



What happened in 2024 and will happen in 2025

Welcome to the first Division 7 newsletter of the new IUFRO board term. The intention of this newsletter is to provide updates on the activities that are occurring within both Research Group 7.02 – Pathology and Research Group 7.03 – Entomology and to draw attention to activities that are occurring more broadly across IUFRO. Within this newsletter you will find highlights from the World Congress which include descriptions of the Division 7 awards and their recipients, highlights from other meetings and notices about upcoming events

With the start of the new board term, IUFRO has launched a new leadership model for the divisions. During the previous term, the board voted to change the leadership model for divisions to a co-coordinator model for this board term. With this change, the divisions are now led by two individuals, at least one of which is female. This has improved the gender balance on the IUFRO board and it also allows for sharing of responsibilities.

Co-coordinators Tod Ramsfield and Maartje Klapwijk





The coordinators of Division 7 are Maartje Klapwijk and Tod Ramsfield. Maartje is a forest entomologist based at the Swedish University of Agricultural Sciences in Uppsala, Sweden, and Tod is a forest pathologist with the Canadian Forest Service, based in Edmonton, AB, Canada, The deputies for Division 7 are Julio Javier Diez Caserio, Mariella Marzano, and Beccy Ganley. Julio is a forest pathologist at the Universidad de Valladolid, Spain, Mariella is a social science researcher based at Forest Research, UK, and Beccy is a forest pathologist based at Plant and Food Research, NZ. Our communication activities are coordinated by Joséphine Queffelec, deputy of Research Group 7.03. As a volunteer organization, IUFRO relies heavily on the participation of scientists who contribute their time and energy to coordinating various activities. Within Division 7, we are very thankful for all of the individuals that have taken on leadership roles. The full list of current Research Group and Working Party coordinators and deputies are listed at the end of this newsletter. All forest scientists are welcome to participate in IUFRO activities and we are looking forward to a productive board term.

IUFRO World Congress – Highlights from Division 7

The 26th IUFRO World Congress took place in Stockholm, Sweden, from 23 – 29 June 2024. The congress provided an opportunity for 4,271 participants from 102 countries to interact and share knowledge on all aspects of forest science. Division 7 was well represented in the programme, with a total of 15 sessions that were organised by members of the division. Sessions co-organized with other divisions, such as "Forest genetics tools to improve forest resilience to climate change and forest health" were broadly focussed, while other sessions were more tightly focussed, such as "Needle diseases of conifers: a globally rising threat to natural and planted forests". There was also an excellent forest pathology field tour organized by our colleagues at SLU. The complete book of abstracts has been published on the IUFRO congress website and can be downloaded here. During the World Congress, IUFRO takes the opportunity to recognize members of the scientific community. The Scientific Achievement Award recognizes "distinquished individual scientific achievements within the fields of research covered by the Union". At the congress, Eckehard Brockerhoff and Brenda Wingfield were recognized with this award. Biographies of all awardees have been posted here.



Tod presenting Richard Sniezko

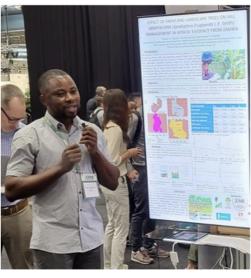
with the Forest Health

Achievement Award.

Photo: Mee-Sook Kim



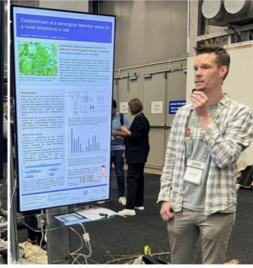




Best Poster recipient Clement Naabeh. Photo: Tod Ramsfield



Best Poster Award recipient Ginna Marcela Grandos Benavides. Photo: Irene Barnes.



Best Poster Award recipient Marius Rehanek. Photo: Carmen Büttner.

