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Book Review

Encyclopedia of Common Natural Ingredients Used in Food Drugs and Cosmetics by Albert Y. Leung & Steven Foster. Wiley Interscience, 1996 (2nd edn). ISBN 0 471 50826 8. XXV + 649 pp. Price: £95.00.

The first edition of this encyclopedia (1980) was only 409 pp. so the second edition is now quite hefty. It retains the same clear succinct readable character and the same division into "General Index" and "Chemical Index". It is probably the latter which adds such value for food chemists because any ingredient can be looked up to see what it contains. Apart from the drugs, cosmetics and herbal remedies listed in the main text there are also quite a number of flavorants though I could not find many natural sources of sweeteners. Artichoke, honey, hydrangea, orange and stevia are included but evidently stevia leaf has been listed as an 'unsafe food ingredient' by the FDA. In this respect the book is not up-to-date with some of the new protein sweeteners, whole fruits, berries and related materials now being reported from Japan and the USA as possible food ingredients. The book is useful for all pharmacological effects which are included with each entry and, where possible, the major active species is identified. In royal jelly, for example, this is 10-hydroxy-*trans*-2-decenoic acid which is structurally related to many insect pheromones and reminiscent of the hexenoic acids of axillary secretions which are of interest in human chemoreception. Ginseng contains numerous saponins some of which produce mutually conflicting biological results (e.g. hypotensive or hypertensive). In traditional Chinese medicine Asian ginseng is considered to have warming properties while America ginseng is said to have cooling properties. Thus American ginseng is normally used for its cooling and thirst quenching effects in summer. The common jujube (*Ziziphus jujuba*) can protect against tooth decay and normalise dry skin and relieve itching. It is traditionally regarded as sweet-tasting and it turns out to contain the largest amount of cyclic AMP ever reported in plants and animals.

Every entry in the book ends with a list of references (up to 40 or more) and a statement about regulatory status. The book is of immeasurable value and, for so much information, the price is certainly reasonable. I recommend it very strongly.

G. Birch