EUPHORBIO VALDEVILOSOCARPAE-INULETUM SALICINAЕ ASS. NOVA PÎNZARU, CANTEMIR & JARDAN (TRIFOLION MEDII T. MÜLLER 1962) IN THE REPUBLIC OF MOLDOVA

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Abstract: The vegetation of the “Peacock” glades in the “Codru” Scientific Reserve, Republic of Moldova, based on 15 relevés has been grouped in a new association Euphorbio valdevisocarpe-Inuletum salicinae Pînzaru, Cantemir et Jardan, ass. nova, h.l., alliance Trifolion medii T. Müller 1962, ord. Origanetalia vulgaris T. Müller 1962, cl. TRIFOLIO-GERANIETEA SANGUINEI T. Müller 1962. The association consists of mesophilic phytocenoses, formed on slightly acidic, typical gray soils, at an altitude of 330-336 m. Hemicryptophytes predominate in the phytocoenoses of this association (74.1%), among the more numerous floristic elements, there are the Eurasian ones (53.7%), followed by the European ones (16.6%) and the Central European ones (6.4%).

Keywords: characteristic species, ecology, Euphorbio valdevisocarpe-Inuletum salicinae ass. nova, range, Republic of Moldova.

Introduction

The vegetation of glades in the Republic of Moldova, for the most part, was studied from a phytosociological point of view, without identifying the plant associations, except for the glades in the arid cliff forests, which consist of phytocoenoses grouped in the association Inulo ensifoliae-Anthericetum ramosi Pînzaru et Coldea 2006 em. Pînzaru 2016, 2017. This article describes a new association – Euphorbio valdevisocarpe-Inuletum salicinae, from the “Peacock” glades of the “Codru” Scientific Reserve. The “Peacock” glades are located on high hills, in the plots 43 and 52, surrounded by sessile oak forests (Quercus petraea) near Stejăreni village, Străşeni district.

Inula salicina L. (Figure 1) is a hemicryptophyte, Eurasian species, (xeromesophilic-) mesophilic (-mesohygrophilic), occurs in riverside meadows, glades and forest clearings, from hilly to mountainous areas, being part of the floristic composition of various associations. The association Agropyro elongatae-Inuletum salicinae Ţerbanescu 1965 (Al. Plantagini salsae-Artemision santonicae Sheleag-Sosonko et Solomakha in Lysenko, Mucina et Iakushenko 2011) [DUBYNA & al. 2019] is found in the meadow vegetation of Ukraine, and the association Violo elatioris-Inuletum salicinae Didier et Royer 1989 (Al. Molinion caeruleae Koch 1926) [BENSETITI & al. 2005] occurs in the hilly meadows of France. In the vegetation of Romania, there are no associations of Inula salicina, but it occurs as an accompanying species in other associations [COLDEA & al. 2012; CHIFU & al. 2014].

The characteristic species Euphorbia valdevisocarpa Arvat et Nyár. [=E. volhynica auct. mold. non Besser ex Racib.] (Figure 2) is a Central European geoelement (endemic), occurring in Romania, the Republic of Moldova and Ukraine (western part). It is
a mesophile and grows in glades, forest edges and sparse forests on hilly terrain [GELTMAN, 1996; SÂRBU & al. 2013]. In the Republic of Moldova, it is rarely found, it has been observed that it is somewhat more common (abundance + coverage from + to 2 and constancy V) in the phytocenoses of *Inula salicina* in the “Peacock” glades.

Materials and methods

The phytosociological research was conducted in June-September, 2020, according to the Braun-Blanquet approach [BRAUN-BLANQUET, 1964]. The area of the relevés was 100 m² [CRISTEA & al. 2004]. Species nomenclature followed PÎNZARU & SÎRBU, 2016. The average annual temperature and precipitation were indicated according to the Atlas of Climate Resources of the Republic of Moldova [NEDEALCOV & al. 2013]. The soils – according to the monograph “The Soils of Moldova” [URSU, 2011].

