IAWA Newsletter - November 2021



The 3rd Q-NET workshop "Tropical QWA", 26 November, 2:00-5:30 pm CET

The 3rd Q-NET workshop "Tropical QWA" will be held online on 26 November, 2:00-5:30 pm CET. After a short update of the Q-NET activities, the workshop will be focused on tropical woods with topics including identification, evolution, structure-function relationships, methodological issues, relevance, and opportunities in applying quantitative wood anatomy in tropical wood research. We look forward to learning from our speakers Peter Gasson, Marcelo Pace, Rosana López, Peter Hiets, and Achim Bräuning, as well as to having a fruitful and exciting general discussion. More info for participation: https://qwa-net.com/.

Veronica De Micco, Italy Georg von Arx, Switzerland The Q-NET Coordination Team

IAWA Fossil Wood Symposium in Prague, Czech Republic, Postponed to May 25-31, 2024

The IAWA Fossil Wood Symposium, dedicated to the memories of Prof. Dr. Herbert Süß (1920-2017) and Prof. Dr. Alfred Selmeier (1923-2018), will be postponed to May 25-31, 2024, organized during the XIth IOPC (International Organization of Palaeobotany Conference) held conjunctly with the XVth International Palynological Congress, due to reviewing the various levels of Coronavirus infections and processes implemented by various European countries. The IAWA Symposium will be organizing an IAWA Social Hour and supper in the famous Carthusian Monastery (1628) in Melnik, just outside Prague, where IAWA has been previously hosted at a European Palaeo-botanical Conference. Detailed information is available by clicking https://www.prague2020.cz/news.php.

Jakub Sakala, Czech Republic

Updated information about the 2024 International Botanical Congress (IBC) in Madrid

Earlier this year it was announced that due to the pandemic the next International Botanical Congress (IBC) will be delayed one year and held in Madrid, Spain in July 2024. The dates for the rescheduled Botanical Congress are as follows:

- Nomenclature Section, July 15-19, 2024
- Congress, July 21-27, 2024

The officers of the IBC Organizing Committee are Gonzalo Nieto Feliner (President), Juan Carlos Moreno (Vice-President), and Marcial Escudero (General Secretary). The organizing team has been working hard to form the necessary planning committees, hire the conference venue and conference management team, and prepare a website to provide details on the upcoming Congress. The Congress website is now live and additional details about the Congress will be added as they become available (https://ibcmadrid2024.com/). Information about the members of the Organizing Committee, Scientific Program Committee, and Advisory Committee can be found on the website. The organizers look forward to welcoming everyone to Madrid in July 2024.

Patrick Herendeen, Chair Jiří Kvaček, Secretary

International Association of Botanical and Mycological Societies

Meeting reports

The 8th IAWA-China Group Annual Meeting and 2021 International Youth Forum for Wood Anatomy, Online, Chengdu, China, November 13-14, 2021

The 8th IAWA-China Group Annual Meeting and 2021 International Youth Forum for Wood Anatomy was held online on November 13-14, 2021, organized by Sichuan Agricultural University and

Inspection and Test Center (Chengdu) of National Furniture Product Quality, co-sponsored by IAWA, IUFRO, and IAWS together. The theme of the conference was "Promote Ecological Wood Anatomy for Sustainable Wood Utilization". The local organizers of China, the former Editor-in-Chief of IAWA Journal Pieter Baas, and IAWA Secretary Yafang Yin gave opening remarks. The President of IAWS Yoon-soo Kim and the Coordinator of IUFRO Division 5 Pekka Saranpää were invited to participate in the conference.