IUFRO also recognizes outstanding doctoral research through the Outstanding Doctoral Research Award. During the congress Joséphine Queffelec was the Division 7 recipient of this award, which recognizes "path-breaking doctoral dissertations completed in the period 2018 – 2023". Biographies of all awardees have been posted here

Division 7 also recognises researchers for their contributions to forest health science. The Division 7 Forest Health Achievement Award, which is awarded to a scientist in recognition for their work in IUFRO Division 7, was awarded to Richard Sniezko, forest geneticist with the USDA Forest Service. Dr. Sniezko's research is focussed on breeding of resistance in 5-needle pines to white pine blister rust. He is highly collaborative and has worked hard to provide opportunities for collaboration with IUFRO Division 2 – Physiology and Genetics. The George Varley award for excellence in

▲The awardees from Division 7

forest entomology is presented to a senior scientist in recognition for their contribution to the science of forest insect research. The award was presented to Barbara Bentz. Dr. Bentz is a forest entomologist with the USDA Forest Service and has conducted pioneering research on bark beetle systems. The Hartig - Patterson award for excellence in forest pathology is presented to a senior scientist in recognition for their contribution to the science of forest pathology research. The award was presented to Jan Stenlid of the Swedish University of Agricultural Sciences. Prof. Stenlid has studied multiple pathosystems including Heterobasidion root disease and ash dieback affecting Nordic ecosystems. During the World Congress, we recognized three individuals from Division 7 with Best Poster Awards. The three that were recognized with this award were: Clement Naabeh, Ghana, "Relating farm and landscape tree structural properties to fall armyworm (Spodoptera frugiperda J.E. Smith) management in Africa: Evidence from Zambia", Ginna Marcela Grandos Benavides, Colombia, "Susceptibility of South African pine material to infection by Dothistroma septosporum in Columbia", and Marius Rehanek, Germany, "Establishment of serological detection methods for novel emaraviruses in oak and ash trees".

Meeting of WP7.03.16 "Behaviour and Chemical Ecology of Forest Insects" and the International Society for Chemical Ecology.

During the annual meeting of the International Society of Chemical Ecology, 14 - 18 July 2024, in Prague, Czechia, Working Party 7.03.16 organized a special session "Chemical Ecology of Forest Insects" in conjunction with the Task Force "Precision Pest Management in Forest Ecosystems". Presentations in the session were focussed on bark beetle management, plant responses to insects, and the development of new chemical attractants. Both oral and poster presentations were included. The symposium highlighted the need for interdisciplinary approaches that include chemical ecology, forest entomology, and molecular biology to develop sustainable pest management strategies. The meeting was also an excellent example of the synergies that can be realized when IUFRO units collaborate with closely aligned international societies.

Second Annual IUFRO Division 7 Women in Forest Science webinar

Division 7 celebrated the International Day of Women and Girls in Science with a global webinar event on the 11th and 12th of February 2025. Nineteen female scientists in the field of forest science presented their work over four webinar sessions. The event was attended by over 200 participants representing 42 countries. Topics covered by the international panel included "Bark beetle attack on Norway Spruce trees and the incidence of wood inhabiting mycobiota", "Effects of climate change on tree health in Kenya", and



Learning about *Cronartium pini* on the forest pathology field tour. Photo: Tod Ramsfield

"Division 7 was well represented in the programme, with a total of 15 sessions that were organised by members of the division"

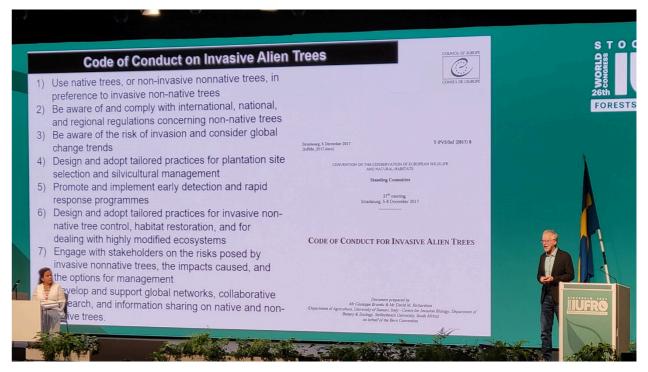
"Indigenous Cultural Fire, an Ancestral Environmental Solution". The full program is available here. The recording of the webinar sessions will be available here from the 21st of February 2025. We acknowledge and thank Joséphine Queffelec and the coordinating team for organizing this webinar series.