Results and discussions

The plant communities of *Inula salicina* L. with *Euphorbia valdevillosocarpa* Arvat et Nyár. and other species, in the “Peacock” glades, occur on slightly humic and slightly acidic typical gray soil, at an altitude of 330-336 m. The height of the hills and the slightly acidic soil create favourable conditions for the development of species characteristic of the class MOLINIO-ARRHENATHERETEA Tx. 1937, such as: *Briza media*, *Hypochaeris maculata*, *Ornithogalum pyrenaicum*, *Serratula coronata*, *Serratula tinctoria*, *Silene atropurpurea* etc.
These phytocoenoses have a compact coverage (100%), and a yellowish color predominates in the landscape during the flowering period of the dominant species. 

**Ass. Euphorbio valdevillosocarpae-Inuletum salicinae**

Pinzaru, Cantemir et Jardan, ass. nova, hoc loco

Relevé type hoc loco: Table 1, rel. 6, N 47°05´536´´, E 028°27´242´´ (Figure 3).

Synoptic table hoc loco: Table 1, 15 relevés

The total area of the phytocoenoses of the association described in this article comprises about 2.6 ha.

**Locations:** Altitude: 330-336 m. Relief: Central Moldavian Plateau, on top of flat or slightly sloping hills (5°), with southern exposure. Soil: typical gray, slightly humic, slightly acidic, formed on loamy-clayey rocks. Climate: temperate-continental, the average annual temperature is 10.0-10.5°C, and the average annual precipitation varies between 650 and 700 mm.

**Figure 3.** As. *Euphorbio valdevillosocarpae-Inuletum salicinae* ass. nova (type) – 21 July 2020, Stejăreni village, Strâșeni district.

**Characteristic species:** *Inula salicina*, *Euphorbia valdevillosocarpa*.

**Constant species:** *Centaurea jacea*, *Galium verum*, *Peucedanum cervaria*, *Tanacetum corymbosum*, *Serratula tinctoria*, *Achillea pannonica*, *Iris graminea*, *Filipendula vulgaris*, *Stachys officinalis*, *Briza media*.

**Rare species:** *Ornithogalum pyrenaicum* (= *O. flavescens* Lam.) [Endangered (EN)], included in the Red Book of Moldova (2015), *Serratula coronata* [Endangered (EN)], included in the Red Book of Moldova (2015), *Silene atropurpurea* (= *Viscaria atropurpurea* Griseb.) [Critically Endangered (CR)], included in the Red Book of Moldova (2015), *Asparagus tenuifolius* (Least Concern (LC)) (Legea…1998), *Briza media* [Nearly Threatened (NT)] (Legea…1998), *Doronicum hungaricum* [Vulnerable (VU)], (Legea…1998), *Iris variegata* [Vulnerable (VU)] (Legea…1998), *Luzula campestris* [Nearly Threatened (NT)] (Legea…1998), *Orchis mascula* [Critically Endangered (CR)] (Legea…1998), *Hypochaeris maculata* L. [Vulnerable (VU)] (Legea…1998).

**Structure:** The overall vegetation cover is 100% (Figure 3). Although the plants in these phytocoenoses are of different heights, from creeping to erect plants – about 150 cm tall, only the dominant species *Inula salicina* and *Euphorbia valdevillosocarpa* form a well-defined layer, reaching a height of 70-90 cm, the other species have an insignificant
abundance. The species of small plants (up to ±15 cm tall): *Viola odorata*, *Lysimachia nummularia*, *Melampyrum cristatum*, *Luzula campestris*, *Glechoma hirsuta*, *Fragaria viridis*, *Primula veris*, *Prunella vulgaris* etc., in some places, they have a cover between 5-10%, and the tall species (120-150 cm) have sporadic distribution: *Peucedanum cervaria*, *P. alsaticum*, *Thalictrum lucidum*, *Serratula coronata*, *Cirsium pannonicum*.

Floristic composition. In the 15 studied relevés, 108 species of vascular plants have been identified, and 47 of them are characteristic of coenotaxa of the class TRIFOLIO-GERANII T. Müller 1962, 21 species – cl. MOLINIO-ARRHENATHERETEA Tx. 1937, 11 species – cl. QUERCO-FAGETEA Br.-Bl. et Vlieger in Vlieger 1937, 3 species – cl. CRATAEGO-PRUNETEA Tx. 1962, and 26 species – Variae syntaxa.

