

**A NEW ASSOCIATION *PHRAGMITO AUSTRALIS-AMORPHETUM FRUTICOSAE*
ASS. NOVA PROV. ON THE SOUTH OF UKRAINE**

Tetyana P. Dziuba¹, Ruslana P. Melnik², Myroslav V. Shevera¹

*M.G. Kholodny Institute of Botany, National Academy of Sciences of Ukraine,
Tereshchenkivska St., 2, 01601 Kyiv, Ukraine, e-mail: eeobot'S-ukr. net, shevertra.mail.rii*
*Biology Department, Mykolayiv State University,
Nikolska Sir., 24, Mykolayiv, 540, Ukraine,
e-mail: melruslana(a)vandex. ru*

The alien invasive species *Amorpha fruticosa* is actively spreading nowadays in the South of Ukraine within the limits of the Steppe zone. It forms mainly floodplain plant communities. In the course of years after its introduction, this species became capable of creation of associations and subassociations, being promoted by anthropogenic influence. Our recent geobotanical researches made possible to distinguish the new association *Phragmito australis-Amorphetum fruticosae* ass. nova prov. and two subassociations with participation of this species. They belong to alliance *Rubo caesii-Amorphion fruticosae* Shevchyk et V. Solomakha 1996 and order *Salicetalia purpureae* Moor 1958 of class *Salicetea purpureae* Moor 1958.

The association *Phragmito australis-Amorphetum fruticosae* occupies the, ridges near beds of rivers and periodically flooded territories on boggy, meadow-bog clayey and sandy soils. Its range is now confined to the Steppe zone. The diagnostic species of the association are *Amorpha fruticosa* and *Phragmites australis*. Density of the shrub layer is 0.6-1.0, its height - 2.5-2.8 (4) m. The layer is formed by *Amorpha fruticosa* with participation of *Elaeagnus angustifolia*, *Salix alba* and *Populus nigra*. The herb layer is dense, with coverage from 40-50% to 60-70%. The herb layer is formed by *Phragmites australis* (5 to 25%) with participation of *Conyza canadensis* (up to 10%), *Poa angustifolia* (to 10%), *Ambrosia artemisiifolia* (to 10%), *Xanthium strumarium* (to 10%), which have a high degree of constancy.

Floristically these communities are poor. The coenoflora of the association consists of 112 species of vascular plants (from 4-8 to 27-32 species in some communities). The representatives of disturbed ecotopes of classes *Stellarietea mediae* and *Artemisietea vulgaris* predominate. The species of zonal vegetation also take part in the coenoflora of *Phragmito australis-Amorphetum fruticosae*. Among them are *Verbascum chaixii* subsp. *austriacum*, *Medicago falcata* (cl. *Festuco-Brometea*), *Atriplex tatarica*, *A. prostrata* (cl. *Cakiletea maritimae*), *Eryngium maritimum*, *Leymus racemosus* subsp. *sabulosus* (cl. *Ammophiletea*), *Jacobaea borysthena* (*Senecio borysthenicus*, cl. *Festucetea vaginatae*), *Achillea asplenifolia* (*Festuco-Puccinellietea*) etc.

The extension of areas occupied by communities with *Amorpha fruticosa* is a result of its considerable ecological amplitude. The necessity of monitoring this plant communities and measures for limitation of *Amorpha fruticosa* expansion in natural phytocoenoses is obviously the task for the future.