WP 7.02.11 "Parasitic plant-microbe-host interaction and parasitic plant ecology, evolution and climate change". Co-organized sessions with the International Parasitic Plant Society. Part of the World Congress on Parasitic Plants. 3 – 7 June 2024. Nara, Japan.

The International Parasitic Plant Society (IPPS), of which many of our IUFRO Working Party associates are also members, organizes international meetings every 2 years. For the 2024 edition, we decided to join forces to co-organize two special sessions. The first session, "Parasitic Plant-Microbe-Host Interaction" was moderated by Airong Li (Kunming Institute of Botany and IPPS Vice President) and Luiza Teixeira-Costa (Vriie Universiteit Brussel and UFRO Coordinator - 7.02.11). The session began with a keynote presentation by Jiangiang Wu (Kunming Institute of Botany) on systemic signalling between Cuscuta, its host plants and rhizosphere microbes. Other topics of this session included: control of parasitic plants such as Striga, which threaten food sovereignty in Ethiopia; ways in which root parasites affect nutrient distribution using common mycorrhizal networks; and evidence of how parasitic plants boost insectivore prey availability in Australian deserts. The second session, "Ecology, Evolution and Climate Change" included was chaired by Susan Wicke (Humboldt University of Berlin) and Francisco Fonturbel (Pontificia Universidad Católica de Valparaíso and UFRO Deputy Coordinator - 7.02.11). The first keynote talk was presented online by Charles Davis



▲Richard Hamelin presenting in the session "Biology, ecology, and management of pest and pathogen invasions in forest: a global perspective." Photo: Tod Ramsfield



▲ Keynote presentation by Sandy Liebhold "Ecological and socioeconomic drivers of the biogeographic patterns of global insect invasions". Photo: Tod Ramsfield.

(Harvard University), who discussed recent advances on the cryptic biology of Rafflesia. The second keynote talk was presented by Luiza Teixeira-Costa, who discussed effects of global change on the ecology, physiology, and distribution of parasitic plants. Other topics of this session included: the role of plastids in parasitic plants biology; how parasitic plant interactions structure the ecology of high-mountain forests; parasitic plant communication mediated by volatile organic compounds; mistletoe host-specificity; and environmental influences on host-parasite relationships.

Other recent meetings:

WPs 7.03.06, 7.03.12, 7.03.13. "Theory and practice to address defoliating insects, invasive pests, and biological control". 21 – 23 August 2024. Tokyo, Japan.

WP 7.02.09. "11th meeting of IUFRO Working Party 7.02.09: Phytophthora in Forests and Natural Ecosystems". 8 – 13 September 2024. Paihia, New Zealand.

Division 7 video:

In 2024, a series of short videos were put together for IUFRO that showcase the research conducted within each Division. The Division 7 video captures various aspects of forest entomology and pathology research and we thank all of the people that contributed pictures from their research. The video for Division 7 can be found here.

Upcoming meetings:

"Tree health – from cities to forests" will take place from 19 – 23 May 2025 at WSL Birmensdorf, Englersaal, Switzerland. The meeting is being organised by four Division 7 working parties: 7.02.02 "Foliage, shoot, and stem diseases",

7.02.05 "Rusts of forest trees", 7.03.35 "Ecology and management of bark and wood boring insects", and 7.03.17 "Tree health in urban forests". The meeting will be limited to 100 participants and registration will be handled on a "first come, first served" basis. Registration and further information for the meeting is available here.

"Integrating forest biosecurity, biodiversity, and technology in a changing climate: A holistic approach to sustainable forest management" 9 – 13 August 2027, Edmonton, AB, Canada. The meeting is open to all of IUFRO units, including all of Division 7, that have activities that intersect with forest health.

