Book reviews

In this section, we will publish reviews of recent books relevant for dry grassland research and conservation. Apart from titles particularly dealing with dry grasslands, also more general titles can be included, as for example phytosociological overviews, floras/faunas and field guides of relevant taxa, or text books on methodology, ecology, and conservation/restoration. Jürgen Dengler (<u>dengler@botanik.uni-hamburg.de</u>) serves as Book Review Editor. Thus, if you are an author, editor or publisher of a book and want to have it reviewed in the Bulletin of the EDGG, please, just contact him. The same applies to EDGG members who want to review a specific new title.

Chytrý, M. (2009) [Ed.]: Vegetace České republiky – 2. Ruderální, plevolová, skalní a suťová vegetace (Vegetation of the Czech Republic – 2. Ruderal, Weed, Rock and Scree Vegetation) [in Czech, with English summaries]. 520 pp., Academia, Praha. ISBN 978-80-200-1769-7. Price: 565 CZK.

Chytrý, M. (2011) [Ed.]: Vegetace České republiky – 3. Vodní a mokřadní vegetace (Vegetation of the Czech Republic – 3. Aquatic and Wetland Vegetation) [in Czech, with English summaries]. 827 pp., Academia, Praha. ISBN 978-80-200-1918-9. Price: 850 CZK (available with 15% discount from <u>http://www.academiaknihy.cz/vegetace-ceske-republiky-3-vodni-a-</u>

Two new volumes of the planned four-volume series of the Czech vegetation have been published recently, one on ruderal and rock vegetation and one on aquatic and semi-aquatic non-woodland vegetation. The first volume, which covers grassland and related communities, including all the dry grasslands, was published in 2007 and reviewed in Bulletin No. 3 (2009, p. 28: Chytrý 2007). Unfortunately, volume 2 is already out of print, but you might find still some copies in book shops. By contrast, a slightly updated second edition of Volume 1 has been published in 2010 and is still available (550 CZK, or 468 CZK from the above mentioned e-shop). Hopefully, editor and publisher will find a way to re-publish also Volume 2.

Volume 2 presents eight vegetation classes with 119 associations, while the thick Volume 3 contains 10 classes with 178 associations. Volume 2 is particularly relevant to dry grassland researchers as it contains the transitions of dry grasslands to ruderal communities (Artemisietea vulgaris), rock communities (Asplenietea trichomanis) and scree communities (Thlaspietea rotundifolii). Each of the syntaxa is described in a detailed text (in Czech, with summaries in English), with extensive and wellstructured synoptic tables, lists of diagnostic species, distribution maps, ecological profiles (mainly based on Ellenberg Indicator Values) and many nice and instructive photographs. The classification is based on a comprehensive national vegetation database and the thorough application of a consistent methodology (which is presented in a concise English methods chapter in each of the volumes).

Without any doubt, the "Vegetation of the Czech Republic" is presently the most advanced example of a country/

state overview of all extant plant communities following a consistent modern approach. Therefore, any serious phytosociologist in Europe should have this series on his/ her book shelf, in particular as the authors also thoroughly revised the nomenclature of all treated syntaxa, which makes this series a major reference work in this respect. Luckily, the authors also put an end to the "deductive" approach (and its many derivates), which once emerged in their country, and in doing so followed two other major recent syntaxonomical reference works (Berg et al. 2001, 2004, Willner & Grabherr 2007). The deductive approach (e.g. Kopecký & Hejný 1994) to differentiate vegetation types in "real" syntaxa on the one hand (those having character species of their own) and a wide array of different "basal", "fragmental" or whatsoever communities, while looking "logic" at first glance appears to be circular reasoning at closer look and it creates a differentiation (implicitly connected with a valuation) where there is no ecological difference (Dengler 2003).

Despite this overall extremely positive evaluation of the series, there are still points that can be criticized and where I would have preferred another solution:

The authors disregarded the syntaxonomic level of order, and treated only associations, alliances and classes. This is not supported by arguments and it is unfortunate as this impedes comparisons with other national overviews and also the application of phytosociological nomenclature where the ordinal rank is obligatory (i.e. vegetation classes need to be defined by orders).

The tables in the books do not reflect the full variety of vegetation types in the country as only those relevés have been included that directly matched the COCKTAIL

definitions of the units. Thus, the tables suggest that the associations are much crisper than they are. Actually, one could classify 100% of all relevés and still receive reasonably well separated units (see Berg et al. 2001, 2004).

Some vegetation types are completely omitted from the presentation. For example, the very frequent ruderal associations Rubo caesii-Calamagrostietum epigeji and Elymo repentis-Rubetum caesii (see Berg et al. 2004) are not presented under this name nor any other, similar to all associations of acidophilous forest edge-communities of the order Melampyro pratensis-Holcetalia mollis (except the Pteridietum aquilini, which is placed in the Epilobietea angustifolii). All these community types are particularly widespread in the Czech Republic, the Rubo-Calamagrostietum even is shown in extensive stands on the cover photo of Volume 2. From the reading, it is not clear to me why these associations are nevertheless excluded from the presentation. Perhaps the authors had difficulties to develop appropriate COCKTAIL definitions or there was a lack of relevés.

One disadvantage I see is the extreme splitting approach in some vegetation classes, in particular in the water vegetation. For example, while Berg et al. (2001, 2004) needed six associations to cover the full variety of *Lemnetea* communities, Chytrý (2011) distinguishes not less than 17 (which are more than the total number of diagnostic species in this class!).

References

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- Willner, W., Grabherr, G. (2007) [Eds.]: Die Wälder und Gebüsche Österreichs – Ein Bestimmungswerk mit Tabellen. – 2 vols., 302 + 290 pp., Spektrum Akademischer Verlag, Heidelberg.

Jürgen Dengler, Hamburg, Germany <u>dengler@botanik.uni-hamburg.de</u>







Vegetace České republiky 3 Vodní a mokřadní vegetace Vegetation of the Czech Republic 3. Aguatic and Wetland Vegetation

