

# Nomenclatural notes on saline vegetation of Ukraine, southern Russia and Kazakhstan

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**Abstract:** Lysenko, T., Mucina, L. & Iakushenko, D. Nomenclatural notes on saline vegetation of Ukraine, southern Russia and Kazakhstan. *Lazaroa* 32: 187-189 (2011).

In this syntaxonomic nomenclature note we introduce the *Plantagini salsa-Artemision santonici* (*Artemisio santonicae-Limonietalia gmelinii, Festuco-Puccinellietea*), a new name for the syntaxon carrying an illegitimate name '*Artemision santonici* Shelyag-Sosonko & Solomakha 1987'. This vegetation comprises *Artemisia santonicum* dominated salt-steppe vegetation on solonetz-like soils of slightly elevated habitats of alluvial plains and of the slopes of shallow depressions in the steppe zone of Ukraine and forest-steppe and steppe zones of Russia. We also suggest a nomenclatural adjustment (*nomen inversum*) for the '*Artemisio pauciflorae-Camphorosmion monspeliacae*' (*Artemisietalia pauciflorae, Festuco-Puccinellietea*). The steppe vegetation classified within this latter syntaxon occurs in southern Russia and northern Kazakhstan.

**Keywords:** Alliance, Asia, Europe, *Festuco-Puccinellietea*, halophytic vegetation, Kazakhstan, Russian Federation, saline habitats, nomenclature, *nomen inversum*, phytosociology, Ukraine.

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En esta nota nomenclatural proponemos el nombre de *Plantagini salsa-Artemision santonici* (*Artemisio santonicae-Limonietalia gmelinii, Festuco-Puccinellietea*), como nuevo para corregir el nombre ilegítimo '*Artemision santonici* Shelyag-Sosonko & Solomakha 1987'. Esta vegetación comprende la vegetación esteparia salina rica en *Artemisia santonicum*, desarrollada en suelos tipo solonetz, de hábitats de planicies aluviales, algo elevadas, de las pendientes de las depresiones temporalmente inundadas, en las estepas de Ucrania, así como las estepas forestales y algunas estepas de Rusia. También sugerimos un ajuste nomenclatural (nómina inversa) para el '*Artemisio pauciflorae-Camphorosmion monspeliacae*' (*Artemisietalia pauciflorae, Festuco-Puccinellietea*).

**Palabras clave:** alianza, Asia, Europa, *Festuco-Puccinellietea*, vegetación halófita, Kazajastán, Federación rusa, saladares, nomenclatura, *nomen inversum*, fitosociología, Ucrania.

This brief syntaxonomic nomenclature note introduces a new name for the *Artemisia santonicum* dominated salt steppes of Ukraine and southern Russia, and suggests performing a name inversion in the *Artemisio pauciflorae-Camphorosmion monspeliacae*, known to occur in southern Russia and in Kazakhstan. The names of the taxa have been adjusted according to the nomenclature as featured by the Euro+Med PlantBase ([www.europlusmed.org/plantbase](http://www.europlusmed.org/plantbase)), accessed on 8 October 2011.

*Plantagini salsa-Artemision santonici* all. nova  
hoc loco

(*Artemisio santonicae-Limonietalia gmelinii, Festuco-Puccinellietea*)

Typus: *Limonio meyeri-Artemisietum santonici*  
SHELYAG-SOSONKO & SOLOMAKHA 1987 (SHELYAG-SOSONKO & SOLOMAKHA 1987: 16), holotypus  
hoc loco.

Synonyms: *Artemision santonici* SHELYAG-SOSONKO & SOLOMAKHA 1987 nom. illeg. (later ho-

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monym to *Artemision maritimae* Micevski 1970) (art. 31 of the ICPN; WEBER & al., 2000); *Artemision santonici* Shelyag-Sosonko & Solomakha 1987 em. Golub 1995 *illeg. emend.* (see GOLUB, 1994, p. 36-37).

Diagnostic taxa of the alliance: *Artemisia santonicum*, *Limonium meyeri*, *Plantago salsa*.

SHELYAG-SOSONKO & SOLOMAKHA (1987) have published a new alliance -the “*Artemision santonicae*” (*recte: Artemision santonici*) which comprises communities supported by solonetz-like soils characteristic of slightly elevated habitats in alluvial plains and of the slopes of shallow depressions of the steppe zone of Ukraine. A taxonomic revision of the *Artemisia maritima* group (PEARSON, 1974) demonstrated that the inland populations formerly considered as *A. maritima s. str.* should be called *A. santonicum*. As the *Artemision santonici* (*sensu* SHELYAG-SOSONKO & SOLOMAKHA, 1987) is based on the same taxonomic concept as the “*A. maritima*” [*recte: Artemisia santonicum*] of MICEVSKI (1970), the former name is a later homonym of the *Artemision maritimae* of MICEVSKI (1970) which was described from the Former Yugoslav Republic of Macedonia, hence illegitimate according to the Art. 31 of the ICPN (WEBER & al., 2000).

Here we reject the illegitimate name *Artemision santonici* SHELYAG-SOSONKO & SOLOMAKHA 1987 and coin a new name for this syntaxonomic concept - the *Plantagini salsaes-Artemision santonici*. The communities of alliance supported by solonetz-like soils characteristic of slightly elevated habitats of alluvial plains and the slopes of shallow depressions of the steppe zone of Ukraine and forest-steppe zone of Russia.

#### ***Camphorosmo monspeliacae-Artemision pauciflorae* Karpov 2001 nom. invers. propos.**

(*Artemisietalia pauciflorae*, *Festuco-Puccinelliea*)

Original name: *Artemisio pauciflorae-Camphorosmion monspeliacae* Karpov 2001.

