

## ANNOTATIONS

**Petrychenko V. F., Zaparnyuk V. I.** Ways of increase of grain productivity of spring vetch under conditions of the right bank Forest-Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 3–7.

The article highlights the problem of grain productivity of vetch spring and ways of its increase depending on the application of seed inoculation, mineral fertilizers and soil liming.

**Babych A. A., Ivanyuk S. V., Kohanyuk N. V.** Assessment of soybean hybrids of the first generation by means of hybridological analysis // Feeds and Feed Production. – 2012. – Issue 74. – P. 8–13.

Elements of productivity of soybean hybrids  $F_1$  by the level of domination and heterosis is estimated by means of hybridological analysis.

**Babych A.A., Babiy S.I., Barvinchenko S.V., Semtsov A.V.** Variability of vegetation periods of faba bean and their correlations // Feeds and Feed Production. – 2012. – Issue 74. – P. 14–18.

Assessment of the collection variety samples of faba bean of the Institute of Feeds and Agriculture of Podillya of UAAS by the duration of interphase periods of vegetation is carried out. The level of variation of interphase periods and their correlations are determined. Variety samples that can be donors for breeding new early varieties are chosen.

**Kolesnik I. V., Barylko M. G., Kolesnik A. V.** Available gene pool of spring vetch and prospects of the selection use of samples from the collection of PSAES named after Vavilov N. I. // Feeds and Feed Production. – 2012. – Issue 74. – P. 19–23.

The results of long-term comprehensive study of the selection and economic value of spring vetch samples from the collection of Poltava State Agricultural Experiment Station named after Vavilov N. I. are highlighted. Sources of valuable traits are identified; prospects are pre-defined; and possible ways of the use of the crop itself and some forms of individual selection while breeding new varieties are presented.

**Lytvynyuk V. V., Yakovets V. A.** Creating of pollinators resistant to rhizomania and root rots of sugar beet // Feeds and Feed Production. – 2012. – Issue 74. – P. 24–28.

The results of creating and evaluation of the best breeding materials and hybrids of sugar beet resistant to rhizomania and root rots at the IBCSB of NAASU are presented.

**Pashtetsky V. S., Ptashnyk O. P., Didovych S. V.** Technology of effective seed production of chickpea in the Steppe zone of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 29–35.

Modern effective system of seed production of chickpea is developed on the basis of combination of zonal agrotechnology of cultivation with the technology of joint application of pre-sowing microbial preparations with nodule bacteria *Mesorhizobium ciceri*, phosphate mobilizing bacteria, microorganisms – antagonist of phytopathogens, which focused on the ecologization of chickpea cultivation in the Steppe zone of Ukraine.

**Bugayov V. V.** The dynamics of seed germination of perennial cereal grasses during storage // Feeds and Feed Production. – 2012. – Issue 74. – P. 36–40.

The results of researches on the effect of species composition and growing conditions of seed of perennial cereal grasses on the dynamics of their germination during storage are stated.

**Kovalenko V. P.** Biological and technological preconditions for obtaining high-quality forage // Feeds and Feed Production. – 2012. – Issue 74. – P. 41–47.

The problem of production intensification of high-quality grass forage and selecting optimum time for grass stand mowing is highlighted.

**Tsurkan N. V.** Condition and trends of the development of production of perennial herbage in the southern Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 48–52.

The state of production development of perennial herbage in Ukraine is investigated. A rapid reduction of the specific gravity of the areas of these crops in the total cultivated area of farms both in the southern Steppe, and Ukraine, which negatively affects soil quality and livestock breeding is established.

**Sobko M., Sobko N., Sobko O.** The role of perennial leguminous herbage in the increase of soil fertility // Feeds and Feed Production. – 2012. – Issue 74. – P. 53–57.

The results of two-year researches of growth and development of perennial leguminous herbage, their productivity under various schemes of use are presented. Data on their influence on the change of stock of nutrients and organic matter of plants in the soil are provided.

**Demidas G. I., Hudz K. F.** Duration of vegetation period depending on the growing technology in ontogeny process of clover // Feeds and Feed Production. – 2012. – Issue 74. – P. 58–60.

The value of such leguminous forage crop as red clover which plays an important role in cattle feeding is highlighted. The article deals with the duration of the vegetation period of early and late varieties of clover. Variety Agros - 12 appeared to have a longer vegetation period – 106 days in the flowering stage, while variety Poli-yanka had the shortest vegetation period - 105 days in the flowering stage.

**Antipova L. K.** Peculiarities of the growth of perennial cereal herbage in the southern Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 61–64.

Data on the linear growth of perennial cereal herbage in height in the south of Ukraine is given. The best of them as lawns are determined.

**Vlasenko V.V., Palamarchuk I.P., Palamarchuk I.I., Yanovych V.P.** Modern views on the use of effective microorganisms to improve cereal-legume herbage mixtures // Feeds and Feed Production. – 2012. – Issue 74. – P. 65–68.

Rather high potential of EM - preparations for the effective bioremediation of soil that justifies the relevance of these studies is shown. The stock of the surface phytomass of cereal-legume herbage mixtures is improving in comparison with control variant.

**Hetman N. Y., Lehman A. V.** Cultivation of legume-oat mixtures under conditions of the right-bank Forest-Steppe // Feeds and Feed Production. – 2012. – Issue 74. – P. 69–72.

The results of investigation of fodder productivity of legume-oat mixtures in conveyor production of green feed are stated. The main directions for further research aimed at the increase of fodder productivity under conditions of the right-bank Forest-Steppe are established.

**Kolodyazhny A. Y., Patyka M. V., Tanchyk S. P., Karpenko E. Y., Rozhko V. M., Dozorets A. O.** The structure of microbial complex of typical chernozem under peas (*pisum sativum* l.) using various farming systems // Feeds and Feed Production. – 2012. – Issue 74. – P. 73–80.

