



## Validation of the names of some associations of antropogenic vegetation of the Southern Urals (Russia)

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### ABSTRACT

In this article, the five associations (*Chenopodio albae*–*Axyridetum amaranthoidis*, *Elytrigio repentis*–*Ambrosietum trifidae*, *Elytrigio repentis*–*Urticetum cannabinae*, *Urtico dioicae*–*Ambrosietum trifidae*, *Bidenti tripartitae*–*Ambrosietum trifidae*) of anthropogenic vegetation of the Southern Urals with dominance of alien plants was validated according to the requirements of the International Code of Phytosociological Nomenclature (4th edition). Previously, these communities were described in the literature as the derivative communities.

**Keywords:** syntaxonomy, phytosociological nomenclature, validation

### РЕЗЮМЕ

Голованов Я.М., Абрамова Л.М. Валидизация некоторых ассоциаций антропогенной растительности Южного Урала (Россия). В статье приводится валидизация пяти ассоциаций (*Chenopodio albae*–*Axyridetum amaranthoidis*, *Elytrigio repentis*–*Ambrosietum trifidae*, *Elytrigio repentis*–*Urticetum cannabinae*, *Urtico dioicae*–*Ambrosietum trifidae*, *Bidenti tripartitae*–*Ambrosietum trifidae*) антропогенной растительности Южного Урала с доминированием чужеродных видов растений согласно требованиям статьи 5 Кодекса фитосоциологической номенклатуры (четвертое издание). Ранее такие ценозы были описаны в литературе в качестве дериватных сообществ.

**Ключевые слова:** синтаксономия, фитосоциологическая номенклатура, валидизация

In Russian syntaxonomic literature, the deductive method of Kopečky–Hejný (Kopečky & Hejný 1974, 1978) was often used to describe communities dominated by alien plants. This method is specifically designed for anthropogenic communities. It is used in the classification of species-poor, seral, and derivative communities. However, such syntaxa were not supported by the International Code of Phytosociological Nomenclature (ICPN) (Theurillat et al. 2021). In this syntaxonomic note, based on the analysis and accumulation of syntaxonomic materials, we validate five associations of anthropogenic vegetation new to the Southern Urals in accordance with the ICPN. Previously, these cenoses were described as derivative communities.

### *Chenopodio albae*–*Axyridetum amaranthoidis* Biktemerova ass. nov.

**Holotypus** – relevé 6 in table 4 on p. 302 in Yamalov & Suyundukova (2008).

The locality of the holotypus of the association is given in the note to table 4 on p. 443. Previously, the cenosis of association was described by G.Ya. Biktemirova (Suyundukova) as a derivative community of *Axyris amaranthoides* [Sisymbrietalia] (Yamalov & Suyundukova 2008). Diagnostic species of the association is *Axyris amaranthoides* (dominant). Ruderal communities of early succession stages with dominance by the alien species *Axyris amaranthoides*. Along with the dominant species, species of classes Sisymbrietea and Artemisietea vulgaris are widely represented in this communities. The communities of the association are distributed in the Trans-Ural region from forest-steppe to steppe zones of the Republic of Bashkortostan and the Orenburg and Chelyabinsk regions.

### *Elytrigio repentis*–*Ambrosietum trifidae* Abramova ass. nov.

**Holotypus** – relevé 5 in table 5 on p. 16 in Abramova (2011).

The locality of the holotypus of the association is given in the note to table 5. Previously, the cenosis of association was described as a derivative community of *Ambrosia trifida* [Agropyretalia] (Abramova 2011). Diagnostic species of the association is *Ambrosia trifida* (dominant). Invasive communities of late succession stages dominated by *Ambrosia trifida*. In the association communities the dominant species is noted together with other species of the order Agropyretalia intermedio-repentis of the class Artemisietea vulgaris. Species of the class Molinio–Arrhenatheretea are common in the communities of association. This cenoses are distributed in the forest-steppe zone of the south of the Republic of Bashkortostan and the Orenburg Region.

