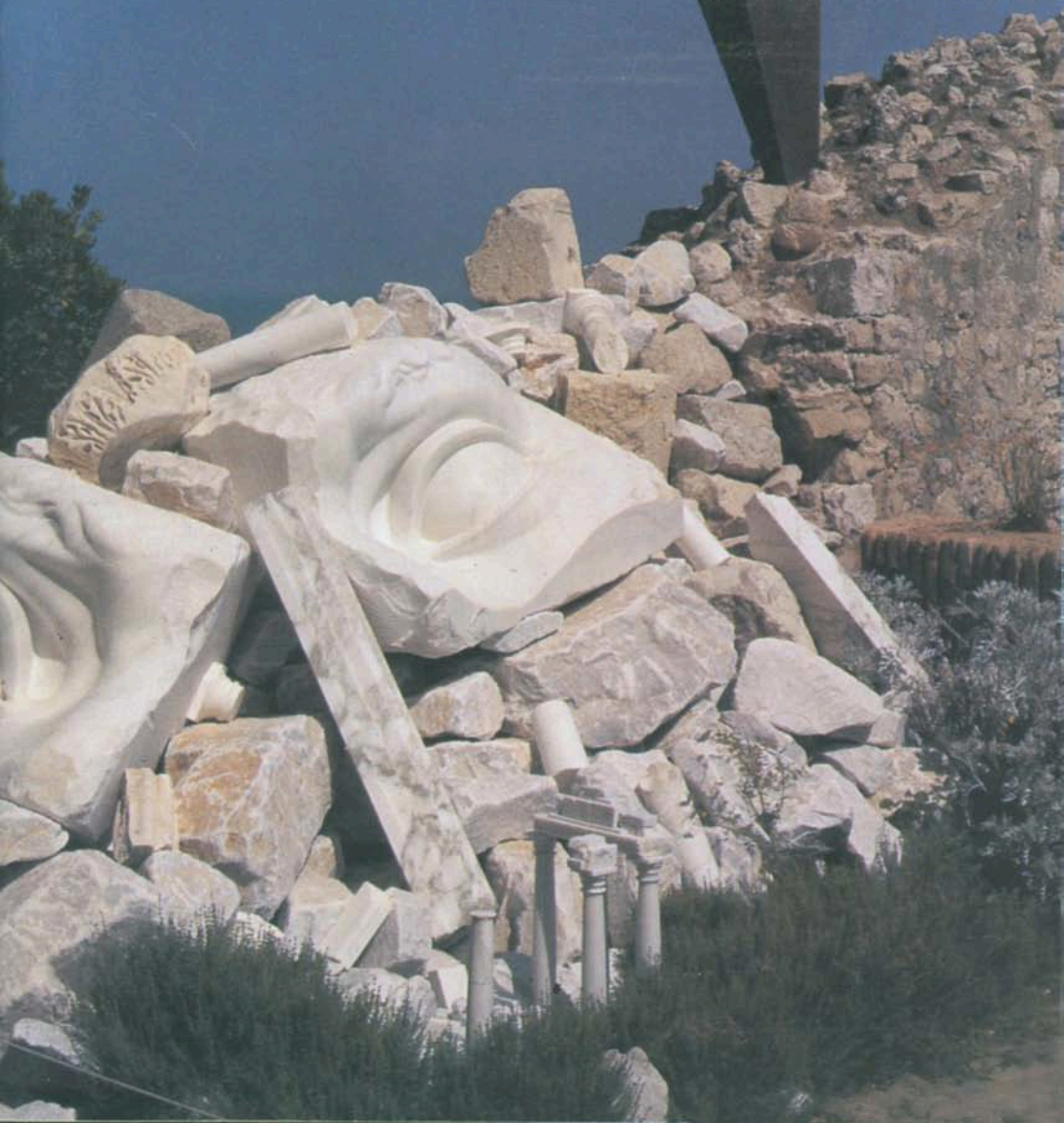


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BOOK REVIEWS

Herbs, Spices and Medicinal Plants: Recent Advances in Botany, Horticulture and Pharmacology, Vol. 1, edited by Lyle E. Craker and James E. Simon, Oryx Press, 2214 North Central at Encanto, Phoenix, Arizona 85004-1483, USA, 359 pp. £46.95.

