

Special Issue

Biotic and Abiotic Controls on Crown Function, Morphology, and Dynamics

Message from the Guest Editor

The purpose of this Special Issue is to feature papers that deepen our insight into the genetic and environmental factors responsible for overall crown morphology. Genetics determines the overall structure of branches, and how tolerant branches are to shade. The environment consisting of the regional climate, disturbance regime, and atmospheric quality affects the longevity and extension of both branches and foliage. Indirect biotic factors include intercrown abrasion, shade and shelter from conspecific and heterospecific competitors, and water and nutrient diversion by hemiparasites such as mistletoe. We would like to bring together all types of studies concerning these biotic and abiotic effects on crown morphology. We are especially interested in studies that integrate the consequences of these effects at various levels of organization, such as tree size and form; branch, foliage, and stand dynamics. Both simulations and experimental studies are welcome. Potential topics include, but are not limited to:

- Branch growth;
- Crown length;
- Functional crown;
- Foliage horizontal and vertical distribution;
- Shade tolerance and branch longevity;
- Branch autonomy.

Guest Editor

Prof. Dr. Thomas J. Dean

School of Renewable Natural Resources, Louisiana State University
Agricultural Center, Baton Rouge, LA 70803, USA

Deadline for manuscript submissions

closed (31 January 2024)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/135504

Forests
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
forests@mdpi.com

[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)





Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)



About the Journal

Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia,
I-25121 Brescia, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank:

JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).