The China Group Annual Meeting was held in the morning on November 13th and 14th. More than 350 representatives from over 50 related universities, research institutes, forest products inspection centers, and wood companies attended this IAWA-China Group Annual Meeting. There were two keynote lectures and 39 oral presentations presenting their research progress on xylem formation, dendrochronology, wood identification, wood properties, wood and bamboo utilization, and archaeological wood. After the voting of the local committee members, the Excellent Presentation Awards (EPA) of the IAWA-China Group were awarded to eight qualified graduate students. The first prize winners are Liu Jiabao from Anhui Normal University and Liu Xing from Nanjing Forestry University. The second prize winners are Yong Lu from Nanjing Forestry University and Xu Haocheng from the International Center of Bamboo and Rattan. The third prize winners are Chen Yan from Sichuan Agricultural University, Li Wen from Fujian Agricultural and Forestry University, Huang Yaqian from Nanjing Forestry University, and Jia Huiwen from Southwest Forestry University.



The 8th IAWA-China Group Annual Meeting, Chengdu, China, 2021

The Youth Forum was held in the afternoon on November 13th. This is the first time for IAWA to organize an international youth forum for wood anatomy. Over 160 representatives took part in this forum. There were one keynote lecture and 15 oral presentations, from 10 countries including Brazil,

Canada, China, Germany, Hungary, Indonesia, Japan, Poland, Serbia, South Africa, etc., presenting the research referring to ecological wood anatomy, wood identification, and the relationship between wood anatomy and properties. The three best reports were selected by the International Scientific Committee of the forum. The first prize of the conference report was awarded to Yana Campos Rizzieri, Brazil (Ontogeny of divided vascular cylinders in *Serjania*: the rise of a novel vascular architecture in Sapindaceae), the second prize went to Qi Chen, China (Hygroscopic swelling of Moso bamboo cells), and the third prize was won by Volker Haag, Germany (Anatomical identification of charcoal and briquettes-developments in the international charcoal trade and the increasing use of substitutes from ntfps).



The 2021 International Youth Forum for Wood Anatomy, Chengdu, China, 2021

The abstracts (both in English and Chinese) of the 8th IAWA-China Group Annual Meeting and 2021 International Youth Forum are available online under the download menu of the IAWA website (http://www.iawa-website.org/en/Downloads/Publications/index.shtml).

The 9th IAWA-China Group Annual Meeting will be held in 2022, at South China Agricultural University, Guangzhou, China.

Qi Jinqiu, Liu Jie, Jiao Lichao, Li Shan, Zhai Shengcheng, China

Miscellaneous News

IUFRO WORLD DAY - Digital Forest Science Forum 2021: Wood Identification

IUFRO WORLD DAY - Digital Forest Science Forum 2021 was held online on 28-29 September. IUFRO Research Group 5.16.00-Wood Identification joined in the forum and organized one session entitled "Advancing Wood Identification to Promote a Sustainable Supply Chain of Forest Products", presenting the state-of-the-art research advances or practices related to wood identification including wood collections, database establishment, wood anatomy, DNA analysis, chemical fingerprints and other innovative methods via recorded video.

The video of the presentation is available at: https://www.youtube.com/watch?v=MWRtvj7OKkY.

Lichao Jiao, China

Personnel of Ghana's Forestry Commission Trained in Wood Identification

During September and October 2021, a total of 94 personnel of the Grading and Inspection Department (GID) of the Timber Industry Development Division (TIDD) of Forestry Commission (FC) were trained successfully in wood identification in Ghana. The personnel were trained on the use of the field identification manual of Ghanaian timbers published in 2020 by Rafael Arevalo, Emmanuel Ebanyenle, Alberta Asi Ebeheakey, and Abban Kofi Bonsu, Ophilious Lambog, Richard Soares, and Alex C. Wiedenhoeft (available: https://www.fs.usda.gov/treesearch/pubs/60264). The training was

organized in four training sessions in four FC-TIDD catchment areas of Ghana: Sunyani, Kumasi, Takoradi, and Accra. Each training session lasted for 4 working days. In addition to the field manual, each trainee was equipped with a utility knife, hand lens, macro/phone lens, and a pack of blades for use in the field screening of 100 commercial timbers of Ghana, using macroscopic and physical identification features. It is envisaged that the wood identification training will aid the grading and inspection personnel of the Forestry Commission of Ghana to combat timber trafficking in a more scientific manner. The training is part of an ongoing international cooperative research among US Forest Service International Programs (USFS/IP), USDA, CSIR – Forestry Research Institute of Ghana (CSIR – FORIG), TIDD - Forestry Commission of Ghana, and UNIDO.



