



ISTANBUL UNIVERSITY  
CERRAHPAŞA



1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

EISSN 2602-4039

VOLUME 72 • ISSUE 1 • JANUARY 2022

forestist.org





1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

## EDITOR IN CHIEF

Murat Demir 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

## ASSOCIATE EDITORS

Ender Makineci 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Run-Cang Sun 

*College of Materials Science and Technology, Director, Beijing Key Laboratory of Lignocellulosic Chemistry, Beijing Forestry University, Beijing South China University of Technology, Guangzhou, China*

Martin A. Hubbe 

*North Carolina State University, Department of Forest Biomaterials, United States*

Raphael Thomas Klumpp

*University of Natural Resources and Life Sciences (BOKU), Department of Forest- and Soil Sciences, Institute of Silviculture, Vienna, Austria*

Ignacio J. Diaz-Maroto Hidalgo 

*University of Santiago de Compostela, Spain*

## EDITORIAL BOARD

Abdullah Emin Akay 

*Bursa Technical University, Faculty of Forestry, Bursa, Turkey*

Ünal Akkemik 

*İstanbul University-Cerrahpaşa, Faculty of Forest Botany Department, İstanbul, Turkey*

M. Hakkı Alma 

*Rector, Iğdır University, Iğdır, Turkey*

Kazuhiro Aruga 

*Utsunomiya University, Faculty of Agriculture, Department of Forest Science, Japan*

Nadir Aynlımıř 

*Department of Wood Mechanics and Technology, İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Kevin Boston

*Norwegian Institute of Bioeconomy, Norway*

Zeki Candan 

*Department of Forest Products Engineering, Faculty of Forestry, İstanbul University-Cerrahpaşa, İstanbul, Turkey*

Jürgen Huss

*Albert-Ludwigs-Universität, Waldbau Institut, Standort und Vegetationkunde, Freiburg, Deutschland, Germany*

S. Nami Kartal 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Lee Woo-Kyun 

*Division of Environmental Science and Ecological Engineering, College of Life and Environmental Sciences, Korea University in Seoul, Republic of Korea*

Neil Pederson 

*Harvard Forest, Harvard University, United States of America*

Tibor Pentek

*University of Zagreb, Faculty of Forestry, Croatia*

Yowhan Son 

*Division of Environmental Science and Ecological Engineering, Korea University, Republic of Korea*

Yafang Yin 

*Chinese Academy of Forestry, Research Institute of Wood Industry, Deputy of IUFRO Unit 5.06.00 Properties and utilization of plantation wood, Beijing, China*

Tetsuhiko Yoshimura

*Shimane University Faculty of Life and Environmental Science, Japan*



Publisher

İbrahim KARA

Director of Operations

Ali ŞAHİN

Editorial Development

Gizem KAYAN TEKAÜT

Deputy Publications Director

Gökhan ÇİMEN

Publication Coordinators

İrem SOYSAL

Arzu YILDIRIM

Deniz KAYA

Bahar ALBAYRAK

Emre KARA

Finance and Administration

Zeynep YAKIŞIRER ÜREN

Project Coordinators

Sinem Fehime KOZ

Doğan ORUÇ

Graphics Department

Ünal ÖZER

Deniz Elif DURAN

Contact

Address: Büyükdere Cad.

No: 105/9 34394

Mecidiyeköy, Şişli, İstanbul

Phone: +90 212 217 17 00

Fax: +90 212 217 22 92

E-mail: info@avesyayincilik.com



# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

## EDITORIAL STAFF

Selim Bayraktar 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Fatma Diğdem Tuncer 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Hüseyin Yurtseven 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

## STATISTICAL EDITORS

Emrah Özdemir 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*

Ersel Yılmaz 

*İstanbul University-Cerrahpaşa, Faculty of Forestry, İstanbul, Turkey*



# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

## AIMS AND SCOPE

Forestist is an international, scientific, open access periodical published in accordance with independent, unbiased, and double-blinded peer-review principles. The journal is the official publication of İstanbul University-Cerrahpaşa, Faculty of Forestry and continues publication since 1951. Forestist is published tri-annually on January, May and September and the publication language of the journal is English.

