

## Resume

**Kosolapov V. M.** Development strategy of breeding and seed production of forage crops // Feeds and Feed Production. – 2010. – Issue 67. – P. 3–7.

The development strategy of breeding and seed production of forage crops demands the development of the adaptive phytocenotic, edaphic, symbiotic, ecotypic selection of forage plants based on ecological and evolutionary biogeocenotic principles. General purpose is to create a system of climatically and environmentally differentiated, adapted to different conditions, economically specialized, highly resistant to pathogens, environmental stresses, with increased symbiotic activity.

**Mykhaylov V. G., Scherbyna E. Z.** Inheritance of length and quantity of inflorescence flowers in soybean hybrids // Feeds and Feed Production. – 2010. – Issue. 67. – P. 8–12.

Soybean forms with quantity of flowers in a cluster up to 43 and with the length up to 15,6 cm caused by the genotype are singled out. These forms are more productive, taller and later-ripening in comparison with varieties and selection numbers with a usual flower cluster.

Incomplete domination of inflorescence length is marked in hybrids of the first generation; in different combinations of crossing super domination, incomplete domination of the greater and smaller quantity of colors is marked.

In hybrids of the second generation traits of smaller length of inflorescence and smaller quantity of flowers are dominant.

**Falatyuk L. V.** Correlative relation between yields and sugar content of sugar beet pollinators // Feeds and Feed Production. – 2010. – Issue 67. – P. 13–17.

In this article correlative analysis of the relation between yields and sugar content of two populations of sugar beet pollinator of Uladovka selection U752 – high-yield and KM2 – sugar directions of selection is conducted. It is established that yield characteristics and sugar content, which were typical for two populations and their groups of selection, are changing. In generated groups the factors of correlation between the weight of root crops and sugar content were in comparison with initial population towards reduction of correlation force. Results of the analysis can be used in selection and estimation of hybrid components to join in one genotype some economically valuable traits.

**Alekseenko N. V., Melnychuk T. N., Kameneva I. A., Andronov E. E.** The formation of epiphyte of chickpea seed under the action of microbial preparations // Feeds and Feed Production. – 2010. – Issue 67. – P. 18–23.

The ability of antifungal strains *Bacillus* sp. 01-1 and *Bacillus* sp. 12501 to be kept on the chickpea seed and prevail in composition of epiphytic microflora during six months that has positive influence on its sowing properties has been established in laboratory experiments using microbiological and genetic methods.

**Trofimov I. A., Trofimova L. S., Yakovleva E. P.** Forage production in the development of Russian agriculture // Feeds and Feed Production. – 2010. – Issue 67. – P. 24–29.

Forage production unites and binds in a single system all branches of agriculture and gives huge advantages to their development. It gives fodder to livestock, productivity of all crops to plant cultivation, soil fertility to agriculture, productivity and sustainability to agricultural lands. It also provides the effective management of agricultural lands and environmental management, supports proper balance in agricultural industry.

**Kvytko H. P., Hetman H. Y., Tsytsyura Y. H., Tsytsyura T. V.** Prospects of growing and feeding value of oil radish in the right-bank Forest-Steppe of Ukraine // Feeds and Feed Production. – 2010. – Issue. 67. – P. 29–38.

Feeding value of oil radish and the prospects of its growing from the point of view of its advantages over other feeding crops of cabbage group is considered. Main problems of technology of this crop growing with the purpose of increasing of its seeding and feeding productivity is determined.

**Artemenko S. F.** Soybean as an alternative predecessor of maize for silage under winter wheat // Feeds and Feed Production. – 2010. – Issue. 67. – P. 39–44.

Results of researches on the influence of traditional ploughing and deep tillage for different predecessors including soybean on the formation of grain productivity of winter wheat are presented.

**Kaminsky V. F., Mosyondz N. P.** Formation of soybean productivity depending on agrotechnical measures in conditions of the northern Forest-Steppe of Ukraine // Feeds and Feed Production. – 2010. – Issue 67. – P. 45–50.

