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17th EDGG Special Feature in *Tuexenia* published

Members of the Eurasian Dry Grassland Group (EDGG) and its predecessor organizations have been publishing Grassland Special Features in Tuexenia since 2005. The present Special Feature was included in volume 44 of *Tuexenia* (Heinken & Becker 2024). It was edited by Steffen Boch, Thomas Becker, Balázs Deák, Kristin Ludewig, and Jürgen Dengler. It contained an editorial as well as five research articles highlighting different aspects of grassland research and written by 46 authors from eight countries, corresponding to the broad diversity of topics and members in EDGG.

In the editorial (Boch et al. 2024), we briefly reviewed the last 20 years of EDGG, which was founded as (German) *Arbeitsgruppe Trockenrasen* in 2004 (Dengler & Jandt 2005). In all except for three years, EDGG (and its predecessors) managed to publish a Grassland Special Feature. Specifically, the editorial summarizes the EDGG activities of the years 2023 and 2024, including some photos from important events.

Riedel et al. (2024) compared cover-based and biomass-based methods for assessing plant abundance in plots from Swiss grasslands, aiming to address issues in resurvey studies with mixed sampling methods. The authors resurveyed 40 historic grassland plots of 0.09 m² using two methods: cover estimates and the originally conducted survey method of biomass harvesting. With the biomass-based species determination, an average of 0.9 more species (4.6%) were found per plot compared to cover-based sampling. In cover-based surveys some species were overlooked, especially graminoids. Fractional cover was well related to fractional biomass with an allometric (power-law) function, with an exponent of 0.6. The derived function allows reliable conversions between biomass and cover in temperate European grasslands. The authors suggest developing similar functions for other ecosystems to facilitate data standardization.

Schindler et al. (2024) investigated the effects of sprinkler irrigation on semi-natural grasslands in Valais (Switzerland). This irrigation method is increasingly applied in inner alpine dry valleys, replacing traditional irrigation methods by water channels. The authors conducted a resurvey of sprinkler-irrigated permanent plots that were established in 1988, complemented by newly established pairs of irrigated and unirrigated plots in the same area. After over 30 years of sprinkler irrigation species richness as well as rare and specialist species had declined in the resurveyed plots. Within the plot pairs, irrigated plots showed different habitat conditions (indicated by means of ecological indicator values) and had much lower species richness than the unirrigated plots. The authors highlighted the need for further studies investigating the long-term risks to grassland biodiversity by sprinkler irrigation.

Marcenó et al. (2024) studied the grassland vegetation in the highest elevations of the Madonie Mountains in northern Sicily, namely the *Plantaginion cupanii*, *Cerastio-Astragalion nebrodensis*, and *Armerion nebrodensis* alliances. By extending the classification of oromediterranean grasslands, the authors described two new associations: the *Androsaco breistrofferi-Potentilletum calabrae* and the *Helianthemo tomentosi-Festucetum crassifoliae*, which occupy the highest elevations. While the *Androsaco breistrofferi-Potentilletum calabrae* can be found in sinkholes (karst dolines) with long-lasting snow cover and extended water availability, the *Helianthemo tomentosi-Festucetum crassifoliae* withstands fluctuations in temperature and water availability on windy ridges.

Willner et al. (2024) revised the dry grasslands of the Eastern Alps syntaxonomically. The authors conclude that the highest division should be between the xeric dry grasslands of the orders *Festucetalia valesiacae* and *Stipo-Festucetalia pallentis* and the meso-xeric dry grasslands of the order *Brachypodietalia*. As diagnostic species of the *Festucetalia valesiacae* and *Stipo-Festucetalia pallentis*, obtained from analyses in eastern Central Europe, were strongly mixed in the investigated stands in the Alps, the authors could not identify orders within the xeric dry grasslands. Therefore, the syntaxonomic position of the three clearly supported alliances *Stipo-Poion xerophilae* (incl. *Diplachnion serotinae*), *Seslerio-Festucion pallentis* and *Festucion valesiacae* remains unclear. This indicates the need for further research on the higher levels of the syntaxonomic system of the xeric dry grasslands of the entire Alps.

Borovyk et al. (2024) reported vascular plant species richness records in the steppe zone of Ukraine, using various data sources. While most of the small-scale records (up to 0.1 m²) were found in mesic grasslands in southern Ukraine with a high abundance of annual grasses and forbs, most of the records at larger scales were found in the northern forb-rich and forb-grass steppes. Mean species richness decreased from northern forb-rich steppes to southern desert steppes at larger scales (1 to 100 m²), while small-scale richness showed little variation between the different steppe subzones. Most records were found in protected areas with a long history of traditional land use. The authors conclude that species-rich grasslands in the steppe zone are influenced by local topography, landscape heterogeneity, and low-intensity management.

The study highlights the importance of protecting steppe grasslands as global biodiversity hotspots, especially in the light of land-use changes and the ongoing war in Ukraine.

Tuexenia is a diamond open access journal and thus publication is free of charge for authors. All articles are freely available from the *Tuexenia* webpage. We are glad that, after two years of interruption due to a lack of manuscripts, we could resume the success story of EDGG Special Features in *Tuexenia* in 2024. We would like to thank those three guest editors who are not continuing in 2025, Thomas Becker, Balasz Deák and Kristin Ludewig, for their services to EDGG and *Tuexenia*, which extended in the case of the first two over many years. At the same time, we have initiated work for the next EDGG Special Feature in *Tuexenia* 45 (2025) and thus call for contributions (see this issue, p. 26).

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Steppe-like grassland with *Adonis vernalis* in Valais, Switzerland. Photo: J. Dengler.