Forestist aims to contribute to the literature by publishing manuscripts at the highest scientific level on all fields of forestry. The journal publishes original articles, reviews, and brief notes that are prepared in accordance with the ethical guidelines.

The scope of the journal includes but not limited to; forest, forestry, forestry based industries, landscape and environment.

The target audience of the journal includes specialists and professionals working and interested in all disciplines of forestry.

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the International Committee of Medical Journal Editors (ICMJE), World Association of Medical Editors (WAME), Council of Science Editors (CSE), Committee on Publication Ethics (COPE), European Association of Science Editors (EASE), and National Information Standards Organization (NISO). The journal is in conformity with the Principles of Transparency and Best Practice in Scholarly Publishing ([doaj.org/bestpractice](http://doaj.org/bestpractice)).

Forestist is currently indexed in Web of Science-Emerging Sources Citation Index, DOAJ, TUBITAK ULAKBİM TR Index, Gale, EBSCO Abstracts, CAB Direct, CABI Forestry Abstracts, CABI Forest Products Abstracts, CABI Environmental Science Database, CABI Horticultural Science Database, CABI Soil Science Database, CABI Soils and Fertilizers Abstracts, CABI Plant Genetics and Breeding Database, CABI Plant Genetic and Resources Abstracts, CABI Plant Protection Database, CABI Review of Agricultural Entomology.

All expenses of the journal are covered by the İstanbul University-Cerrahpaşa, Faculty of Forestry. Processing and publication are free of charge with the journal. No fees are requested from the authors at any point throughout the evaluation and publication process. All manuscripts must be submitted via the online submission system, which is available at [www.forestist.org](http://www.forestist.org). The journal guidelines, technical information, and the required forms are available on the journal's web page.

Statements or opinions expressed in the manuscripts published in the journal reflect the views of the author(s) and not the opinions of the İstanbul University-Cerrahpaşa, Faculty of Forestry, editors, editorial board, and/or publisher; the editors, editorial board, and publisher disclaim any responsibility or liability for such materials.

Forestist is an open access publication and the journal's publication model is based on Budapest Open Access Initiative (BOAI) declaration. Journal's archive is available online, free of charge at [www.forestist.org](http://www.forestist.org). Forestist's content is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.



**Editor in Chief:** Murat DEMİR

**Address:** İstanbul University-Cerrahpaşa, Faculty of Forestry, Valide Sultan Cad. No:1, 34473 Bahçeköy, Sarıyer, İstanbul, Turkey

**Phone:** +90 (212) 338 24 00 / 25289

**E-mail:** [forestist@istanbul.edu.tr](mailto:forestist@istanbul.edu.tr)

**Publisher:** AVES

**Address:** Büyükdere Cad., 105/9 34394 Mecidiyeköy, Şişli, İstanbul, Turkey

**Phone:** +90 212 217 17 00

**E-mail:** [info@avesyayincilik.com](mailto:info@avesyayincilik.com)

**Web page:** [www.avesyayincilik.com](http://www.avesyayincilik.com)



1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

## INSTRUCTIONS TO AUTHORS

Forestist is an international, scientific, open access periodical published in accordance with independent, unbiased, and double-blinded peer-review principles. The journal is the official publication of İstanbul University-Cerrahpaşa, Faculty of Forestry and continues publication since 1951. Forestist is published tri-annually on January, May and September and the publication language of the journal is English.

Forestist aims to contribute to the literature by publishing manuscripts at the highest scientific level on all fields of forestry. The journal publishes original articles, reviews, and brief notes that are prepared in accordance with the ethical guidelines.

The scope of the journal includes but not limited to; forest, forestry, forestry based industries, landscape and environment.

