant water physiology because of the rapid global change.

With this Special Issue of *Forests*, we aim to provide new insights into xylem structure and function. Manuscripts are welcomed in the form of original research or review papers that address novel aspects of xylem structure and function at the whole-tree, forest community, and ecosystem level, especially in the context of global climate change.

Potential topics include, but are not limited to, the following:

- 1) Linkages between xylem structure and function and whole-tree performance, community or ecosystem processes.
- 2) Novel methods in the research of xylem structure and function.
- 3) Plasticity of xylem structure and function along environmental gradients.
- 4) Variation in water-use strategies of trees and their adaptation mechanism under global climate change.





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