

BOOK REVIEW

COMPRESSION WOOD IN GYMNOSPERMS

by T. E. Timell

Springer-Verlag, Berlin-Heidelberg-New York-Tokyo. 1986. 2150 pages (in three volumes). ISBN 3-540-15715-8. DM998.

Wood scientists have been awaiting publication of this work which has been many years in preparation. They will not be disappointed. The full text comes in three volumes (2150 pages), tastefully bound in high quality paper and liberally illustrated with photographs and diagrams (932) and tables from referenced texts (197). The author's stated objective was "to bring together in one single work everything that is currently known about compression wood". To this end, over 8000 sources of information have been referenced and organised into 21 chapters.

The author must have agonised over the structure of the text, and a glance at the chapter headings reveals some apparent inconsistencies. For example, Chapter 9 covers Formation of Compression Wood; Chapter 11, Fundamental Factors Causing Formation of Compression Wood; and Chapter 20, Compression Wood Induced in Firs by the Balsam Woolly Aphid. Similarly, reports of the effects of growth rate on compression wood formation occur at several points in the text. The important point, however, is that this is written as a reference text, and as such each chapter is self-contained.

Most readers will find some parts of the book relevant to their area of interest – for example, Chapter 15 on Ecology of Compression Wood Formation is over 300 pages, including 50 pages of references. Another specialist section is Chapter 19 – Compression Wood in Pulp and Paper Manufacture. Throughout there are references to work done in New Zealand on radiata pine.

If one were to criticise this mammoth effort it would be for the tendency to a "shotgun" approach to the published literature rather than selection of the key papers. The emphasis is on reporting rather than analysing. Nevertheless, students will find references invaluable for pursuing project areas.

On reading this text it becomes apparent that, despite exhaustive research on compression wood for over 100 years, there are still large gaps in our knowledge regarding its formation.

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