**IAWA Bulletin New Series - Volume 9(3)**

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| **Author(s):** | William Louis Stern |
| **Title:** | **Index Xylariorum. Institutional Wood Collections of the World. 3.** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 203-252 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001072](http://dx.doi.org/10.1163/22941932-90001072) |

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| **Author(s):** | Sherwin Carlquist; Scott Zona |
| **Title:** | **Wood Anatomy of Papaveraceae, with Comments on Vessel Restriction Patterns** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 253-267 |
| **Keywords:** | vessel restriction patterns; systematic wood anatomy; Papaveraceae; Ecological wood anatomy |
| **Abstract:** | Qualitative and quantitative features are reported for Bocconia, Dendromecon, Dicentra, Hunnemannia, and Romneya. Bocconia differs from the other genera by its wide vessels, few per group, and few per mm2; it shows paedomorphosis in vessel element length and ray histology. In respects other than these, it agrees with features common to woody Papaveraceae; these features in turn occur in families of Papaverales (Berberidaceae, Lardizabalaceae, Ranunculaceae): vessels in diagonal groups; presence of both libriform fibres and vasicentric tracheids; nucleated nature of libriform fibres; rays almost exclusively multiseriate; rays wide, tall, and composed mostly of procumbent cells; wood storied to various degrees. Additional features show resemblance between one or more genera of Papaveraceae and other families of Papaverales. Bocconia is distinctive among Papaveraceae in its relatively mesomorphic wood, which may in part be explainable on the basis of stern succulence. The occurrence of avessei restriction pattern - vessels in the centre of fascicular areas (axial portions of secondary xylem between rays) not in contact with rays - in Dicentra and Hunnemannia is like that of other genera of Papaverales such as Nandina. An explanation for the significance of vessel restriction, involving genera other than those of Papaverales (Launea, Valeriana), is attempted. |
| **DOI:** | [10.1163/22941932-90001073](http://dx.doi.org/10.1163/22941932-90001073) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **Holz als Rohstoff für den Musikin-strumentenbau. Hans Georg Richter, 44 pp., illus., 1988. Edition Moeck Nr. 4043. Moeck Verlag D-3100 CeIle, F.R.G. Price: DM 38.00 (hard cover).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 268-268 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001074](http://dx.doi.org/10.1163/22941932-90001074) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **Usi e proprietà tecnologiche de legni Africani. Marcello Ceneri and Maria Laura Edlmann Abbate, 167 pp., illus., 1988. In: Contributi Scientifico-pratici per una migliore conoscenza ed utilizzazione dellegno XXXIII, No. 84. Istituto per la Ricerca sul Legno, Firenze. Price unknown (paperback).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 268-268 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001075](http://dx.doi.org/10.1163/22941932-90001075) |

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| **Author(s):** | Frank W. Telewski |
| **Title:** | **Intra-Annual Spiral Compression Wood: A Record of Low-Frequency Gravitropic Circumnutational Movement in Trees** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 269-274 |
| **Keywords:** | circumnutation; gravitropic response; Spiral compression wood |
| **Abstract:** | The majority of detailed studies on circumnutational growth movements have focused on herbaceous plants or on the primary growth of woody plant seedlings, ignoring completely secondary growth in woody plants. The relatively rapid movement in herbaceous tissues consists of two components: an autonomous growth rhythm and a gravitropic response. Since there is a gravitropic component to circumnutational movement and a gravitropic stimulus can induce compression wood formation, the formation of a compression wood spiral may be expected if there is a circumnutational movement of a woody stern. It is suggested here, that observed spirals of compression wood within annual growth rings in Pinus taeda L. and Abies concolor (Gord. ' Glend.) Lindl. ex Hildebr. represents an annual record of a slower circumnutational growth movement. Data derived from observations of greenhouse- grown 3-year-old Pinus taeda seedlings indicate that there are two distinct circumnutational patterns of different rotation al frequency present in woody plants associated with primary and secondary tissues. |
| **DOI:** | [10.1163/22941932-90001076](http://dx.doi.org/10.1163/22941932-90001076) |

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| **Author(s):** | Phil Woo Lee; Young Geun Eom |
| **Title:** | **Anatomical Comparison Between Compression Wood and Opposite Wood in a Branch of Korean Pine (Pinus Koraiensis)** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 275-284 |
| **Keywords:** | Korean pine (Pinus koraiensis S. et Z.); compression wood; opposite wood; branch wood; anatomical features |
| **Abstract:** | Compression wood and opposite wood formed in the branch of Korean pine (Pinus koraiensis S. et Z.) is described and compared in qualitative and quantitative anatomical aspects. |
| **DOI:** | [10.1163/22941932-90001077](http://dx.doi.org/10.1163/22941932-90001077) |