A group photo of Resource Persons (Emmanuel Ebanyenle, Ophilious Lambog, Abban Kofi Bonsu, and Alberta Asi Ebeheakey), Grading and Inspection Personnel of FC –TIDD, and the USFS/IP Representative (Destina Samani). Photo by the Public Relation Department of Forestry Commission, Accra, Ghana.

Emmanuel Ebanyenle, Ghana

Development of WIDER (Wood Identifier) and ECVT 4D Dynamic

As the output of USAID PEER Cycle 8: Development of Wood Identification System and Timber Tracking Database to Support Legal Trade, two prototypes of wood identifier (WIDER) and tree monitoring system (ECVT 4D Dynamic) have been patented.

WIDER is a capacitance wood identification system. It consists of capacitance spectroscopy measurement and Artificial Intelligence (AI) machine learning-based identification software. Wider is portable and battery-powered and can measure wooden objects in just milliseconds with accuracy > 95%.

The technology for monitoring tree physiological processes (ECVT 4D Dynamic) based on the nature of electrical permittivity allows the tree's response to the environment to be known in real-time. The processes that occur can be seen entirely, including the part of the tree that is most active and always responds, thus it can be used for a study to find out where the 'brain of the tree" is. The physiological processes of trees are strongly influenced by environmental conditions. By understanding the physiological processes that occur, the appropriate silvicultural treatment can be determined, thus the stand productivity can be increased, and information on the tree resilience to disturbances can be useful for individual or population selection in tree breeding programs and climate change adaptation.





WIDER



ECVT 4D Dynamic

Ratih Damayanti, Indonesia

Reconstruction of the PayPal Service of the IAWA Website

The old IAWA website for transferring money via PayPal (credit card) will soon be restructured. The website address will remain the same but will have a completely different look.

Ingrid de Kort and Cees Lut

Dr. Jifke Koek-Noorman passed away in August, 2021

Dr. Jifke Koek-Noorman, a long-standing member of IAWA, passed away at the age of 79 on 24 August 2021. She published extensively on the comparative wood anatomy of Rubiaceae and other woody plant families in the wood research group at Utrecht University.

Prof. Dieter Eckstein passed away this year

Prof. Dieter Eckstein recently passed away at the age of 82. He was an active IAWA Member and distinguished scholar and teacher, and leading pioneer in the fields of dendrochronology and wood anatomy of tree rings. For the IAWA Journal he edited three special issues on growth periodicity in tropical trees. Our sincere condolences go to the Hamburg group and his family.

Prof. W.L. (Bill) Stern passed away this year

Prof. W.L. (Bill) Stern passed away on 1 November at the age of 95. He made many significant contributions to wood anatomy. In 1982 he chronicled the first 50 years of IAWA's history in great detail in the New Perspectives in Wood Anatomy book and played a key role in safeguarding Samuel Record's heritage. Our sincere condolences go to his family.

Call for Newsletter Items

The IAWA Newsletter will keep the IAWA community actively informed and stimulate members to visit the IAWA website for the latest and detailed news. Please send any news items you wish to share with the whole IAWA community to the newsletter editors Dr. Shan Li (<u>lishan.ecology@hotmail.com</u>) or Dr. Lichao Jiao (<u>jiaolc@caf.ac.cn</u>) of the IAWA Office, Beijing.

Call for Manuscripts of IAWA Journal 2022

The editors of the IAWA Journal would like to encourage new manuscript submissions for volume 43, 2022. A reminder that subscribers/IAWA members can register for 'table of contents' alerts on the IAWA Journal homepage.

