

Medicinal and Aromatic Plants—Industrial Profiles, Vol. 9: Tea Tree, The Genus *Melaleuca*. Edited by Ian Southwell and Robert Lowe (Wollongbar Agricultural Institute, Wollongbar, Australia). Harwood Academic Publishers, Amsterdam, The Netherlands. 1999. x + 287 pp. 17 × 24.5 cm. \$110.00. ISBN 90-5702-417-9.

Tea tree oil, customarily derived from *Melaleuca alternifolia*, has become popular as a topical medication for its antiseptic and antiinflammatory activity, such that large-scale production is increasingly attractive. This volume ambitiously seeks to serve both industry and academia, combining practical and scholarly information.

The chapters aimed at industry are most valuable, fully justifying a cover price that might otherwise seem exorbitant for a volume of moderate size. Given only this book and suitable general knowledge, one could set up and cultivate a tea tree plantation, maximize oil production through breeding and harvesting practices, and even construct a still for the extraction of oil. Chapters introducing commercial uses, product formulation, and marketing further inform the potential producer.

Thorough coverage of chemical composition, biological activity, and toxicology will appeal to the researcher. The chemical review features discussions of infraspecific variability, the effects of processing methods on oil composition, and biosynthetic pathways. A well-written botanical chapter addresses two groups of *Melaleuca* species that include the economically valuable *M. alternifolia*, *M. cajuputi* (cajuput), and *M. quinquenervia* (niaouli). Nomenclatural history, distribution, and keys to distinguish the species

within each group are provided, but no mention is made of what distinguishes those groups from the 200 other species of *Melaleuca*.

M. cajuputi and *M. quinquenervia* each are covered in separate chapters, and a final chapter surveys these and a dozen other potentially valuable species. While the subject is worthy, these chapters are the weakest portion of the book. Information provided in the first two seems inadequately referenced. Multiple chemotypes have already been identified for most of the species covered in the last. *M. quinquenervia* is therein said to have two major chemotypes, plus a distinctive third variety (whose description in the text does not quite match that provided in a table); by contrast, the chapter devoted to *M. quinquenervia* claims five chemotypes that barely resemble those presented in the survey chapter. It is clear from such contradictions that current understanding of the range of variation within these species must be woefully incomplete.

The book is generally well edited, although a few typos have slipped through. Tables and figures are remarkably clear, and a number of attractive and informative color plates enhance the text.

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