The target audience of the journal includes specialists and professionals working and interested in all disciplines of forestry.

The editorial and publication processes of the journal are shaped in accordance with the guidelines of the Council of Science Editors (CSE), the Committee on Publication Ethics (COPE), the European Association of Science Editors (EASE), and National Information Standards Organization (NISO). The journal conforms to the Principles of Transparency and Best Practice in Scholarly Publishing (<https://doaj.org/bestpractice>).

Originality, high scientific quality, and citation potential are the most important criteria for a manuscript to be accepted for publication. Manuscripts submitted for evaluation should not have been previously presented or already published in an electronic or printed medium. The journal should be informed of manuscripts that have been submitted to another journal for evaluation and rejected for publication. The submission of previous reviewer reports will expedite the evaluation process.

Manuscripts that have been presented in a meeting should be submitted with detailed information on the organization, including the name, date, and location of the organization.

Manuscripts submitted to Forestist will go through a double-blind peer-review process. Each submission will be reviewed by at least two external, independent peer reviewers who are experts in their fields in order to ensure an unbiased evaluation process. The editorial board will invite an external and independent editor to manage the evaluation processes of manuscripts submitted by editors or by the editorial board members of the journal. The Editor in Chief is the final authority in the decision-making process for all submissions.

The authors are expected to submit researches that comply with the general ethical principles which include; scientific integrity, objectivity, collegiality, data integrity, institutional integrity and social responsibility.

### Authorship

Being an author of a scientific article mainly indicates a person who has a significant contribution to the article and shares the responsibility and accountability of that article. To be defined as an author of a scientific article, researchers should fulfill below criteria:

- Making a significant contribution to the work in all or some of the following phases: Research conception or design, acquisition of data, analysis and interpretation.
- Drafting, writing or revising the manuscript
- Agreeing on the final version of the manuscript and the journal which it will be submitted
- Taking responsibility and accountability of the content of the article

Outside the above mentioned authorship criteria, any other form of specific contribution should be stated in the Acknowledgement section.

In addition to being accountable for the parts of the work he/she has done, an author should be able to identify which co-authors are responsible for specific other parts of the work. In addition, authors should have confidence in the integrity of the contributions of their co-authors.

If an article is written by more than one person, one of the co-authors should be chosen as the corresponding author for handling all the correspondences regarding the article. Before submission, all authors should agree on the order of the authors and provide their current affiliations and contact details. Corresponding author is responsible for ensuring the correctness of these information.

Forestist requires corresponding authors to submit a signed and scanned version of the Copyright Agreement and Acknowledgement of Authorship Form (available for download through [www.forestist.org](http://www.forestist.org)) during the initial submission process in order to act appropriately on authorship rights and to prevent ghost or honorary authorship. If the editorial board suspects a case of "gift authorship," the submission will be rejected without further review. As part of the submission of the manuscript, the corresponding author should also send a short statement declaring that he/she accepts to undertake all the responsibility for authorship during the submission and review stages of the manuscript.

Forestist requires and encourages the authors and the individuals involved in the evaluation process of submitted manuscripts to disclose any existing or potential conflicts of interests, including financial, consultant, and institutional, that might lead to potential bias or a conflict of interest. Any financial grants or other support received for a submitted study from individuals or institutions should be disclosed to the Editorial Board. Cases of a potential conflict of interest of the editors, authors, or reviewers are resolved by the journal's Editorial Board within the scope of guidelines.



1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

The Editorial Board of the journal handles all appeal and complaint cases within the scope of COPE guidelines. In such cases, authors should get in direct contact with the editorial office regarding their appeals and complaints. When needed, an ombudsperson may be assigned to resolve cases that cannot be resolved internally. The Editor in Chief is the final authority in the decision-making process for all appeals and complaints.