Lloyd Donaldson, New Zealand Marcelo Pace, Mexico

Contents of IAWA Journal 42(4) 2021

Letter to the Editor

Not all lipids in xylem conduits are artefacts. A reply to Yamagishi et al.

Authors: Steven Jansen and H. Jochen Schenk

Pages: 384-385

Online Publication Date: 19 Oct 2021

Response

A response to the commentary by Jansen and Schenk

Authors: Shohei Yamagishi and Yuzou Sano

Pages: 386

Online Publication Date: 16 Nov 2021

Regular articles

Mogami Tokunai's wood collection from Hokkaido, Japan: an early record of Ainu wood culture

Authors: Pieter Baas, Tomoyuki Fujii, Nobushige Kato, Mechtild Mertz, Shuichi Noshiro, and Gerard

Thijsse

Pages: 349-364

Online Publication Date: 09 Apr 2021

Artifactual lipid coatings on intervessel pit membranes in dried xylem tissues of some angiosperms Authors: Shohei Yamagishi, Kengo Shigetomi, Syunya Fujiyasu, Dan Aoki, Tetsuro Uno, Kazuhiko

Fukushima, and Yuzou Sano

Pages: 365-383

Online Publication Date: 07 May 2021

Study on chemical pattern recognition of Phoebe bournei wood based on gas chromatography/mass spectroscopy

Authors: Tianshi Wang, Xiaoling Liao, Liping Ning, Xueju Xu, Mei Li, and Yingjian Li

Pages: 387-396

Online Publication Date: 26 Jan 2021

Pterocarpus wood identification by independent and complementary analysis of DART-TOFMS, microscopic anatomy, and fluorescence spectrometry

Authors: Erin R. Price, Isabella A. Miles-Bunch, Peter E. Gasson, and Cady A. Lancaster

Pages: 397-418

Online Publication Date: 01 Jun 2021

Regeneration of vascular tissue through redifferentiation of interxylary phloem after complete girdling in Aquilaria sinensis

Authors: Bei Luo, Arata Yoshinaga, Tatsuya Awano, Keiji Takabe, and Takao Itoh

Pages: 419-434

Online Publication Date: 15 Sep 2021

Fossil wood of Syzygium from the Miocene of Guangxi, South China: the earliest fossil evidence of the genus in eastern Asia

Authors: Yifan Li, Luliang Huang, Cheng Quan, Jianhua Jin, and Alexei A. Oskolski

Pages: 435-441

Online Publication Date: 17 Sep 2021

Fossil woods from the Eocene of Corcovado, Argentinean Patagonia: geological setting and conifer diversity

Authors: Roberto R. Pujana, Inés Aramendía, Juan L. García Massini, and Sol Noetinger

Pages: 442-456

Online Publication Date: 18 May 2021

Variations in bacterial decay between cell types and between cell wall regions in waterlogged archaeological wood excavated in the intertidal zone

Authors: Mi Young Cha, Kwang Ho Lee, Jong Sik Kim, and Yoon Soo Kim

Pages: 457-474

Online Publication Date: 17 Sep 2021

Anatomical properties of Hibiscus macrophyllus and its mature wood development Authors: Efrida Basri, Ratih Damayanti, Atmawi Darwis, Saefudin, and Imam Wahyudi

Pages: 475–485

Online Publication Date: 24 Sep 2021

Spatial and temporal patterns of wound periderm development in Cryptomeria japonica bark

Authors: Etsushi lizuka, Megumi Ohse, Izumi Arakawa, Peter Kitin, Ryo Funada, and Satoshi Nakaba

Pages: 486–496

Online Publication Date: 23 Sep 2021

Wood mechanical properties and their correlation with microstructure in Chinese fir clones

Authors: Yurong Wang, Ru Jia, Haiyan Sun, Yamei Liu, Jianxiong Lyu, Rongjun Zhao, and Shengquan

Liu

Pages: 497-506

Online Publication Date: 03 Feb 2021

Book review

Author: Pieter Baas Pages: 507–508

Online Publication Date: 01 Oct 2021