This is the first volume of what is envisaged as an annual series of anthologies on scientific studies of herbs and spices. The twelve contributors and two editors of this volume come from America, Spain, Israel, and Hungary. As such, they represent trends of herbal research which are largely or wholly unknown in Britain. Particularly esoteric is the article "Medicinal Plants of Israel: An Ethnobotanical Survey" by four Israeli scientists. This survey does not touch Jewish uses of herbs, but confines itself solely to the indigenous uses by the bedouins, Druze, Moslem Arabs and Christian Arabs, representing a total of 64 informants. The plants (together with the parts used) are listed successively under different uses, such as "Native Plants Used to Treat Eye Ailments," "Native Plants Used to Treat Kidney Diseases". The method of preparation is also given; i.e. for ear aches, oil is extracted from the leaves of the myrtle, drops of which are placed in the ears.

By far the most valuable contribution to this volume is the magnificent survey by Arthur O. Tucker of the Department of Agriculture and Natural Resources at Delaware State College (USA) of the "Botanical Nomenclature of Culinary Herbs and Potherbs". This constitutes 47 pages

with 222 footnotes. All who have a deep interest in herbs should have Tucker's priceless guide through the labyrinth. He sorts out the Latin names with marvellous finesse and gives many common names for the herbs in various languages. For instance, *Angelica archangelica* is called angelica in English, Italian, and Spanish, but angélique in French, Angelika in German, and also Engelwurz in German.

Tucker lists over 290 species and hybrids and sorts them out from one another. This is particularly valuable for the notorious *Labiatae*. He informs us that *Mentha spicata* is the same as *Mentha viridis* and *Mentha longifolia*. He lists the six sub-species of *Origanum vulgare* with their various synonyms in Latin and the three cultivars of the main sub-species. He points out that Greek or Italian "oregano" is *Origanum hirtum*, also known as *heracleoticum*, but adds in his introduction that the herb as used for flavouring is collected in the wild, mixing various plants. Thus: "Actually, oregano is a flavor rather than one or a few species, a fact which produces even further confusion."

Tucker tries to bring order to the thymes, pointing out the two sub-species of *Thymus serpyllum*, while observing that *serpyllum* has been applied also to various other thymes such as *Thymus praecox*, sub-species *arcticus*, *Thymus pulegioides*, and *Thymus quinquecostatus*. He cautions us that *Thymus nyemalis* is "often incorrectly cited as the source of 'Spanish verbena oil'" and informs us that "conehead thyme" is the same as "Cretan thyme", which is the same as "thyme of the ancients" and "headed savory" (i.e. *Thymus capitatus*). If

anything, Tucker's lists are too brief and succinct. We could have done with a bit more exposition for many of the highly complex and controversial issues raised here. But to complain would be ungracious, for Tucker has accomplished wonders, and all herbalists will be in his debt for decades to come.

The other chief attraction of this volume is "The Chemistry, Pharmacology, and Commercial Formulations of Chamomile" by Connie Mann and E. John Staba. Probably nothing so full has ever been written on the subject, and this would seem to be the definitive treatment, complete with 220 footnotes for those who wish to know more. The article starts by observing that "German and Roman chamomile, used for centuries as medicinal plants (primarily due to the azulene content of the extracted essential oils), are quite dissimilar in their essential oil and chemical composition. While there are, for example, several flavonoids and other compounds common to both chamomiles, each plant type should be considered separately". Eight pages of chemicals are then listed, which occur in the chamomiles.

Interesting comments are made on the medicinal uses of the chamomiles, based on this thorough — indeed, exhaustive — chemical analysis. It is concluded that the azulenes in the chamomiles trigger a release of cortisone in the body, leading to an anti-allergenic and anti-inflammatory effect through the inhibition of histamine release. Azulene compounds also stimulate liver regeneration. A further anti-inflammatory effect comes from one of the principal components of German chamomile,

alpha-bisabolol. And whereas German chamomile has well-known sedative effects (possibly due to the amino acid tryptophan, though this remains obscure), Roman chamomile does not have such effects. One documented case of allergy to chamomile tea has been reported. The yellowing agents for hair-dyeing are also discussed. In short, this ample and full article is something the herbal practitioner does without at his peril.

The other articles in this book are very technical, though for any reader to whom that is no impediment, they will be invaluable. They include such as "Chemotaxonomic Aspects of Essential Oils", "The Biochemical Pharmacology of Plant Alkaloids" (which points out that "no perfectly satisfying definition of the term alkaloid is apparent"!), and "Biochemistry of Monoterpenes and Sesquiterpenes of the Essential Oils". It is a pity that the book is so expensive and that many of the articles are inaccessible to the amateur or enthusiast, but there can be no denying that this is a fundamental book of reference containing material which no professional can do without, and much will edify and delight the herb gardener, herb cook, and amateur herbalist.

Robert Temple