The spectrum of life forms includes: hemicryptophytes (H) = 80 species (74.1%), geophytes (G) = 10 species (~9.3%), chamaephytes (Ch) = 4 species (3.7%), nanophanerophytes (Phn) = 4 species (3.7%), therophytes (Th) = 8 species (7.4%), hemitherophytes (TH) = 2 species (1.8%).

In the spectrum of geoelements, the Eurasian ones predominate (Eua) = 58 species (53.7%), followed by the European ones (Eur) = 18 species (16.6%) and Central European (Euc) = 7 species (6.4%), other geoelements are represented by 1 to 4 species.

According to the soil humidity indices, in the phytocoenoses of the given association, there are 56 mesophilic (ms) species (51.7%) and 52 xeromesophilic (xm) species (48.3%), for these reasons, we have included this association in the alliance *Trifolion medii* T. Müller 1962, order *Origanetalia vulgaris* T. Muller 1962.

**Figure 4.** Locations of the ass. *Euphorbio valdevillosocarpae-Inuletum salicinae* in the Republic of Moldova

Territorial protection. The phytocoenoses of the above-mentioned association are protected on the territory of the “Codru” Scientific Reserve.

Conservation value. The plant communities of the highlighted association are of high conservation value; they are rare and include 10 rare, protected species, among them, there are 3 species that are listed in the Red Book of the Republic of Moldova (2015).
Table 1. Ass. Euphorbio valdehillosocarpae-Inuletum salicinae ass. nov.

| Life form | Geoklements | Edafic humidity | Relevé no. | Altitude (m) | Aspect | Slope (°) | General coverage (%) | Surface of relevé | Number of species | Charact. species |
|-----------|-------------|-----------------|------------|--------------|--------|----------|----------------------|------------------|-----------------|----------------|
|           |             |                 |            | 1 2 3 4 5 6 | 7      | 8        | 9 10 11 12 13 14 15 |                  |                 |                |
| H         | Eua         | ms              | Inula salicina | 4 4 4 4 4 4 4 3 4 4 3 4 4 4 4 3 | V      |
| H         | Euc         | ms              | Euphorbia valdehillosocarpa | 1 1 1 1 1 1 2 2 1 1 2 1 1 1 1 | V      |
|           |             |                 |            |              |        |          |                      |                  |                 |                |
| H         | Eua         | ms              | Centaurea jacea | + 1 1 1 1 1 1 1 - 1 1 1 - | V      |
| H         | Eur         | ms              | Achillea pannonica | 1 + + + 1 r + r 1 + 1 + - - + - | IV     |
| H         | Eua         | ms              | Lathyrus pratensis | + + + + + + + - - + - + + + | III    |
| H         | Eur         | ms              | Knautia arvensis | - - - - - - - - - r - - - - | I      |
| H         | Eua         | ms              | Leucanthemum vulgare | - - - - - - r - r - - - - r | I      |
| H         | Eua         | ms              | Trifolium medium | - - - - - - - - - - - - - | I      |
|           |             |                 |            |              |        |          |                      |                  |                 |                |
| H         | Eua         | ms              | Galium verum | + + + + + + + r + + + + + + r + 2 | V      |
| H         | Eua         | ms              | Filipendula vulgaris | r + + + - r r + - l r - + + r | IV     |
| H         | Eua         | ms              | Galatella sedifolia | + + - - - - 1 l - - - 1 l l 1 | III    |
| H         | Eur         | xm              | Trifolium alpestre | - - - + + + r + - r - - r + + | III    |
| H         | Euc         | xm              | Valeriana collina | r - r - - - - - - - r r r - r | II     |
| H         | Eur         | ms              | Lathyrus sylvestris | - - - - - - r - - - - - - - - | I      |
| H         | Eua         | xm              | Medicago falcata | - - - r - r - - r - - r - - r - | I      |
| H         | Eua         | xm              | Origanum vulgare | - - - - - r - - - - - r - - - - | I      |
| H         | Eua         | ms              | Primula veris | - - r - - + - - - - - - - - | I      |
| H         | Euc-M       | xm              | Securigera varia | - - - - + - - - - r - - r - - | I      |
### Euphorbio valdivillosocarpe-inuletum salicinae ass. nova pînaru ...