Result of researchers on the study of the dependence of soybean produc-

tivity on the fertilization system, seed inoculation and sowing methods in conditions of the northern Forest-Steppe of Ukraine are stated.

**Onychko V. I.** Influence of variety traits and agrotechnical measures on fodder bean grain productivity in conditions of the north-east Forest-Steppe of Ukraine // Feeds and Feed Production. – 2010. – Issue 67. – P. 51–58.

The influence of soil tillage, presowing seed treatment, variety traits and different dozes of mineral fertilizers on productivity and quality of fodder bean grain is established. It is determined that replacement of soil tillage from plowing into non-plowing results in reduction of fodder bean grain yield. More effective doze of fertilizers at cultivation of fodder beans on typical low humus fertile black soils is  $N_{45}P_{60}K_{60}$  that allows to receive additionally up to 0,65 t/ha of grain.

**Golodnaya A. V., Nychyporuk V. V.** Vegetation period and productivity of feed lupine depending on sowing term and hydrothermal conditions in the western Polissya // Feeds and Feed Production. – 2010. – Issue 67. – P. 59–63.

The results of researches that testify that in conditions of the western Polissya, it is necessary to sow blue and white lupine besides yellow one are given. The beginning of sowing of early grain crops was optimum sowing term for the studied lupine species.

**Petrychenko V. F., Movchan K. I.** Influence of the sowing method and plant density on the individual productivity of bean plants // Feeds and Feed Production. – 2010. – Issue. 67. – P. 64–69.

The dependence of bean seed formation under the influence of sowing method and plant density per unit of area in conditions of the right-bank Forest-Steppe of Ukraine is determined.

**Poysha L. A., Adamovytych A. M.** Assessment of productivity and quality of winter wheat (*triticum aestivum L.*) and winter triticale (*triticosecale wittm*) // Feeds and Feed Production. – 2010. – Issue 67. – P. 70–75.

In Latvia cereals are used as livestock feed and raw materials for the food industry. Objective: to evaluate the efficiency, quality and yield of ethanol in the varieties of winter wheat and winter triticale. Three varieties of winter wheat (*Triticum aestivum L.*) and winter triticale (*Triticosecale Wittm*) in the test were studied with two standards of nitrogen fertilizer ( $N_{100}$  ( $1970 + 30$ )  $kg\ ha^{-1}$ ,  $N_{140}$  ( $70 + 70$ )  $kg\ ha^{-1}$ ). In winter triticale large fluctuations in crop yields within a va-

riety depending on the rate of nitrogen fertilizer than wheat were observed. Speed of fermentation and the theoretical yield of ethanol varied considerably depending on the crop year and the rules of the nitrogen fertilizer.

**Komlaeva L. I., Adamovych A. M., Poysha L. A.** Seed yield and oil content in Latvian varieties of flax(*linum usitatissimum l.*) // Feeds and Feed Production. – 2010. – Issue. 67. – P. 76–81.

Flax is a crop that can be completely used not only for fibers and seed but for other purposes. In Latvia fibrous flax was cultivated but nowadays oil flax is more extensively cultivated for oil production and oilcake is used for animal feeding. Most areas of flax cultivation are in Lathalia, eastern part of Latvia that has better conditions for its cultivation. 92 samples of fibrous flax and 8 samples of oil flax with different qualitative and quantitative traits have been investigated. As a result the best varieties and lines of fibrous and oil flax that can be used to get high quality seed and oil have been determined.

**Materynsky P. V.** Agrotechnical value of grain-leguminous cultures in short crop rotations // Feeds and Feed Production. – 2010. – Issue 67. – P. 82–87.

Agrotechnical value of grain-leguminous cultures in efficiency increase of short crop rotations and improvement of indicators of soil fertility is proved.

**Petrychenko V. F., Borona V. P., Zadorozhny V. S., Kolisnyk S. I.** Peculiarities of weed control in soybean sowings under no-till technology // Feeds and Feed Production. – 2010. – Issue. 67. – P. 88–93.

