CONCISE HANDBOOK OF PSYCHOACTIVE HERBS: MEDICINAL HERBS FOR TREATING PSYCHOLOGICAL AND NEUROLOGICAL PROBLEMS. Spinella M., PhD. New York; The Haworth Press, Inc., 2005. 288 pp. Hard Cover: ISBN: 978-0-7890-1857-1 (0-789-1857-8) USA: $49.95 Outside USA: $49.95, Soft Cover: ISBN: 978-0-7890-1858-8 (0-7890-1858-6) USA: $34.95 Outside USA: $34.95.

There are very few good books on the topic of psychoactive herbs,1,2 and fewer still on the use of such herbs for treating psychological and neurological problems.3 It is also an enormous task to cull from the disparate literature of herbal medicines and produce something that can be considered as concise. This problem is further complicated by the fact that there is precious little scientific evidence to actually demonstrate the medicinal efficacy of most psychoactive herbs, as much information is either anecdotal or from archaic sources. Also, this may not be the most sympathetic time in history to have anything positive to say about any psychoactive agent.

Moreover, most of the applicable scientific information on psychoactive herbs is limited to single chemical entities that have been isolated from plants or fungi, which may or may not have much to do with the overall action(s) of the initial raw material. Despite these obstacles, Dr. Marcello Spinella has managed to compile a useful text on a broad selection of neurologically active herbs, which is written in a way that will appeal to both students and teachers in the medical sciences.

This book, titled, Concise Handbook of Psychoactive Herbs: Medicinal Herbs for Treating Psychological and Neurological Problems, contains 11 chapters, a useful glossary of important terms, a bibliography for each chapter and an index. The introduction begins with an excellent overview of plants as medicines, with practical examples, although some bits of gratuitous opinion could be deleted in a future
edition, such as the suggestion that the coffee tree eventually dies of caffeine poisoning, or that the US DEA regulates illegal drugs. There are only a few other examples where the author’s opinion could be eliminated, shortened or supported by fact. Another limitation, at least for those who live outside of the USA, is that this book was written with FDA and DEA regulations in mind. About half of the chapters conclude with a short summary of the main points, and most chapters have at least one table to convey information of particular importance.

The text of the second chapter, entitled “How the Brain Works” is a splendid overview of brain chemistry and neurological function in just under 14 pages. This is followed by a fine presentation in the third chapter concerning how drugs work, in less than 10 pages. The next seven chapters discuss a selection of the most common classes of psychoactive herbs, which are divided into categories of stimulants, cognition enhancers, sedatives and anti-anxiety agents, herbs for mental illness, analgesics, the so-called hallucinogens and cannabis. A final chapter concludes with a discussion on substance use, abuse and addiction. Overall, the impartial tone of this book will probably not satisfy those who continue to believe that psychoactive herbs, in general, are somehow inherently dangerous. In fact, plant-based products are much more difficult to misuse than the distillates and purified powders that have become so common in post-industrial cultures.

It is also refreshing to see caffeine represented as the addictive psychoactive stimulant that it is, while the discussion of nicotine in the chapter on stimulants helps put the matter of tobacco use into perspective. And who would have thought that Mormon tea (Ephedra nevadensis), a rich source of ephedrine and a traditional alternative to caffeinated beverages, is not only a righteous stimulant on its own, but that it can also be used to produce methamphetamine? The chapter on stimulants also contains an informative discussion of cocaine, with a crude but effective illustration that compares the pharmacokinetic differences between smoked crack, insufflated cocaine hydrochloride and chewed coca leaves. One might be surprised to see tobacco considered as a cognitive enhancer in chapter five. This perspective helps us to understand why so many people, from so many different cultures, continue to use tobacco as they try and cope with the stress of grinding boredom in too many jobs. A wide range of caffeinated beverages also plays well in this nine-to-five paradigm, with ethyl alcohol readily available to help us “unwind” at the end of the day.

