**IAWA Journal - Volume 17(1)**

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Ken Shimaji** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 3-4 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000617](http://dx.doi.org/10.1163/22941932-90000617) |

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| **Author(s):** | Monique T. M. Bosman |
| **Title:** | **Longitudinal Variation in Selected Wood Properties of Naturally and Plantation Grown Light Red Meranti (Shorea Leprosula and S. Parvifolia, Dipterocarpaceae)** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 5-14 |
| **Keywords:** | Shorea leprosula; Shorea parvifolia; fibre wall percentage; tissue proportions; Light Red Meranti; wood quality; longitudinal variation; plantations; specific gravity; tropical hardwoods |
| **Abstract:** | Longitudinal variation in fibre wall percentage, area percentage of vesse ls and resin canals and specific gravity was studied at three to five height levels in three naturally and five plantation grown trees of Light Red Meranti (Shorea leprosula and S. parvifolia). |
| **DOI:** | [10.1163/22941932-90000618](http://dx.doi.org/10.1163/22941932-90000618) |

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| **Author(s):** | Hsiu Hwa Wang; Robert L. Youngs |
| **Title:** | **Drying Stress and Check Development in the Wood of two Oaks** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 15-30 |
| **Keywords:** | cell deformation; Oaks; microscopy; drying stresses; wood ultrastructure |
| **Abstract:** | This study was designed to relate the checking behaviour of drying wood as observed under light and electron microscopes to moisture gradient, stress development, and mechanical properties of drying wood during early stages of drying . Woods used were northern red oak (Quercus rubra) and narrow-leaved oak (Cyclobalanopsis longinux).Wood was dried from the green condition at 40, 60, and 80°C as wafers. Wafers were sealed to retard drying from the transverse surfaces. Moisture gradient was measured during drying on thin slices removed from the tangential faces. Drying stresses were estimated for the same times and drying conditions by finite element modeling using the ABAQUS program modified to take into account time-related deformation. Stiffness and strength in tension perpendicular to the grain in the tangential direction were determined at 20, 40, 60, and 80°C for specimens in the green conditions and at 15% moisture content. |
| **DOI:** | [10.1163/22941932-90000619](http://dx.doi.org/10.1163/22941932-90000619) |

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| **Author(s):** | Simcha Lev-Yadun |
| **Title:** | **Circular Vessels in the Secondary Xylem of Arabidopsis Thaliana (Brassicaceae)** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 31-35 |
| **Keywords:** | Arabidopsis thaliana; circular vessels; secondary xylem; differentiation |
| **Abstract:** | Circular vessels differentiate in the secondary xylem of the short stem of Arabidopsis thaliana at the rosette level, where many inflorescence s grow following the repeated cutting of developing inflorescences over several weeks. The circular vessels differentiate adjacent to developing buds, but are not found in branching regions of the inflore scence s. |
| **DOI:** | [10.1163/22941932-90000620](http://dx.doi.org/10.1163/22941932-90000620) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Review** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 36-36 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000621](http://dx.doi.org/10.1163/22941932-90000621) |

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| **Author(s):** | Young Geun Eom; Youn Jib Chung |
| **Title:** | **Perforated Ray Cells in Korean Caprifoliaceae** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 37-43 |
| **Keywords:** | Weigela; Sambucus; Perforated ray cells; Viburnum; Lonicera; Caprifoliaceae |
| **Abstract:** | Perforated ray cells are recorded for the first time in species of Lonicera, Sambucus, Viburnum, and Weigela (Caprifoliaceae) that grow in Korea, These ray cells have simple perforations in Lonicera and Sambucus which have vessel elements with simple perforations, and have scalariform perforation s or variant types of scalariform perforations in Viburnum and Weigela which have vessel elements with scalariform perforations. In Korean Caprifoliaceae the perforations of ray cells are similar to the types of perforation plates in the vessel elements of the same wood. |
| **DOI:** | [10.1163/22941932-90000622](http://dx.doi.org/10.1163/22941932-90000622) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Review** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 44-44 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000623](http://dx.doi.org/10.1163/22941932-90000623) |

