

AUTECOLOGICAL FEATURES OF VARIETIES *LOLIUM PERENNE* L.
OF DOMESTIC BREEDING

O. Leshchenko

Reviewed ecological and biological characteristics of plant varieties of Lolium perenne L. of Ukrainian breeding. Definitely the most promising varieties of domestic breeding for creating lawns. The results of the studies found that varieties Andriana-80, Leta and Lytvynivskyy-1 are the best for used as basic components for grass mixtures, varieties Sviatoshynskiy and Orion – for sowing during the repairing of lawn coverage.

Lolium perenne L., the lawn kulturfitotsenoz, variety, grass mixture

Pasture cover embellishment of any of landscape composition, their popularity in gardening populated areas around the world is growing every year. Examples of use in landscaping turf surfaces are known several millennia - descriptions Chinese imperial park Cheu (hundreds of years BC), villas in Tuscany Pliny the Younger (62 - 114 years. BC) and others [2].

By creating a quality kulturfitotsenozu should involve adapted to our climate plants, but in Ukraine there is a fashion pasture grass mixtures foreign selection, which for a short period of time lose their decorative and vitality. *L. perenne* L. is one of the most important crops for feed as well as for lawn business in temperate regions of the world [9]. In the case of a lawn for various purposes in Ukraine using only 27% of the available range of forage grasses [8], so the creation of turf surfaces with grades of domestic selection is important.

The purpose of research - autekolohichna rating grades *L. perenne* L. Ukrainian selection.

Materials and methods research. The objects of research served *L. perenne* L. varieties Ukrainian selection: Adrian, 80, Lytvynivskyy-1, summer, Orion, Svyatoshynskiy. The research (field and laboratory) carried out in 2008-2012. At the

NSC "Institute of Agriculture" NAAS Ukraine. Laboratory studies were performed in the department of plant breeding and seed production of forage crops, field - research in the fields of NSC "Institute of Agriculture" NAAS Ukraine.

Assessment sowing qualities of seeds (weight of 1000 pcs., Germination energy, germination) five grades L. perenne L. conducted in accordance with GOST 12038-84. Seeds in the amount of 100 pieces. each variety were sown in Petri dishes on two layers of moistened filter paper and germinated at a temperature of + 20 °C.

In the field seeding five grades L. perenne L. conducted a special drill NWT-3.6 in four versions with different rate of sowing in triplicate.

Standard rules seeding served during laying seed crops [7]. Standard rules seeding diploid (Adrian, 80, Lytvynivskyy-1, summer, Orion) and tetraploid (Svyatoshinsky) grades were 20 and 30 g per 1 m² respectively, continue seeding rate increased 2-4 times in order to analyze the state of dependence turf from sowing density per unit area. Area of research areas amounted to 10.5 m².

Evaluating the overall decorative turf coverage carried by the degree of closing ground vegetative organs of plants and identified a five-point scale (AA Laptev, 1983) [6].

Analysis destruction of vegetation brown rust performed on a scale E.E.Heshele [4] with modifications: the research area of 10.5 m² plots diagonally singled to 4 area 0.2 m² each.

Conclusions

1. The results of the research established that L. perenne L. varieties Ukrainian selection Andrian-80, Lytvynivskyy-1, summer, Orion, Svyatoshinskiy the absolute weight of 1000 grains vidselektovani well. On the basis of "seed germination" all varieties have high seed germination.

2. Assessment of vigor seed varieties 5 L. perenne L. indicates that the total seed germination was high and ranged from 93-95%.

3. Decorative monovydyovoyi turf grades 5 L. perenne L. in the first two years of growth was high (5 points) gradually decreased and the quality of the third or fifth years of cultivation placement shoots transformed from a close-diffuse to the single-separate varieties Lytvynivskyy-1 and Orion Shtvchenkovskiy.

4. On the basis of the research can be recommended varieties Andrian-80 as the most stable and summer to brown rust lesions.

5. We determined that L. perenne L. varieties Ukrainian selection suitable for creating high-quality lawn and they can be placed on the following sequence: Adrian, 80, summer, Lytvynivskyy-1 and Orion Shtvchenkovskiy.

Список літератури

1. Браун Д. Методы исследования и учета растительности / Д. Браун ; под ред. Т.А. Работнова ; [пер. с англ. Т.Л. Челобановой]. – М. : Изд-во иностр. лит-ры., 1957. – 316 с.

2. Головач А. Г. Газоны, их устройство и содержание / А. Г. Головач. – М.–Л.: Изд-во Академии Наук СССР, 1955 – 336 с.

3. Гриник О. М. Екологічна характеристика газонотвірних трав'яних рослин паркової зони Львова / О.М. Гриник, Н.Є. Горбенко // Науковий вісник НЛТУ України : зб. наук.-техн. праць. – Львів : РВВ НЛТУ України. – 2011. – Вип. 21.9. – С. 58-65.

4. Довідник по виробництву насіння багаторічних трав / [Зінченко Б. С., Дробець П. Т., Мацьків О. І. та ін.]; під ред. Б. С. Зінченка. – К. : Урожай, 1990. – 232 с.

5. Иванов А. Ф Кормопроизводство / А. Ф. Иванов, В. Н. Чурзин, В. И Филин. – М. : Колос, 1996. – 400 с.

6. Лаптев А. А. Газоны / А. А. Лаптев. – К. : Наук. думка, 1955 – 176 с.

7. Методические указания по селекции многолетних трав. – М. : Всесоюзный НИИ кормов, 1985. – 188 с.

8. Шкура О. В. Насінна продуктивність високодекоративних газонних трав родини Poaceae залежно від технології вирощування в Правобережному Поліссі України : автореф. дис. на здобуття наук. ступеня канд. с-г. наук : спец. 06.01.09 «Рослинництво» / О. В. Шкура. – К., 2010. – 22 с.

9. The genome and transcriptome of perennial ryegrass mitochondria [Електронний ресурс] / Md Shofiqul Islam, Bruno Studer, Stephen L Byrne, Jacqueline D Farrell, Frank Panitz, Christian Bendixen, Ian Max Møller and Torben

Asp. - Islam et al. BMC Genomics 2013, 14:202. – Режим доступа до журн. :
<http://www.biomedcentral.com/1471-2164/14/202>