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Titolo	Forest entomology and pathology . Volume 1 Entomology // edited by Jeremy D. Allison, Timothy D. Paine, Bernard Slippers, Michael J. Wingfield
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ISBN	3-031-11553-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (xii, 810 pages) : illustrations (some color)
Disciplina	590
Soggetti	Forest ecology Forest insects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Section I: Introduction to Forest Entomology -- 1. Introduction to and the Importance of Insects -- 2. Form and Function -- 3. Forest Arthropod Biodiversity -- 4. Insect Ecology -- 5. Forest Insect Population Dynamics -- 6. Forest Insect -Natural Enemy Interactions -- 7. Forest Insect-Plant Interactions -- 8. Insects and Forest Succession. Section II: Categories of Insects that Damage Trees -- 9. Foliage Feeders -- 10. Bark Beetles -- 11. Ambrosia Beetles -- 12. Woodborers in Forest Stands -- 13. Sap-sucking Forest Pests -- 14. Gall Formers -- 15. Tip, Shoot, Root and Regeneration Pests -- 16. Insects of Reproductive Structures -- Section III: Management of Forest Insect Pests -- 17. IPM: the Forest Context -- 18. Spatial Dynamics of Forest Insects -- 19. Monitoring and Surveillance of Forest Insects -- 20. Silviculture -- Section IV: Future Prospects -- 21. Forest Health in the Anthropocene -- 22. Climate Change and Forest Insect Pests -- 23. Forest Insect Invasions and their Management.
Sommario/riassunto	This open access book will provide an introduction to forest entomology, the principles and techniques of forest insect pest management, the different forest insect guilds/feeding groups, and relevant forest insect pest management case studies. In addition to covering 30% of the earth, forest ecosystems provide numerous timber and non-timber products that affect our daily lives and recreational

opportunities, habitat for diverse animal communities, watershed protection, play critical roles in the water cycle, and mitigate soil erosion and global warming. In addition to being the most abundant organisms in forest ecosystems, insects perform numerous functions in forests, many of which are beneficial and critical to forest health. Conversely, some insects damage and/or kill trees and reduce the capacity of forests to provide desired ecosystem services. The target audience of this book is upper-level undergraduate and graduate students and professionals interested in forest health and entomology.

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