Forestist requires each submission to be accompanied by a Copyright Agreement and Acknowledgement of Authorship Form (available for download at [www.forestist.org](http://www.forestist.org)). When using previously published content, including figures, tables, or any other material in electronic formats, authors must obtain permission from the copyright holder. Legal, financial and criminal liabilities in this regard belong to the author(s). By signing this form authors agree that the article, if accepted for publication by the Forestist, will be licensed under a Creative Commons Attribution-Non Commercial-NoDerivatives 4.0 International License (CC BY-NC-ND).

Statements or opinions expressed in the manuscripts published in Forestist reflect the views of the author(s) and not the opinions of the editors, the editorial board, or the publisher; the editors, the editorial board, and the publisher disclaim any responsibility or liability for such materials. The final responsibility in regard to the published content rests with the authors.

## MANUSCRIPT PREPARATION

Manuscripts can only be submitted through the journal's online manuscript submission and evaluation system, available at [www.forestist.org](http://www.forestist.org). Manuscripts submitted via any other medium will not be evaluated.

Manuscripts submitted to the journal will first go through a technical evaluation process where the editorial office staff will ensure that the manuscript has been prepared and submitted in accordance with the journal's guidelines. Submissions that do not conform to the journal's guidelines will be returned to

the submitting author with technical correction requests.

Authors are required to submit the following:

- Copyright Agreement and Acknowledgement of Authorship Form

during the initial submission.

These forms are available for download at [www.forestist.org](http://www.forestist.org)

### Preparation of the Manuscript

**Title page:** A separate title page should be submitted with all submissions and this page should include:

- The full title of the manuscript as well as a short title (running head) of no more than 50 characters,
- Name(s), affiliations, highest academic degree(s), and ORCID ID(s) of the author(s),
- Grant information and detailed information on the other sources of support,
- Name, address, telephone (including the mobile phone number) and fax numbers, and email address of the corresponding author,
- Acknowledgment of the individuals who contributed to the preparation of the manuscript but who do not fulfil the authorship criteria.

**Abstract:** An English abstract should be submitted with all submissions. Submitting a Turkish abstract is not compulsory for international authors. Abstract section of all types of articles should be unstructured. Please check Table 1 below for word count specifications.

The style of abstract must be concise and must not contain references. The abstract should be prepared to summarize the following parts in an unstructured way:

- Aim of study: Set the goal or directly the specific objectives and, describe the relevance of the study;
- Study area: Specify the geographic area

in which the study has been made;

- Material and methods: Describe briefly materials and methods, crops or organisms involved must be identified, as well as soil type, chemicals, or other details which can be important for the interpretation of the results;
- Main results: List and discuss relevant results (including numeric values of experimental results);
- Research highlights: One or two closing sentences with most relevant findings and implications.

**Keywords:** Each submission must be accompanied by a minimum of four to a maximum of six keywords for subject indexing. The keywords should be listed in full without abbreviations. Keywords should be written both in English at the end of the related abstract. The authors should not use the same words as the manuscript title.

### Manuscript Types

**Research Articles:** This is the most important type of article since it provides new information based on original research. The main text of original articles should be structured with Introduction, Method, Results, Discussion, and Conclusion and Recommendations subheadings. Please check Table 1 for the limitations for Research Articles.

Statistical analysis to support conclusions is usually necessary. Statistical analyses must be conducted in accordance with international statistical reporting standards. Information on statistical analyses should be provided with a separate subheading under the Materials and Methods section and the statistical software that was used during the process must be specified.

Units should be prepared in accordance with the International System of Units (SI).

**Review Articles:** Reviews prepared by authors who have extensive knowledge on a particular field and whose scientific background has been translated into a high volume of publications with a high citation potential are wel-



1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

comed. These authors may even be invited by the journal. Reviews should describe, discuss, and evaluate the current level of knowledge of a topic in the field and should guide future studies. The main text of review articles should be begun with an Introduction section and finalized with a Conclusion section. The remaining parts can be named relevantly to the essence of the research. Please check Table 1 for the limitations for Review Articles.

