

СЕКЦІЯ «БІОЛОГІЧНІ НАУКИ ТА ЕКОЛОГІЯ»

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ROCKY GRASSLANDS ON SEDIMENTARY OUTCROPS IN UKRAINE: PRELIMINARY RESULTS OF THE SYNTAXONOMICAL REVISION

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Question. Rocky grasslands on carbonate outcrops are well described from Western and Central Europe but there is a lack of information about this type of vegetation from the Eastern Europe. The problem is that the classification of these communities is very difficult and causes many discussions. The aim of our work is to make syntaxonomical revision of the rocky grasslands on sedimentary outcrops and to make formalized classification on alliance level.

Methods. In total we have used 640 relevés of the rocky grasslands on carbonate outcrops from Podillia, Crimea, south part of Ukraine, Donetsk Ridge, Middle Russian Plateau, Transcarpathian region. We have analysed the geobotanical data using TWINSPAN modified algorithm. The differentiations between the syntaxa we have confirmed using DCA-ordination method. All syntaxa names are presented by Mucina et al (2016), Didukh & Mucina (2014), Didukh & Vasheniak (2018).

Results. All results have been interpreted in alliance level.

The first cluster is consisted of rocky grasslands on chalk outcrops on Krasna valley and is sharply separated from the other data. We have interpreted it as the *Thymo cretacei-Hyssopetalia cretacei* order, *Artemisio hololeucae-Hyssopion cretacei* alliance.

The second and the third clusters are consisted of Crimean data and have been interpreted as the *Stipo pulcherrimae-Festucetalia pallentis* order, *Androsaco tauricae-Caricion humilis* and *Veronico multifidae-Stipion ponticae* alliances described firstly from the territory of Ukraine.

The fourth cluster is consisted of data gathered from the south Ukraine and adjacent territories and has been interpreted as the *Potentillo arenariae-Linion czernjajevii* alliance.

The fifth cluster is consisted of the data gathered from western and central Podillia and interpreted as the *Galio campanulati-Poion versicoloris* alliance. We suppose that it is the eastern vicariant of the *Bromo pannonici-Festucion csikhegyensis* alliance.

The sixth cluster corresponds to the *Diantho lumnitzeri-Seslerion albicantis* alliance occurred in Transcarpathian region.

Our syntaxonomic decisions are confirmed by the results of DCA-ordination, which proves the leading role of carbonate content, acidity, thermal climate, cryoclimate in the differentiation of rocky grasslands on sedimentary outcrops in Ukraine.

Conclusions. The obtained results are important for solving the discursive questions relating to the estimation and preservation of syntaxonomic diversity, the search for criteria for distinguishing between higher rank syntaxa, and the establishment of boundaries between western Pannonian and Southern Pontic rocky grassland communities.