Modern state and prospects of soybean cultivation under no-till technology is elucidated. Peculiarities of the system of weed control in soybean sowings under this technology are characterized.

**Zhadorozhny V. S., Movchan I. V.** Weed control in sowings of maize for grain // Feeds and Feed Production. – 2010. – Issue. 67. – P. 94–100.

Results on the study of the dynamics of weed germination and harm of the most widespread species are presented and chemical methods of their control in sowings of maize for grain are developed. It is determined that adding of adjuvants to workings solutions provides norm reduction without efficiency decrease.

**Okrushko S. E.** Research of herbicide influence on the weeded fields and sunflower productivity // Feeds and Feed Production. – 2010. – Issue 67. – P. 106–111.

The comparative description represents the influence of the number of herbicides on weeds control in sunflower crops. It is established that, in comparison with agro control, chemical methods decrease weed number and provide higher productivity sunflower seeds and is more cost effective.

**Solonenko V. I.** Invasion of *Grindelia squarrosa* (Pursh) Dun. in Vinnytsia region // Feeds and Feed Production. – 2010. – Issue 67. – P. 112–119.

The history of penetration and distribution of *G. squarrosa* in Ukraine is analyzed, botanical description of the species and varieties is represented, ecological adaptation of plants to natural conditions of Ukraine is shown. The fact of penetration of *G. squarrosa* in Vinnytsya region is fixed, its role in composition of phytocenosis is analysed, chemical composition, useful properties and prospects of species existence are considered.

**Havrylyuk M. M., Petrychenko V. F., Kurhak V. H.** The state and main trends of researches on the grassland science in Ukraine // Feeds and Feed Production. – 2010. – Issue. 67 – P. 120–127.

The generalization of grassland science branch in Ukraine, the role of meadow lands as a source of biomass of different purpose is adduced specifically for the cheap grass fodder and biofuel production, in soil protection from erosion and water sources from pollution and siltation, in diversity preservation and so forth. The main results and modern research trends in grassland science as well as measures that must be conducted for the improvement of investigation state and introduction of developments into agricultural production are shown.

**Birukovich A. L., Meerovsky A. S., Pastushok R. T.** Basic approaches of the development of meadow forage production in Belarus // Feeds and Feed Production. – 2010. – Issue. 67 – P. 128–134.

The basic approaches of the development meadow forage production in Belarus and results of scientific researches are presented.

**Kulakovskaya T., Kurhak V., Adamovitch A.** Main trends of researches and ecological aspects of the grassland farming development in Europe // Feeds and Feed Production. – 2010. – Issue. 67. – P. 135–142.

The generalization of modern research trends on the grassland science that are based on the systemic approach in the field of management on meadows and pastures, the diversity of soil-climatic conditions and meadow plants are given. They permitted to optimize the grassland farming development in Europe. Meadows and pastures in Europe being traditionally feed sources today also fulfill new functions of stabilizer of the ecological conditions and additional source of amended energy resources that causes new questions, problems and tendencies in the grassland farming development for the solution and development of which an integration of scientists and practical specialists is carried out when conducting research.

**Vorobel M., Veklenko Y.** Forage production in Slovakia and Ukraine: adaptive approach - from intensification to ecologization // Feeds and Feed Production. – 2010. – Issue. 67. – P. 143–149.

The modern state of forage production in two neighboring countries - Slovakia and Ukraine is reflected, the reasons of negative influence on its development of the technocratic approach to nature management intensification in the past are analyzed, and the priority of application of principles of adaptive forage production in the future as a strategic approach of agriculture in a global scale is proved.

**Adamovich A., Gutmane I.** Productivity and photosynthesis characteristics of *festulolium* and *lolium boucheanum* sward // Feeds and Feed Production. – 2010. – Issue. 67. – P. 150–158.