**Short Note:** This type of manuscript present significant findings from tangential investigations that are offshoots from larger studies or from early results that will have to be confirmed through further study. The main text should be structured with Introduction, Materials and Methods, Results and Discussion, and Conclusion subheadings. Please check Table 1 for the limitations for Short Note.

**Tables:** Tables should be included in the main document, presented after the reference list, and they should be numbered consecutively in the order they are referred to within the main text. A descriptive title must be placed above the tables. Abbreviations used in the tables should be defined below the tables by footnotes (even if they are defined within the main text). Tables should be created using the "insert table" command of the word processing software and they should be arranged clearly to provide easy reading. Data presented in the tables should not be a repetition of the data presented within the main text but should be supporting the main text.

**Figures and Figure Legends:** Figures, graphics, and photographs should be submitted as separate files (in TIFF or JPEG format) through the submission system. The files should not be embedded in a Word document or the main document. When there are figure sub-

units, the subunits should not be merged to form a single image. Each subunit should be submitted separately through the submission system. Images should not be labeled (a, b, c, etc.) to indicate figure subunits. Thick and thin arrows, arrowheads, stars, asterisks, and similar marks can be used on the images to support figure legends. Like the rest of the submission, the figures too should be blind. Any information within the images that may indicate an individual or institution should be blinded. The minimum resolution of each submitted figure should be 300 DPI. To prevent delays in the evaluation process, all submitted figures should be clear in resolution and large in size (minimum dimensions: 100 × 100 mm). Figure legends should be listed at the end of the main document.

All acronyms and abbreviations used in the manuscript should be defined at first use, both in the abstract and in the main text. The abbreviation should be provided in parentheses following the definition.

Scientific plant and animal names should be written in italics in the main text.

When a product, hardware, or software program is mentioned within the main text, product information, including the name of the product, the producer of the product, and city and the country of the company (including the state if in USA), should be provided in parentheses in the following format: "EC meter (Orion Star A212, Thermo Scientific, MA, USA)

All references, tables, and figures should be referred to within the main text, and they should be numbered consecutively in the order they are referred to within the main text.

Limitations, drawbacks, and the shortcomings

of original articles should be mentioned in the Discussion section before the conclusion paragraph.

## Title Levels

### First

*Centered, bold, capital initial letters*

The text starts with a new paragraph.

### Second

*Flush left, bold, initial letters uppercase*

The text starts with a new paragraph.

### Third

*Flush left, bold, italic, initial letters uppercase*

The text starts with a new paragraph.

### Fourth

*Indented, bold, capital initial letters, end with a point*

The text begins on the same line with the title and continues as a standard paragraph.

### Fifth

*Indented, bold, capital initial letters, end with a point*

The text begins on the same line with the title and continues as a standard paragraph.

**References:** While citing publications, preference should be given to the latest, most up-to-date publications. Authors should avoid using references that are older than ten years. The limit for the old reference usage is 15% in the journal. If an ahead-of-print publication is cited, the DOI number should be provided. Authors are responsible for the accuracy of references. Both in-text citations and the references must be prepared according to the American Psychological Association (APA) 7th edition. In the main text of the manuscript, references should be cited by author's name and the publication year in parenthesis.

Table 1. Limitations for each manuscript type

| Type of manuscript | Word limit | Abstract word limit | Reference limit | Table limit | Figure limit             |
|--------------------|------------|---------------------|-----------------|-------------|--------------------------|
| Research Article   | 8000       | 250                 | 40              | 8           | 7 or total of 15 images  |
| Review Article     | 8000       | 250                 | 60              | 8           | 10 or total of 20 images |
| Short Note         | 4000       | 200                 | 20              | 8           | 10 or total of 20 images |



