

Book Review

Herbal Products, Toxicology and Clinical Pharmacology, second ed., Timothy S. Tracy, Richard L. Kingston, (Eds.). Humana Press, Totowa, NJ (2007). xiii+288 pp., ISBN: 1-58829-313-0.

This is the second edition of a volume first published in 2000. The first edition was titled “Toxicology and Clinical Pharmacology of Herbal Products” edited by Cupp, and provided reviews of twenty-five herbal products. This edition has added four herbs and removed the discussion of twelve herbal products, resulting in the current coverage of seventeen herbs.

The thirteen herbs that are covered in both volumes are ma huang and the Ephedra alkaloids, kava, *Ginkgo biloba*, valerian, St. John’s wort, echinacea, feverfew, garlic, ginger, saw palmetto, *Panax ginseng*, cranberry, and hawthorn, with the new additions of evening primrose, *Citrus aurantium*, *Vitex agnus-castus*, and bilberry. The herbs that were eliminated from this volume are: borage, chamomile, coltsfoot, comfrey, licorice, pokeweed, sassafras, aloe, senna, cascara sagrada, dong quai, and cat’s claw. In addition, a chapter on the legal and regulatory aspects formerly in the first edition was eliminated.

For each herb, a series of topics is typically discussed in the following sequence: history, current promoted uses, sources and chemical composition, products available, pharmacological effects, clinical studies, pharmacokinetics, adverse effects and toxicity, drug interactions, reproduction, and regulatory status. These are well-thought out sections and by dividing each chapter in a standard manner, there is better quality control and evenness of coverage than might otherwise be the case. In general, the writing has a good style and there is significant and very useful discussion of the biological and clinical studies that are presented. What is glaringly missing is a discussion of the chemistry associated with each of the herbal products. The volume has extremely few chemical structures, and the sections on “sources and chemical composition” do not even mention the compounds isolated, the potential or known active principles, or even the classes of compounds likely to be present. This “black box” approach

to discussing the plants is rather disturbing for a number of reasons, most important of which is that if ever there is to be effective quality control of herbal products, dietary supplements or traditional medicines, the need for strong analytical chemistry and a correlation with biological activity is critical in a tripartite (botany, chemistry, biology) approach.

The stated rationale for the development of the second edition was that “additional scientific information has come to light, and the public’s interest in particular herbs has changed”. However, although most of the chapters do have updated information, the chapter on cranberry, an herb of substantial current interest, actually has no references more recent than 1998, prior to the publication of the first edition.

In summary, this is a somewhat useful volume and a valiant attempt to fill a very broad niche. It brings together some pertinent biological, pharmacological, and clinical information of a range of important herbs. It is a detraction that some of the most important clinically and commercially significant herbal products are not discussed. In spite of that, this volume will be of interest to those clinical pharmacists who are consulted with respect to herbal products and who teach courses on herbal remedies in the contemporary pharmacy curriculum. However, the shortcomings of this volume will make it of limited use to phytochemists and pharmacognocists. In addition, the volume does not place the many sciences related to herbal products in a contemporary setting with respect to the issues of existing monographs and those under development, and the public health issues of quality control and regulations. A review of the diverse paper and electronic sources of information on herbal products to aid health store and pharmacist providers, as well as the public, sort through the myriad of claims and information currently available would be a useful addition to a future edition.

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