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| **Author(s):** | Peter Gasson |
| **Title:** | **Wood Anatomy of the Tribe Swartzieae With Comments on Related Papilionoid and Caesalpinioid Leguminosae** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 45-74 |
| **Keywords:** | Baphiopsis; generic wood descriptions; Swartzieae |
| **Abstract:** | The tribe Swartzieae, like the Sophoreae is a basal member of the Papilionoid legumes, lying at the boundary between this subfamily and the Caesalpinioideae (Polhill ' Raven 1981). Recent surveys have investigated the wood anatomy of 42 out of the 48 genera in the Sophoreae (Fujii ' Baas 1992; Fujii et al. 1994; Gasson 1994; Den Outer ' Van Veenendaal 1992). Similar work is needed on the Swartzieae ( II genera), and in the Caesalpinioideae on Caesalpinieae (47 genera) , Amherstieae (25 genera) and Detarieae (55 genera). The wood anatomy of Swartzieae is described here, the genus Baphiopsis apparently for the first time, and comparison is made especially with Sophoreae . There is no clear delim itation between the two tribes, which is confirmed by cladistic analysis on 12 wood characters of Swartz ieae alone, then combined Swartzieae and Sophoreae. Baphiopsis (Swartzieae) and Baphia (Sophoreae) are so similar anatomically that they should perhaps be in the same tribe, and Bocoa is not uniform anatomically, and may not be a coherent genus. The data presented here will assist in reaching conclusions on the correct delimitation of some genera and tribes in the Papilionoid legumes. |
| **DOI:** | [10.1163/22941932-90000624](http://dx.doi.org/10.1163/22941932-90000624) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Appendix - Species Examined** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 75-75 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000625](http://dx.doi.org/10.1163/22941932-90000625) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Association Affairs** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 76-76 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000626](http://dx.doi.org/10.1163/22941932-90000626) |

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| **Author(s):** | Michelle K. Putz; Edith L. Taylor |
| **Title:** | **Wound Response in Fossil Trees from Antarctica and its Potential as a Paleoenvironmental Indicator** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 77-88 |
| **Keywords:** | wound; flood; Antarctica; fossil wood; fire |
| **Abstract:** | Numerous permineralized axes of Middle Triassic age from Fremouw Peak, Antarctica show evidence of mechanical wounding and wound responses. These consist of both elongate and triangular-shaped scars. Some scars can be detected beneath subsequent secondary xylem, indicating that wounding occurred early in stem development. In other stems, scars remained open suggesting late wounding and the permanent disruption of the cambium. In cross section most stems display little cal1ustissue, but wound periderm can be seen along the margin of the scar. In some stems the wound phellogen has formed phellem and phelloderm within the wounded area oriented perpendicular to the growth rings. Although some scars resemble those produced by fires, we were unable to document the presence of charcoal around scars. In modem ecosystems wounds may be caused by other agents, including debris drifting in floods, flowing ice, avalanche s, and animals . Each of these potential sources is reviewed in relationship to the paleoclimate in the region during the Triassic. |
| **DOI:** | [10.1163/22941932-90000627](http://dx.doi.org/10.1163/22941932-90000627) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Review** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 89-90 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000628](http://dx.doi.org/10.1163/22941932-90000628) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Wood Anatomists on the Internet** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 91-94 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000629](http://dx.doi.org/10.1163/22941932-90000629) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Wood Anatomy News** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 95-97 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000630](http://dx.doi.org/10.1163/22941932-90000630) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Association Affairs** |
| **Source:** | IAWA Journal, Volume 17, Issue 1 |
| **Publication Year:** | 1996 |
| **Pages:** | 98-98 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90000631](http://dx.doi.org/10.1163/22941932-90000631) |