1951

# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

When there are more than two authors, the first author should be listed followed by "et al." Please see below for examples:

| Author Type   | Parenthetical citation  | Narrative citation   |
|---|---|--|
| One author  | (Gonzalez, 2019)  | Gonzalez (2019)  |
| Two authors   | (Gonzalez & Jones, 2019)  | Gonzalez and Jones (2019)                                    |
| Three or more authors   | (Gonzalez et al., 2019)   | Gonzalez et al. (2019)                                       |
| Group author with abbreviation:<br>First citation<br>Subsequent citations | (American Psychological Association [APA], 2020)<br>(APA, 2020) | American Psychological Association (APA, 2020)<br>APA (2020) |
| Group author without abbreviation   | (University of California, 2020)                                | University of California (2020)                              |
| No author   | ("New drug," 1993)<br>Use an abbreviated version of the title.  |  |

## Reference List:

**Journal Article:** Heede, B.H. (1991). Response of a stream in disequilibrium to timber harvest. *Environmental Management*, 15(2), 251-255.

**Journal Article with more than one author:** Jerrentrup, A., Mueller, T., Glowalla, U., Herder, M., Henrichs, N., Neubauer, A., & Schaefer, J. R. (2018). Teaching medicine with the help of "Dr. House." *PLoS ONE*, 13(3), Article e0193972. <https://doi.org/10.1371/journal.pone.0193972>

**Turkish Article:** Sağlam, S., Asan, Ü., Lafortezza, R., Özkan, Y. U. (2021). Parçalanmanın İstanbul'daki bazı kent ormanlarının yapısına etkileri [Fragmentation effects on the structure of some urban forests in İstanbul]. *Forestist*, 71(1), 31-39.

## Books

**By a Single Author:** Kimmel, M. S. (2007). *The gendered society*. Oxford University Press.

**By Two or More Authors:** DiFonzo, N., & Bordia, P. (2007). *Rumor psychology: Social and organizational approaches*. American Psychological Association.

**By a Corporate (Group) Author:** American Sociological Association. (1975). *Approaches to the study of social structure*. Free Press.

**Edited Book:** Rhodewalt, F. (Ed.). (2008). *Personality and social behavior*. Psychology Press.

**Book Chapter with Editor(s):** McCormack, B., McCance, T., & Maben, J. (2013). Outcome evaluation in the development of person-centred practice. In B. McCormack, K. Manley, & A. Titchen (Eds.), *Practice development in nursing and healthcare* (pp. 190-211). John Wiley & Sons.

**Dissertation or Thesis:** Valentin, E. R. (2019, Summer). *Narcissism predicted by Snapchat selfie sharing, filter usage, and editing* [Master's thesis, California State University Dominguez Hills]. CSU ScholarWorks. <https://scholarworks.calstate.edu/concern/theses/3197xm925?locale=en>

**No Author: The universal declaration of human rights.** (1974). U.S. Catholic Conference, Division of Latin America.

**Web sites:** Sparks, Dana. (2018, September 12). Mayo mindfulness: **Practicing mindfulness exercises**. Mayo Clinic.

**In the seventh edition, up to 20 authors should now be included in a reference list entry. For sources with more than 20 authors, after the 19th listed author, any additional authors' names are replaced with an ellipsis (...) followed by the final listed author's name:** Author, A. A., Author, B. B., Author, C. C., Author, D. D., Author, E. E., Author, F. F., Author, G. G., Author, H. H., Author, I. I., Author, J. J., Author, K. K., Author, L. L., Au-

thor, M. M., Author, N. N., Author, O. O., Author, P. P., Author, Q. Q., Author, R. R., Author, S. S., . . . Author, Z. Z.

## REVISIONS

When submitting a revised version of a paper, the author must submit a detailed "Response to the reviewers" that states point by point how each issue raised by the reviewers has been covered and where it can be found (each reviewer's comment, followed by the author's reply and line numbers where the changes have been made) as well as an annotated copy of the main document. Revised manuscripts must be submitted within 30 days from the date of the decision letter. If the revised version of the manuscript is not submitted within the allocated time, the revision option may be cancelled. If the submitting author(s) believe that additional time is required, they should request this extension before the initial 30-day period is over.