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| **Author(s):** | Aart J.E. van Bel; Christiaan van der Schoot |
| **Title:** | **Primary Function of the Protective Layer in Contact Cells: Buffer Against Oscillations in Hydrostatic Pressure in the Vessels?** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 285-288 |
| **Keywords:** | hydrostatic pressure; osmotic pressure; tyloses; Protective layer |
| **Abstract:** | In the literature it has been suggested that the protective layer, deposited along the wall between xylem parenchyma and vessels, is involved in tylose formation as part of an antipathogenic response. Yet, in a number of cases, the presence of a protective layer is not related with tylose development. It is proposed here, that the protective layer primarily acts as a buffer against hydrostatic oscillations in the vessels. As the hydrostatic pressure in the vessels becomes less negative, the xylem cells will increasingly withdraw water from the apoplast. Once the hydrostatic pressure has surpassed a certain limit, the protective layer is unable to withstand the osmotic pressure of the parenchyma cells and the latter will bulge into the vessels giving rise to the formation of tyloses. |
| **DOI:** | [10.1163/22941932-90001078](http://dx.doi.org/10.1163/22941932-90001078) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **The plant·book - A portable dictionary of the higher plants. D. J. Mabberley, xii +706 pp., 1987. Cambridge U niversity Press, Cambridge, New York. Price: UK£ 20.00 (soft cover).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 288-288 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001079](http://dx.doi.org/10.1163/22941932-90001079) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Himalayan plants. Vol. 1. H. Ohba and S. B. Malla (eds.), 500 pp., illus., 1988. University of Tokyo Press (distributors for the New World: Columbia University Press, Irvington, NY; for Europe, the Middle East, and Africa: Academic ' University Publishers, London; for Asia: Toppan Co., Singapore). Price US$ 225.50.** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 288-288 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001080](http://dx.doi.org/10.1163/22941932-90001080) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **Wood Anatomy News** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 289-291 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001081](http://dx.doi.org/10.1163/22941932-90001081) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **A new tree biology - facts, photos and philosophies and their problems and proper care. Alex L. Shigo, xiv + 595 pp., illus., 1986 (hard cover).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 292-292 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001082](http://dx.doi.org/10.1163/22941932-90001082) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **A new tree biology dictionary. Terms, topics and treatments for trees, their problems and proper care. Ibid. × + 132 pp., 1986 (soft cover).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 292-293 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001083](http://dx.doi.org/10.1163/22941932-90001083) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **Tree biology and tree care. A.L. Shigo, K. Volbrecht and N. Hvass, vi + 137 pp., mainly photographs, 1988. Shigo and Trees, Associates, 4 Denbow Road, Durharn, New Hampshire 03824, U.S.A. Price: US$ 23.00 (hard cover).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 293-293 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001084](http://dx.doi.org/10.1163/22941932-90001084) |

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| **Author(s):** | Ben J. H. ter Welle |
| **Title:** | **Atlás anatómico de maderas de Cuba. 1. Raquel Carreras and Miquel A. Vales, 79 pp., illus., 1986. Instituto de Botánica, Academia de Ciencias de Cuba, Havanna. Price unknown.** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 293-293 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001085](http://dx.doi.org/10.1163/22941932-90001085) |

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| **Author(s):** | Pieter Baas |
| **Title:** | **[Wood science]. Cheng Chünching (ed.), 1379 pp., illus., 1985. Chinese Forestry Publications, Beijing. Price: Yuan 30.00 (cloth; in Chinese).** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 293-293 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001086](http://dx.doi.org/10.1163/22941932-90001086) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Association Affairs** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 294-294 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001087](http://dx.doi.org/10.1163/22941932-90001087) |

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| **Author(s):** | Editors IAWA Journal |
| **Title:** | **Erratum** |
| **Source:** | IAWA Bulletin NS, Volume 9, Issue 3 |
| **Publication Year:** | 1988 |
| **Pages:** | 294-294 |
| **Keywords:** |  |
| **Abstract:** |  |
| **DOI:** | [10.1163/22941932-90001088](http://dx.doi.org/10.1163/22941932-90001088) |