| H | Eua | ms | Silene vulgaris | - - r - - - - r - - - - - - I |
| H | Circ | xm | Solidago virgaurea | - - - r - - - - - - - - - - I |
| Th | Eua | ms | Vicia hirsuta | - - - - - - r - - - - - I |

**Geranion sanguinei**

| H | Eur | xm | Peucedanum cervaria | r l + + + + - + + r r r - r l V |
| H | Euc | xm | Galium rubioides | - + - - - - - - - r r - - r r r II |
| Th | Eur | xm | Melampyrum cristatum | + - - r r r r + - - - - - r - II |
| G | P-P | B | Iris variegata | - - - - - - - - - r r - r - - I |
| H | Euc | xm | Peucedanum alsaticum | - - - - - r - - - - - - - - - I |
| H | Euc-M | xm | Prunella laciniata | - - - - - - - - - - - - - - + - I |
| H | Med | xm | Silene coronaria | - - - - - - - - - - - - - - - I |
| H | Eua | xm | Trifolium montanum | - - - - - - + - - + - - - - I |
| H | Eua | xm | Veronica spicata | - - - r - - - - - - - - r - I |

**Antherico ramosi-Geranieta sanguinei**

| H | Eua | xm | Tanacetum corybosum | r r r r r r r + r r - r + - + V |
| G | Pont-M | xm | Iris graminea | r r r r r r r - r r - - r r - IV |
| H | P-P | xm | Cirsium pannonicum | - - - - - - - + r r - - r r + II |
| TH | Med | xm | Arabis sagittata | - - - - - - - - r - - r - r I |
| H | Eua | xm | Nepeta nuda | - - r - - - - r - - - - - - I |

