Mushrooms in the Mekong Region – Review

Daniel Winkler – Mushroaming.com

There is an interesting new book out called "Mushrooms for Trees and People - A field guide to useful mushrooms of the Mekong Region", by Peter Mortimer, Jianchu Xu, Samantha Karunarathna and Kevin Hyde containing 124 pages. It is published in Kunming, Yunnan, China by the World Agroforestry Centre (ICRAF) and luckily there is also a <u>free pdf</u> <u>download</u> available on the humidtropics.cigar.org web pages.

I love to read mushroom books from all kinds of regions around the world. As a trained geographer and fee-lance mushroamer I love to keep learning of the distribution range of species and genera and see what peoples' favorite mushrooms are in different corners of the world. While I had only limited exposure to the Asian tropics during mushroom season yet, I have been many times in the cold and warm-temperate zone of the Tibetan Plateau searching and researching fungi. I have crossed the upper Mekong known in Tibet as the Dza Chu, many times during my travels. I hunted morels high above its banks in the Tibetan areas of Yunnan and even threw rocks across the Mekong during caterpillar fungus season up in the hilly grasslands on the Kham-Amdo border in today's Qinghai Province. But let's get back to the book (or pdf), it presents 86 mushrooms found in the catchment of the mighty <u>Mekong</u>, some found on the Tibetan Plateau, but many more growing in subtropical and tropical reaches of the Mekong catchment area below, before it empties into the South China Sea in Southernmost Vietnam near the Cambodian border.

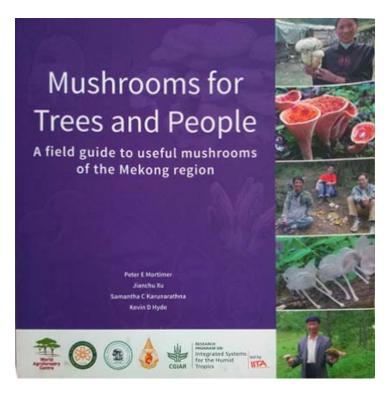
Surprisingly the soft cover book is written in English and thus for many Western readers it is much more accessible than the plethora of Chinese mushroom books published in China only containing the scientific name in Roman script. Each mushroom is presented with its scientific name, no authors are given and no synonyms, something that would be helpful when presenting for example *Echinoderma asperum* (formerly known as *Lepiota aspera*). With each species there are also a range of common mushroom names listed containing names used in Thai and Laotian, Chinese, Tibetan, Japanese and English. Each mushroom is presented over two 21x21 cm (8x8 in) pages. Most photos are presenting the described mushroom very well, many mushrooms are presented by 1 or 2 pictures sometimes also up to four. In most cases photo space is a quarter or eighth of the available page area. However, in this case the images are becoming quite small, although often there would have been easily more space for richer photo depiction and sadly there are plenty of half empty pages in the book. Besides the mushroom image(s) is an eco-zone diagram, showing if

the mushroom grows in alpine rangelands, grasslands, or in four different stages of forest maturity. There is also an altitudinal diagram that shows 0 to 4000m. The strangest thing is that I can not find any system of order how these mushrooms are presented. It is neither alphabetic, nor taxonomic, nor geographic by country or habitat, nor by use like edible, medicinal vs. toxic etc. To illustrate the confusing presentation: there are 9 species of Lentinus presented in the book, to be found in 4 different places (The genus Lentinus includes about 40 gilled polypores, many of them edible). The oddest content is on page 26/27. It is presenting a seemingly pinkish chanterelle with white gill-like folds, depicted in two images labeled as Cantharellus cibarius. However, the text describes a "yellow to golden-yellow" mushroom. Listing its size and habitat turns out to more or less a straight lift off the description of C. californicus on Mycoweb! Here an excerpt from the Mekong mushroom book: "This mushroom commonly grows gregariously, clustered or in fairy rings; preferring the shade of *Quercus* agrifolia (coast live oak) and less commonly found with Lithocarpus densiflorus (tanbark oak) and Umbellularia californica (California bay)". This is followed by "original" information from the upper Mekong catchment: "This mushroom is normally found in mossy coniferous forests, but is also often found in mountainous birch forests and among grasses and low-growing herbs." The mushroom depicted might actually be Gloeocantharellus persicinus, but I am not sure about that, all I know, it is for sure not *Cantharellus cibarius*. Why would any of these apparently otherwise gualified authors go for such a blunder, very strange?

Anyway, there is bunch of other oddities like two full page images (p.120 & 125) of a collector labeled as holding Boletus edulis. However, the boletes depicted are clearly not *B. edulis*, one is probably *Harrya chromapes* (= *Leccinum /* Tylopilus chromapes), the other is a blue staining bolete. Amanita hemibapha is listed as also occurring in North America, which is probably a reference to A. jacksonii, which was known for awhile as A. hemibapha, still a valid name in Asia, since it was originally applied to a Himalayan Caesar mushroom species. Its altitudinal distribution is given from 0 to 2000m, but I have picked it several times between 3200 and 3600m in the Tibetan areas (There is at least another half dozen of temperate species in the book reported to grow below 2000m that can be found above 3000m in the upper Mekong. Morels are presented by the example of Morchella conica, a species name used in China (and Europe) for trade in black morels. Strangely it states morels are only growing between 2900 and 3100m. I have seen them growing at least 500m higher up and would expect them to grow above 4000m on the Tibetan Plateau (treeline reaches 4750m in the Mekong headwaters, Update: I found black morels in 4450m in Litang in June 2017), but more importantly to offer such a narrow band for altitudinal distribution is strange. In general, the idea to present tropical lowland mushrooms mixed with Plateau species seems an odd choice. Also, sometimes it is clearly better to avoid a fixed format like giving altitudinal diagrams (which waste a lot of precious space that could be filled with other information), when one is not able to provide reliable information for each species.

Writing such a critical review I feel a bit guilty, although there are plenty of other points that I think need revision. However, besides all its evident short comings, there is tons of helpful and correct information in the book as well and had the authors spend only some more days on the manuscript the actual contribution to popularizing mushrooms from the Mekong region might have been in the center of this review . All in all I am glad to have a copy - thanks to Britt Bunyard; it surely broadened my fungal horizon introducing me for example to the yellow edible truffle *Mycoamaranthus cambodgensis* and *Micropsalliota globocystis*.

Publishing the book as a free pdf is very helpful and surely will help to spread fungal knowledge. I just hope the authors take the time and correct some of the errors and offer a revised version online.



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