There are so many good things to say about this book that it should only be fair to nitpick for some constructive criticism. The quality of
illustrations is quite poor and rudimentary throughout the book. The provided rational for the putative antidepressant effect(s) of St. John’s Wort (Hypericum perforatum) is still lacking a satisfactory explanation in terms of pharmacologic efficacy for the studied molecular components, which may say more about the inability of modern science to fully investigate a complex plant material, rather than an indictment of this interesting herbal product. In the chapter on Herbs for Mental Illness, the author correctly defines a hallucination as “perceiving something that isn’t really there,” but neglects to mention that hallucinations are also defined as having no known source of external stimuli. So, is it appropriate to say that an exogenous chemical can “generate” a hallucination? This becomes a problem as the author struggles to define a hallucinogen in chapter nine. Although the author’s presentation is certainly a refreshing break from the standard treatment of this topic, it is important to point out that a chemical agent, such as mescaline, is an external stimuli (albeit working on the endogenous level). In other words, the psychological effect has a rational basis and the term hallucinogen is nothing more than a misnomer. This is why a psychiatrist coined the term psychedelic (i.e., mind manifesting or soul revealing) almost 50 years ago.

The section on Yage in this chapter (which is correctly spelled as Yagé and also known as Ayahuasca, Hoasca, Daime and many other names) is lacking to the point of embarrassment; for example, the beta-carbolines in this beverage are selective inhibitors of monoamine oxidase (MAO). They do NOT work in a similar manner as LSD, and it is surprising that the author has failed to grasp even the most basic facts of this matter. On that same topic, it was disappointing to see the omission of any discussion on Banisteriopsis caapi, the main ingredient of Yagé as a treatment for Parkinson’s disease in the past, and that harmala alkaloids from this jungle liana are again being investigated for this purpose. Also, the addition of Jimsonweed (Datura stramonium) by American colonists to the common stew pot of occupying British soldiers in 1676 Jamestown, Virginia was certainly Not accidental! There are many other aspects of this particular chapter that could be revised with very little effort, as the author is at least open to the consideration of psychedelic agents as useful therapeutics.

The chapter on Cannabis is unfortunately lacking in both depth and accuracy. Although this is a good overview of another timely topic, it is outdated and contains some inaccuracies. It is not true, for example, that the recreational use of drug cannabis is legal in The Netherlands. The legal status of drug cannabis is often confused by its social tolerance in some countries. And, while approximately 400 chemicals have been
identified from Cannabis, only a handful are of any major consequence. Most of those 400 chemicals occur in many other herbal plants as well, while some are now known to be artifacts of analysis. This number is one of the few tangible products of an aggressive research effort to identify assumed toxicity, which has yet to materialize for drug cannabis, despite an intense, well-funded effort over the last 40 years. The other main product of that dubious effort was Marinol® [i.e., synthetic delta-9-tetrahydrocannabinol (THC)], a safe and effective Schedule III drug in the US. It was also disappointing to see Cannabis represented as three different species, when in fact there is only one that is recognized by botanists; that is, Cannabis sativa L. In some places in this book, the term cannabis is used as a synonym for THC, which is simply incorrect. It is also not true that the cannabinoids have been demonstrated to be teratogenic or otherwise toxic, nor is smoke from drug cannabis “very similar” in composition to tobacco smoke. Cannabis, unlike tobacco, is lacking in nitrogenous compounds and the cannabinoids, unlike nicotine, are potent oil-soluble antioxidants. Also, Cannabis is not known to take up polonium 210 or other alpha-emitting radioactive isotopes from the soil like tobacco is known to do. There was not even mention of cannabidiol (CBD), another major constituent of Cannabis, which has been shown to be effective in treating epilepsy. It would also be useful to include some discussion on the biological metabolites of both THC and CBD, as these have potent anti-inflammatory actions, which could explain why so many people continue to use drug cannabis way beyond the age where most people often stop using illegal psychoactive agents for “recreational” purposes. Thus, the chapter on Cannabis should be completely revised for the modern audience. However, it was refreshing to read a startling, yet obvious truth; that higher potency marijuana requires less smoking for the desired effect and, thus, results in less potential damage to the respiratory system from burnt plant material.

Overall, and considering the lack of too many good alternatives at this point, I would recommend this book to anyone interested in reading about psychoactive herbs. This book is especially recommended for those who are interested in the medical sciences and public policy. It is hoped that future editions of this book will appear with better illustrations and more accurate information on some of the selected topics.

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