Holotypus: *Puccinellio tenuissimae-Artemisietum pauciflorae* Karpov 2001.

Synonyms: *Artemision pauciflorae* Grebenyuk, Golub et Yuritsyna 2000 *nom. inval.* (art. 5); *Arte-*

*mision pauciflorae* Grebenyuk, Golub & Yuritsina in Golub et al. 2005 (syntax. syn.); *Artemision pauciflorae* Grebenyuk, Golub et Yuritsyna in Golub et al. 2006 (syntax. syn.).

Diagnostic taxa of the alliance: *Artemisia pauciflora*, *Bassia prostrata*, *Camphorosma monspeliacaca*.

The *Artemisio pauciflorae-Camphorosmion monspeliacae* KARPOV 2001 comprises plant communities dominated by *Artemisia pauciflora* on solonetz-like and solonetz soils of the Volga and Ural River basins. The name of this alliance (as suggested in the original diagnosis by KARPOV, 2001: 110) is in the contradiction with Article 10b of the IPCN since *Artemisia pauciflora* is invariably the dominating species (see the original diagnosis of the nomenclatural type of this alliance). We suggest inverting the name of the alliance to conform to the art. 42 of the ICPN. *Artemisia pauciflora* and *Camphorosma monspeliacaca*, the eponymous species of the alliance, are distributed both in the steppe as well as in the desert zones, yet showing distributional optimum in the former zone (SAFRONOVA, 2010). In this respect, the *Camphorosmo-Artemision pauciflorae* should comprise plant communities dominated by dwarf sub-shrubs on solonetz-like chernozem and kastanozem soils of the steppe and desert zones of the Volga River basin, southern Ural region and western Kazakhstan.

Here we include also the *Artemision pauciflorae* into the *Camphorosmo monspeliacae-Artemision pauciflorae*, because of the coincidence of their distribution areas spanning the central and northwest part of Russia between Volga and Ural Rivers and neighbouring regions to the east of the Volga River (GOLUB & al., 2005) as well as in the Orenburg Region of Russia (KARPOV, 2001; GOLUB & al., 2005, 2006). They also show high similarity in floristic composition, and share position along ecological gradients. Last but not least, both the *Artemision pauciflorae* and the *Camphorosmo-Artemision* are impossible to separate in the tabular presentation of the syntaxa in GOLUB & al. (2005). For priority reasons, the valid name for this syntaxon should be the *Artemision pauciflorae-Camphorosmion monspeliacae* KARPOV 2001.

## BIBLIOGRAPHY

- Ferrari, C. & Speranza, M. — 1975 — La vegetazione dei calanchi dell'Emilia-Romagna (con note di sistematica per la vegetazione dei suoli alomorfi interni) — Notiz. Fitossociol. 10: 69-86.
- Golub, V.B. — 1994 — Class *Asteretea tripolium* on the territory of the former USSR and Mongolia — Fol. Geobot. Phytotax. 29: 15-54.
- Golub, V.B. — 1995 — Halophytic, desert and semi-desert plant communities on the territory of the former USSR — Russian Academy of Sciences, Institute of Ecology of the Volga River Basin, Togliatti.
- Golub, V.B., Karpov, D.N., Sorokin, A.N. & Nikolychuk, L.F. — 2005 — Soobshchestva klassa *Festuco-Puccinellietea* Soó ex Vicherek 1973 na territorii Evasii (Communities of the class *Festuco-Puccinellietea* Soó ex Vicherek 1973 on the territory of Eurasia) — Vegetatsiya Rossii 7: 59-75. (in Russian)
- Golub, V.B., Karpov, D.N., Nikolaychuk, L.F., Sorokin, A.N. & Bazhanova, N.B. — 2006 — Conspectus of communities of the class *Festuco-Puccinellietea* Soó ex Vicherek 1973 in the territory of the Commonwealth of Independent States — Biul. Samarskaya Luka 17: 28-51.
- Karpov, D.N. — 2001 — K sintaxonomii rastitel'nosti solontsevistykh stepей Orenburgskoi oblasti (Syntaxonomy of vegetation of solonetz-like steppes of Orenburg Re-
- gion) — In: Chibilyov, A.A. (Ed.). *Bioraznoobrazie i bioresursy Urala i sopredel'nykh territoriy* (Biodiversity and biological resources of the Urals and the adjacent regions). Pp. 108-111. — Gazprom, Orenburg. (in Russian)
- Micevski, K. — 1970 — Nov endemičen sojuz vo vegetatsijsata na Makedonija — *Artemision maritimae* Micevski fed. nov. (New endemic alliance of the vegetation of Macedonia — *Artemision maritimae* Micevski fed. nov.) — Godiš. Zborn. 22: 157-166. (in Macedonian)
- Persson, K. — 1974 — Biosystematic studies in the *Artemisia maritima* complex in Europe — Opera Botanica 35: 1-188.
- Safranova, I.N. — 2010 — O podzonal'noi strukture rastitel'nogo pokrova stepnoi zony v evropeiskoi chasti Rossii (On the subzonal structure of plant cover in the steppe zone of European Russia) — Botanicheskii Zhurnal 95: 1126-1134. (in Russian)
- Shelyag-Sosonko, Yu. R. & Solomakha, V.A. — 1987 — Novi sintaxoni galofil, noī roslinnosti Ukrainsi (New syntaxa of the halophytic vegetation of Ukraine) — Ukrainskii Botanicheskii Zhurnal 44(6): 13-17. (in Ukrainian)
- Weber, H.E., Moravec, J. & Theurillat, J.-P. — 2000 — International Code of Phytosociological Nomenclature. 3rd edition — J. Veg. Sci. 11: 739-768.

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