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Book Review

Natural Antimicrobial Systems and Food Preservation. Edited by V. M. Dillon and R. G. Board. CAB, 1994. ISBN 0 85198 878 4. 336 pp. £49.95.

Many living tissues have defence mechanisms for protection against contaminant micro-organisms, but methods for exploiting these systems within the realm of food preservation have proved elusive. The widespread use of organic acids is an obvious exception to the rule, as is the incorporation of nisin into selected foods but, in general, the translation of natural processes into processes suitable for the food industry has met with marginal success.

Nevertheless, the attraction of the systems in being both 'natural' and less damaging to the original properties of the food than, for example, heating or drying, has ensured that interest in investigating potential materials has remained undiminished. Equally fascinating has proved to be the sheer variety of plant and animal tissues that exhibit antimicrobial properties, and it is this diversity that is explored to the full in this multi-author book. Thus, in some 300 pages, the coverage ranges over the antimicrobial systems in milk and eggs, bacteriocins from starter culture bacteria, antimicrobial compounds from food plants—including a full range of herbs and spices, and concludes with a most helpful appraisal of the future prospects for inhibiting microbial activity in food with one or more of the available systems. The sub-division into eleven chapters is logical, and the majority of the contributions is well presented and extensively referenced.

According to the editors, the book seeks to review our current knowledge of the subject, and there can be little doubt that this aim has been achieved with distinction. Indeed, anyone with even a marginal interest in food preservation will be pleased to have this volume on their bookshelves, and CAB International deserve every credit for publishing the text at a reasonable price, and without sacrificing the quality of printing or presentation.

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