Accepted manuscripts are copy-edited for grammar, punctuation, and format by professional language editors. Once the publication process of a manuscript is completed, it is published online on the journal's webpage as first online publication before it is included in its scheduled issue. A PDF proof of the accepted manuscript is sent to the corresponding author and their publication approval is requested within 2 days of their receipt of the proof.

**Editor in Chief:** Murat DEMİR

**Address:** İstanbul University-Cerrahpaşa, Faculty of Forestry, Valide Sultan Cad. No:1, 34473 Bahçeköy, Sarıyer, İstanbul, Turkey

**Phone:** +90 (212) 338 24 00 / 25289

**E-mail:** forestist@istanbul.edu.tr

**Publisher:** AVES

**Address:** Büyükdere Cad. 105/9 34394 Mecidiyeköy, Şişli, İstanbul, Turkey

**Phone:** +90 212 217 17 00

**E-mail:** info@avesyayincilik.com  
[www.avesyayincilik.com](http://www.avesyayincilik.com)



# FORESTIST

Official Journal of İstanbul University-Cerrahpaşa, Faculty of Forestry

Formerly Journal of the Faculty of Forestry İstanbul University

## CONTENTS

1 Acknowledgement of Reviewers

### ORIGINAL ARTICLES

Dieback of *Gmelina arborea* Trees and Structural Alterations Induced in the Wood Cell Walls by *Alternaria alternata*

2 Sivan Pramod, Suresh Mesara, Karumanchi S. Rao, Kishore S. Rajput

Spatial Modeling of Fire Occurrence Probability in a Protected Area in Western Mexico

Francisco Javier Sahagún-Sánchez, Abril Joaquina Méndez-García, Francisco Martín Huerta-Martínez, Marco Antonio Espinoza-Guzmán

10

Energy Efficiency of Timber Transport by Trucks on Hilly and Mountainous Forest Roads

Zdravko Pandur, Hrvoje Nevečerel, Marijan Šušnjar, Marin Bačić, Kruno Lepoglavec

20

Evaluation of Forest Road Damages Using Return Periods Caused by Heavy Rains in Kanuma and Nikko Cities of Tochigi Prefecture, Japan

Kazuhiro Aruga, Taisei Sekiguchi, Tadamichi Sato, Yasuhiro Shuin

29

The Variability of Turkish Hazel (*Corylus colurna* L.) Populations in Serbia According to Morphological Nut Traits

Vladan Popović, Aleksandar Lučić, Sanja Jovanović, Katarina Mladenović, Ljubinko Rakonjac

41

Growth and Productivity Modeling of Seven *Eucalyptus* Species in Souiniet's Arboretum in the Northwestern of Tunisia

Sameh Mhamdi, Mohamed Tahar Elaieb, Naoufel Souayah, Mariem Khouja, Mohamed Larbi Khouja, Ali Aloui, Kévin Candelier

48

Generating Avalanche Hazard Indication Map and Determining Snow Avalanche Protection Forests in Çaykara-Trabzon (NE-Turkey)

Abdurrahim Aydın, Remzi Eker, Yunus Barış Odabaşı

62

Effect of Land Use on Some Physical and Chemical Water Quality Parameters in the Sub-watersheds of Big Melen Stream

Tarık Çitgez, Refik Karagül, Mehmet Özcan, Ali Kemal Özbayram

73

Climate-Growth Relationships in Managed and Unmanaged Kazdağı Fir Forests

Ferhat Kara

81

Landscape Characteristics and Main Plant Species of Floristic Composition of Doğanbey Old Village in Aydın

Beyza Şat

88

An Analysis on Strategic Environmental Assessment Legislation (EU Legislation) Considering Turkey

Gül Başar, Nimet Velioğlu

97