**Trifolio-Geranietea**

| H | Eua | ms | Stachys officinalis | + - r r r - - r r - - r r r r r r r r IV |
| H | Circ | xm | Clinopodium vulgare | r - r r - + - + - + r - - r - III |
| H | Pont | xm | Dianthus membranaceus | - - - r r r - r r - - r - r - - r r r III |
| H | Eua | xm | Veronica teucrum | r + r r r r r r r - - - - - - III |
| H | Eua | xm | Campanula glomerata | var. cervicarioides | - - - - - - - - - - - - r r - - r r - II |
| H | Eua | ms | Hypericum perforatum | - - r - - - r r r r r r - - - - r II |
| H | Eua | ms | Vicia cracca | - - r - - + - - r r r r - - - - + II |
| H | Eua | xm | Campanula persicifolia | - - - - - - r - r - - - r - I |
| Region | Code | Species            | Presence | Additional Presence | Common Presence | Rarity | Subclass | Order | Family | Genus | Species |
|--------|------|--------------------|----------|---------------------|----------------|--------|----------|-------|--------|--------|---------|
| Th     | Eur  | Dianthus armeria   | -        | -                   | -              | -      | -        | -     | -      | -      | -       |
| H      | Eua  | Fragaria vesca     | +        | l                   | +              | +      | +        | +     | +      | +      | +       |
| Ch     | Euc-M| Teuerium chamaedrys| -        | -                   | -              | -      | -        | -     | -      | -      | r       |
| H      | Eue  | Vincetoxicum hirundinaria | r  | -                  | r              | -      | -        | -     | -      | -      | -       |
|        |      | **Molinio-Arrhenatheretalia** |      |                     |                |        |          |       |        |        |         |
| H      | Eua  | Serratula tinctoria | +        | +                   | r              | +      | +        | +     | +      | +      | l       |
| H      | Eua  | Briza media        | -        | r                   | -              | +      | -        | r     | r      | r      | r       |
| H      | Eua  | Dactylis glomerata | +        | +                   | +              | r      | -        | -     | -      | -      | -       |
| G      | Euc-M| Ornithogalum pyrenaicum | +      | +                   | r              | -      | +        | +     | -      | -      | -       |
| H      | Eue  | Salvia pratensis   | r        | r                   | r              | r      | -        | -     | -      | -      | -       |
| H      | Eua  | Hypochaeris maculata | r  | -                  | r              | -      | -        | -     | -      | -      | -       |
| H      | Pont | Serratula coronata | -        | -                   | -              | -      | r        | r     | r      | r      | r       |
| H      | Balc | Silene atropurpurea | r        | -                   | r              | r      | -        | -     | -      | -      | r       |
| H      | Euc-Po| Thalictrum lucidum | r        | r                   | -              | r      | +        | +     | -      | -      | -       |
| H      | Eua  | Calamagrostis epigejos | +      | -                   | -              | -      |         |       | +      | +      | -       |
| H      | Eua  | Leontodon hispidus  | -        | -                   | -              | -      | -        | -     | -      | -      | -       |
| H      | Eua  | Lotus corniculatus  | -        | -                   | -              | r      | -        | -     | -      | -      | -       |
| H      | Eue  | Luzula campestris   | -        | -                   | -              | +      | -        | -     | -      | -      | -       |
| Ch     | Eue  | Lysimachia nummularia | r  | -                  | +              | -      | -        | -     | -      | -      | -       |
| H      | Eue  | Plantago media     | -        | -                   | -              | r      | -        | -     | -      | -      | -       |
| H      | Circ | Prunella vulgaris   | -        | -                   | -              | r      | -        | -     | -      | -      | r       |
| H      | Circ | Scutellaria galericulata | -  | -                  | -              | +      | -        | -     | -      | -      | -       |
| H      | Eua  | Stellaria graminea  | -        | -                   | -              | -      | -        | -     | -      | -      | r       |
| H      | Eua  | Veronica longifolia | -        | r                   | -              | -      | -        | -     | -      | -      | r       |
| H      | Eua  | Viola jordanii     | -        | -                   | -              | -      | -        | -     | -      | -      | -       |
| H      | Eua  | Viola pumila        | -        | -                   | -              | -      | +        | +     | -      | -      | -       |
|        |      | **Crataegus-Pruentea s.l.** |      |                     |                |        |          |       |        |        |         |
| Pnh    | Eur  | Crataegus monogyna  | r        | -                   | r              | -      | r        | r     | r      | r      | +       |
| Pnh    | Eur  | Rosa canina        | -        | r                   | -              | -      | r        | -     | -      | -      | -       |

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| Phn | Eu | xm | Dominant Species | V1 | V2 | V3 | V4 |
|-----|----|----|-----------------|----|----|----|----|
| **Phn** | Phn | **Eu** | **xm** | **Prunus spinosa** | - | - | - | - | + | - | r | - | - | - | - | - | 1 |
| G | Pont | x | Carex brevicolli | - | - | + | - | + | - | r | r | r | r | - | - | - | - | - | - | III |
| G | Pont | M | Asparagus tenuifolius | - | - | r | r | - | - | - | r | - | - | r | r | - | - | - | - | - | - | - | II |
| H | Eu | ms | Ranunculus auricomus | - | - | r | r | - | - | r | - | - | r | r | - | - | - | - | - | - | II |
| H | Med | xm | Viola odorata | r | - | r | + | - | r | - | - | - | - | - | - | - | - | - | - | - | - | II |
| G | P-P-B | m | Doronicum hungaricum | - | r | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | I |
| H | Pont | M | Glechoma hirsuta | - | - | + | - | - | - | - | + | - | - | - | - | - | - | - | - | - | - | I |
| H | Eu | xs | Brachypodium sylvaticum | - | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| H | Eu | ms | Hypericum hirsutum | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| H | Euc | xm | Lathyrus niger | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| G | Eur | ms | Orchis mascula | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| Phn | Eur | x | Pyrus pyraster | - | + | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | I |

