Object of our research - a pine forest near to railway station Maljutinka (region of Vasilkov town). On its edges and in the form of a underbrush there are deciduous breeds: *Quercus robur L, Sorbin aucuparia* L., *Padus avium* Mill., *Mains domestica* Borh., *Pints communis* L., etc.

But last years more and more these species are replaced with the following, aggressive enough: Padus serotina (Ehrh.) Ag., Robinia pseudoacacia L., Acer negundo L. The grassy cover has strongly suffered also: have disappeared Pulsatilla latifolia Rupr., Lycopodium clavatum L. Disappear Anlhericum ramosum L., Polygonatum multiflorum (L.) All. Under threat of disappearance Convalaria majalis L. instead of them on spontaneous garbage dumps in forests and about them monoprepotent thrickets invasive species increase: Helianlhus tuberosus L., Solidago canadensis L., S. giganlea L., Echinocystis lobata (Michx.) Torr. et Gray, etc. Thus the tendency of degradation and decrease a biodiversity was outlined in forests in of Kiev suburbs.

LEVEL OF INVASION ACROSS HABITATS OF SLOVAKIA

Jana Medvecka. Ivan Jarolimek

Institute of Botany, Slovak Academy of Sciences,
Diibravska cesla 9, 845 23, Slovakia,
e-mails: jana.medvecka(3)savba.sk, ivan.iarolimek'aisavba.sk

Level of invasion, i.e. proportion of allochthonous species, across habitats from lowlands to alpine belt was analysed using the geographically stratified database from the Slovak Republic, consisting of 18 872 phytocoenologica! releves. The releves were divided into 39 habitat types, based on the EUNIS classification (http://eunis.eea.europa.euAiabitats.jsp). The data set contained 142 (6.7%) neophytes and 217 (10.3%) archeophytes. One half (50.05%) of the releves contained at least one alien species. Non-native species, in average, represented 11.16% of the total number of species per releve.

Highest proportion of archeophytes (over 50%) contained anthropogenic herb stands of annual species and vegetation of arable lands. Trampled habitats, anthropogenic herb stands of perennials and seminatural and ruderal mesophilous fringes contained up to 25% of archeophytes. Neophytes were most represented in the anthropogenic herb stands of annual species, highly artificial broadleaved deciduous forests, seminatural and ruderal mesophilous fringes and trampled habitats.

On the contrary, the least invaded were bogs, mires, subalpine and alpine shrubs and grasslands, and some types of forest vegetation, especially broadleaved swamp woodlands on acid peat and boreal bog conifer woodlands.

APOPHYTIZATION OF THE MYKOLAYIV URBAN FLORA

Ruslana P. Melnik

Mykolayiv State University, Biology Department, NikolskaSir., 24, Mykolayiv540.Ukraine, e-mail: melruslanuialwndex.ni

Anthropogenization of natural landscape, in particular industrial form of manage are a powerful factor of change of cover within the limits of city and suburban areas. In the process

of building of the city, the landscape of his territory changes most. Exactly the urbanized landscape is the main factor which determines the structure and features of the city flora.

The urban flora of Mykolayiv is consisting of 909 species of vascular plants containing 338 apophytes: 145 hemiapophytes, 99 evantapophytes and 94 evapophytes. The index of apophytization reflects the level of conversion of aborigenophyte plants from indigenophytes into anthropogenic ecotopes. Compared with other cities in southern Ukraine. Mykolayiv has the largest index of apophytization (IAp = 37.2) of its urban flora in general. The index apophytization native element (IAps = 50.1) yields only to 0.2 Kherson (IAps = 50.3), indicating a major role in the apophytization process in synanthropization of the flora compared with other cities. For the urban flora of Mykolayiv, unlike other towns, tended apophytization prevails over antropophytization in the process synanthropization of flora. Taking into account that all cities are taken by us for comparison they are in the forest area (Warsaw, Krakow, Uzhgorod), but Mukolayiv is in the steppe and we can talk about different synanthropization strategies of flora. Synanthropisation of the flora in cities located in the forest area is mainly due to alien species, while in the steppe is mainly due to apophytes.

Apophytes bring in a considerably contribution to the process synantropization flora compared with alien species. In the process of apophytization of the flora of Mikolayiv, the large part is played by psammophytes and titorantes. In our opinion, this is because the city is located in the deltas of two great rivers (the Southern Bugh and the Ingul). in particular, first as sinantropic species are marked by us such psammophytes as Achillea micrantha Willd., Astragalus varius S.G. Gmel., Carex ligerica J.Gay, Cenlaurea borysthenica Grun., Helichrysum arenarium (L.) Moench, Senecio borysthenicus (DC.) Andrz.; Tragopogon borysthenicus Artemcz. and others. Most psammophytes are obligate weeds which meet mainly on sandy and subsandy anthropogenic substrates (sandy embankments of railways, sandy inwash, construction sites). Among litorantes in Mikolayiv discovered Astrodaucus Httoralis (Bieb.) Drude, Crambe pontica Stev. ex Rupr., Lagedium lataricum (L.) Sojak, Leymus sabulosus (Bieb.) Tzvel., Salsola kali subs, pontica (Pall.) Mosyakia Trachomitum sarmatiense Woodson and others. Most litorantes get to the city in the rail.

NOTES ON TAXONOMY AND ECO-COENOLOGY OF STELLARIA PALLIDA IN THE TOWN OF KOSICE (EASTERN SLOVAKIA)

Vlastimil Mikolas

Hanojska 4, SK-04013 Kosice, Slovakia, e-mail: <u>dolomiiicolalai.gmail.com</u>

Stellaria pallida [Dumort.]Crep. is a member of Stellaria media agg. This species is a spring ephemerophyte with occurrence in warm regions of central, western, eastern Europe and in southern Europe. The species was studied in some localities found by the author in Kosice town in eastern Slovakia.

Taxonomically, very different populations were discovered. In a greater part of populations, plants had no petals at all, however, populations with petals reaching 2/3 to 4/5 of length of sepals were also found. These populations are require another analyses. Anthers are firstly yellowish white, later reddish brown with black margins and after rupturing of anthers grayish black. Their number is usually 2-3, however in a single population plants with up to 5-6 anthers were discovered. Again these plants call for another research. Stigmas with styles are 1-1.5-[2.5] mm long, usually. 3 styles are frequently [however not always] curved down. Plants are typically yellow-green coloured.

Eco-coenologically, *Stellaria pallida* grows on dry, sunny, sandy habitats, with only partial coverage, because little plants of the species are only poor competitors. Frequently