### *Elytrigio repentis*–*Urticetum cannabinae* ass. nov.

**Holotypus** – relevé 4 in table 8 on p. 24 in Abramova & Golovanov (2016).

The locality of the holotypus of the association is given in the note to table 8. Previously, the cenosis of association was described as a derivative community of *Urtica cannabina* [Polygono–Artemisietea austriacae], var. *Carduus acanthoides*. Diagnostic species of the association is *Urtica cannabina* (dominant). Invasive communities of late succession stages dominated by *Urtica cannabina*. In the communities of association the dominant species is noted together with other species of the order Agropyretalia intermedio-repentis of the class Artemisietea vulgaris. Communities of the association are occasionally distributed in steppe and forest-steppe zones of the Republic of Bashkortostan and the Orenburg Region.

**Urtico dioicae–Ambrosietum trifidae Abramova ass. nov.**

**Holotypus** – relevé 9 in table 7 on p. 23 in Abramova (2011).

The locality of the holotypus of the association is given in the note to table 6. Previously, the cenosis of association was described as a derivative community of *Ambrosia trifida* [Galio–Urticetea] (Abramova 2011). Diagnostic species of the association is *Ambrosia trifida* (dominant). The co-dominant is *Urtica dioica*. Invasive communities dominated by *Ambrosia trifida* in shady habitats with rich soils. In communities of the association, the dominant species is observed together with plants of the alliances Senecionion fluviatilis and Arction lappae of the class Epilobietea angustifolii. Communities of the association are occasionally distributed along the floodplains of southern rivers of the Republic of Bashkortostan, as well as in the steppe and forest-steppe zones of the Orenburg region.

**Bidenti tripartitae–Ambrosietum trifidae Abramova ass. nov.**

**Holotypus** – relevé 7 in table 7 on p. 18 in Abramova (2011).

The locality of the holotypus of the association is given in the note to table 7. Previously, the cenosis of association was described as a derivative community of *Ambrosia trifida* [Bidentetea] (Abramova 2011). Diagnostic species of the association is *Ambrosia trifida* (dominant). Anthropogenic coastal communities dominated by *Ambrosia trifida* on rich, well-moistened soils. Species of the alliances Bidentetum tripartitae and Chenopodion rubri of the class Bidentetea are widely represented in the communities of the association. *Ambrosia trifida* replaces *Bidens tripartita* in synanthropic communities of the association Bidentetum tripartitae. The communities of the association are distributed mainly within the steppe zone of the Republic of Bashkortostan and the Orenburg Region.

**CONCLUSIONS**

The syntaxonomical system of all validated communities of the anthropogenic vegetation is as follows.

**Class****Order****Alliance****Association**

Sisymbrietea Gutte et Hilbig 1975

Sisymbrietalia sophiae J. Tx. ex Görs 1966

Atriplicion Passarge 1978

Chenopodio albae–Axyridetum  
amaranthoidis Biktemerova **ass. nov.**

Artemisietea vulgaris Lohmeyer et al. in Tx. ex von Rochow 1951

Agropyretalia intermedio-repentis T. Müller et  
Görs 1969

Convolvulo arvensis–Agropyron repentis  
Görs 1967

Elytrigio repentis–Ambrosietum trifidae  
Abramova **ass. nov.**

Elytrigio repentis–Urticetum cannabinae  
**ass. nov.**

Epilobietea angustifolii Tx. et Preising ex von Rochow 1951

Convolvuletalia sepium Tx. ex Moor 1958

Senecionion fluviatilis Tx. ex Moor 1958

Urtico dioicae–Ambrosietum trifidae  
Abramova **ass. nov.**

Bidentetea Tx. et al. ex von Rochow 1951

Bidentetalia Br.-Bl. et Tx. ex Klika et Hadač 1944

Chenopodion rubri (Tx. in Poli et J. Tx. 1960)

Hilbig et Jage 1972

Bidenti tripartitae–Ambrosietum trifidae  
Abramova **ass. nov.**

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