The productivity of grasslands and pastures mostly depends on cultivated grass varieties. Festulolium hybrids are among the most persistent and productive grasses of the grasses used in many Europe countries, especially in adverse environments. The aim of present research were to study photosynthesis activity and crop yield of Festulolium and Lolium boucheanum ryegrass foreign varieties under agro-ecological conditions of Latvia. Field trials were established on the loam sod – podzolic soil and fertilized with  $N_{120}$  ( $40+40+40$ )  $P_{78}$ ,  $K_{90}$   $kg/ha^{-1}$ . The productivity of photosynthesis and biomass were dependent on the variety. The relationship between net photosynthesis productivity value, leaf area index and DM production was confirmed.

**Husev M. H., Voytashenko D. P.** Agrotechnical measures of forage agrocenosis productivity increase on the irrigated areas of the south region of Ukraine // Feeds and Feed Production. – 2010. – Issue. 67. – P. 159–165.

Results of field forage production intensification in the Steppe zone of the south of Ukraine in conditions of irrigation are stated in the article. Efficiency of application of intercrop sowings in forage crop rotations for conveyer supply of forages of necessary quality is shown.

**Zheltova A. H., Halchenko H. M.** Influence of global warming on the formation of high productive agrocenosis in the southern Steppe // Feeds and Feed Production. – 2010. – Issue. 67. – P. 166–172.

Influence of global warming on the productivity of meadow agroecosystems is illuminated in article. Grassing of lands withdrawn from cultivation should be made by perennial beans and cereal grasses of new generation that are the most resistant to extreme weather conditions of the Steppe zone.

**Mospan A. M., Chepur S. S.** Effective use of sown legume-cereal grasses as an important means resource replenishment of fodder protein in animal feeding // Feeds and Feed Production. – 2010. – Issue. 67. – P. 173–177.

The dynamics of fodder protein content changeability in fodders of plant communities from the sown meadows of mountainous-forest belt of the Carpathians is elucidated. Its dependence on the phases of plant development and their fertilization is shown.

**Zhukov V. P., Kulyk M. F., Kostetska U. V.** Peculiarities of ensilage of beans and cereal grasses with preservative «Glaukosil» // Feeds and Feed Production. – 2010. – Issue. 67. – P. 178–182.

Technological peculiarities of storage and quality indices of silages from dried legume grasses and legume-cereal grass mixtures when preserving by sulphur-containing preservative «Glaukosil» applied during ramming and hermetization of trench store-houses at the rate of 1 and 2 % thought the mass.

**Hutsol A. V., Hutsol N. V., Korniychuk O. I., Polhul L. P., Delezha A. V.** Usage of minovite in pig production // Feeds and Feed Production. – 2010. – Issue. 67. – P. 183–187.

It is shown that feeding pigs of different age with minovite (4 g per 100 kg of the live mass) results in productivity increase, has not negative impact on the pork quality, causes changes in some structures of adaptive digestion organs.

**Koval S. S., Mandryk M. O., Bihas O. V.** Innovative technologies of milk production in Vinnytsia region // Feeds and Feed Production. – 2010. – Issue 67. – P. 188–195.

Results on the study of introduction of innovative technologies of milk production are stated.

**Opanasenko I. P., Zaets A. P., Opanasenko G. V., Panko V. V.** Comparative efficiency of the use of rape meal, extruded vetch and pea in young cattle feeding // Feeds and Feed Production. – 2010. – Issue 67. – P. 196–200.

Protein has always been one of the most important ingredients of human food and animal fodder: its cost in the diet exceeds 70 % of the general cost of fodder. Cost reduction of protein component in fodder is the main reserve of the decrease of fodder and animal product prime cost. Modern livestock breeding finds the way out in maximum use of plant protein – products of sunflower, pea, vetch, soybean, rape, maize processing.

**Azurkin V. O., Didur I. N.** Features of moisture-yielding ability of grain hybrids of corn depending on norms of nitric fertilizers // Feeds and Feed Production. – 2010. – Issue 67. – P. 201–204.

On the basis of results of experience features of moisture-yielding ability of grain by corn hybrids, depending on norms of nitric fertilizers are shown. It is established that losses of a moisture by grain depend as on physiological and genetic features of hybrids of corn, and from intensity of fertilizers.