**Varias syntaxas**

| G | Eu | m | Elymus repens | 1 | 1 | 1 | + | - | 1 | - | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | IV |
| H | Eu | xm | Festuca valesiaca | + | - | - | + | + | - | 1 | - | + | - | - | - | - | + | + | - | - | - | - | III |
| Ch | Eu | x | Artemisia austriaca | + | + | r | r | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | II |
| H | Eu | x | Euphorbia virgata | - | - | - | - | - | - | + | - | - | - | - | + | - | - | - | - | - | - | - | + | II |
| H | Eur | ms | Ajuga reptans | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | r | - | I |
| G | Eu | m | Allium oleraceum | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | r | - | - | I |
| Th | Eur | x | Alyssum alyssoides | - | - | - | - | - | r | - | - | - | - | - | - | - | r | - | - | - | - | - | - | I |
| H | Eu | x | Artemisia pontica | - | - | - | - | - | - | - | - | r | r | - | - | - | - | - | - | - | - | - | - | I |
| H | Eu | x | Bromus inermis | - | - | - | - | - | - | - | - | + | - | - | - | - | - | r | - | - | - | - | r | - | I |
| Th | Eu | x | Buglossoides arvensis | - | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| H | Eu | ms | Carex polyphylla | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | r | - | - | - | - | I |
| G | Eu | x | Carex praecox | - | - | - | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| Th | Adv | ms | Eriogonum annuum | - | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | I |
| H | Euc | x | Koeleria pyramidata | - | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | I |
| H | Eu | ms | Linaria vulgaris | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | + | I |
| H | Eua | ms | Phleum phleoides | - | - | - | - | - | + | - | r | - | - | - | - | - | - | - | - | - | - | 1 |
| H | Eua | xm | Pilosella bauchinii | - | - | - | - | - | + | - | r | - | - | - | - | - | - | - | - | - | r | 1 |
| H | Eua | xm | Poa angustifolia | - | - | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| H | Eur | xm | Polygala comosa | - | - | - | - | + | - | - | - | - | - | - | - | - | + | - | - | - | - | - | - | - | 1 |
| H | Eua | xm | Potentilla argentea | - | - | - | - | - | - | - | - | - | - | - | - | - | r | - | - | - | - | - | - | - | 1 |
| H | Eua | xm | Poentilla recta | - | - | - | - | - | + | - | - | - | - | - | - | - | + | - | - | - | - | - | - | - | 1 |
| H | Eua | ms | Tanacetum vulgare | - | - | - | - | - | - | - | r | + | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Ch | Eua | xm | Thymus pannonicus | - | - | - | - | - | r | - | r | - | - | - | - | - | - | - | - | - | - | - | 1 |
| TH | Euc-M | ms | Tragopogon dubius var. marschallianus | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Th | Eur | ms | Valerianella locusta | - | - | - | - | - | - | r | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Th | Med | ms | Trifolium campestre | - | - | - | - | - | - | + | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |

Place and date of the relevés: 1-3, glade no. 1, plot no. 52, Stejăreni village, Strâşeni district, 10.VI.2020, 21.VII.2020, 11.IX.2020; 4-12 (*6 -typus), glade no. 2, plot no. 43, Stejăreni village, Strâşeni district, 10.VI.2020, 21.VII.2020, 11.IX.2020; 13-15, glade no. 3, polt no. 43, Stejăreni village, Strâşeni district, 10.VI.2020, 21.VII.2020, 11.IX.2020.
Conclusions

The association *Euphorbio valdevillosocarpae-Inuletum salicinae* Pinzaru, Cantemir et Jardan ass. nova includes plant communities of hemicryptophytes (74.1%), mesophytes and xeromeshyphates, formed on high hills (330-336 m altitude), on slightly acidic, typical gray soils.

In the floristic composition, the Eurasian elements predominate (53.7%), followed by the European (16.6%) and Central-European ones (6.4%). The differential species *Euphorbia valdevillosocarpa* Arvat et Nyár. is a Central European geoelement (endemic), therefore the association can also be considered Central European (Eastern).

The association *Euphorbio valdevillosocarpae-Inuletum salicinae* Pinzaru, Cantemir et Jardan ass. nova has been included in the alliance *Trifolion medii* T. Müller 1962, order *Origanetalia vulgaris* T. Müller 1962, class TRIFOLIO-GERANIETEA SANGUINEI T. Müller 1962.

It has been proposed to include the association *Euphorbio valdevillosocarpae-Inuletum salicinae* in the List of Rare Plant Associations of the Republic of Moldova, with high conservation value.

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