Microbial complex of typical chernozem under peas is analyzed. The results of the number, quality and biodiversity of the bacterial microflora and soil micromycetes under application of different cropping systems and soil tillage are presented. The influence of different cropping systems and tillage on the formation of complex microbial soil for growing peas is shown.

**Koshevsky I. I., Patyka M. V., Berezhnyak M. F., Vegera S. M.** Influence of organic and mineral system of fertilization on the development of pea diseases and plant productivity // Feeds and Feed Production. – 2012. – Issue 74. – P. 81–86.

Method of soil tillage, application of straw under the predecessor and fertilizers are of great importance for the biological function of agriculture and have influence on the development of plant diseases. Application of straw and mineral fertilizers increases soil suppressiveness and reduces affection of pea by peronosporosis.

**Nagorny V. I.** Peculiarities of growing soybean varieties of different maturity groups in the south-eastern Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 87–93.

Elements of the technology of soybean production, which provide the yield of quickly maturing varieties at 2,37–2,45 t/ha, early-maturing – 2,56–2,84 t/ha and mid – 2,85–3,12 t/ha are researched and developed.

**Kolesnik S. I., Venediktov O. M., Kobak S. Y.** Ways of optimization of soybean fertilization system under conditions of the right-bank Forest-Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 72. – P. 100–106.

The results of four-year researches on the study of influence of methods pre-sowing seed preparation and foliar nutrition on the productivity of soybean varieties and economic efficiency of their cultivation are expounded.

**Kovalenko O. A., Korkhova M. M.** Bare fallow and soybean as predecessors of winter wheat under conditions of the northern Steppe of Ukraine // Feeds and Feed Production. – 2012. – Issue 72. – P. 107–111.

The influence on productivity indices of predecessors of bare fallow and soybean under different winter wheat varieties and types in the northern Steppe of Ukraine is analyzed.

**Medvedeva L. P., Kernasyuk Y. V., Mostipan T. V.** Features of concentration and efficiency of soybean production in Kirovograd region // Feeds and Feed Production. – 2012. – Issue 72. – P. 112–118.

Results of researches on the efficiency and concentration of soy production in Kirovograd region are expounded; major directions of increasing its productivity and gross output are grounded.

**Golodna A. V., Shliakhturov D. S., Stolyar E. A.** Quality of lupine grain depending on varieties and seeding terms in the northern part of the Forest-Steppe // Feeds and Feed Production. – 2012. – Issue 74. – P. 119–123.

The results of studies on the determination of the dependence of productivity of lupine varieties, grain quality on the seeding terms and hydrothermal conditions are given. It is established that in the northern part of the Forest-Steppe varieties Siderat 38 and Cristal provide maximum yield of protein during the first term of sowing.

**Perehrym O. R.** Influence of fertilization on the formation of blue lupine seed yield under condition of Pre-Carpathians // Feeds and Feed Production. – 2012. – Issue 74. – P. 124–128.

The results of studies on the impact of different doses of mineral fertilizers on seed yield formation of blue lupine. It is established that the highest seed yield of blue lupine forms through application of  $P_{60}K_{90}$  in combination with double foliar nutrition with Vuksal Microplant.

**Tugueva I. V.** Formation of green forage productivity in pure blue lupine sowings and its mixture with spring grain and legume crops under conditions of Polissya // Feeds and Feed Production. – 2012. – Issue 74. – P. 129–135.

Results of researches on the influence of seeding rates of pure sowings of blue lupine and legume-cereal mixtures on productivity and quality of green mass under conditions of Polissya are given. It is established that mixtures give better yields of dry weight in comparison with pure sowing of blue lupine which gives the chance to receive forage of better quality.

**Ratoshnyuk V. I.** The use of blue lupine as green fodder under conditions of Ukrainian Polissya // Feeds and Feed Production. – 2012. – Issue 74. – P. 136–142.

The article proved the effectiveness of the use of lupine green mass for green fodder for livestock production in the area of Polissya.

**Plaksa V. N.** Realization of biological potential of spring triticale varieties under conditions of the western Polissya of Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 143–150.

The article contains results of studies on the effect of different seeding rates, level of mineral nutrition on the yield of spring triticale under conditions of the western Polissya of Ukraine.

**Kravets O. C.** Effect of fertilizers on the growth and development of spring vetch in the right-bank Forest-Steppe // Feeds and Feed Production. – 2012. – Issue 74. – P. 151–154.

Results of the study on the effect of fertilizers on the growth and development of spring vetch, and the dynamics of growth in height during vegetation period are presented.

**Chernelivskaya E. A.** Features of sugar beet cultivation using various technologies // Feeds and Feed Production. – 2012. – Issue 74. – P. 155–159.

The results of long-term researches on the intensive and integrated technologies of sugar beet cultivation, which provide a yield of root crops at level 52–60 t/ha, sugar output – 9.3–10.8 t/ha, net profit of 12.6–13.7 thousand hryvnas/ha at 106–116% production profitability are presented.

**Burko L. M.** Content of trace elements in root crops and tops of fodder beet depending on the level of fertilization and plant density // Feeds and Feed Production. – 2012. – Issue 74. – P. 160–163.

The results of researches on the influence of organic and mineral fertilizers and plant density on the content of trace elements in root crops and tops of fodder beet are presented.

**Litvinov D. V.** Biological cycle of organic matter and elements of plant nutrition in the field crops on the chernozem // Feeds and Feed Production. – 2012. – Issue 74. – P. 164–169.

In the stationary experiment of NSC «Institute of Agriculture of NAAN» carried out on the chernozem of Panfilskaia experiment station, plant biomass and the content of chemical elements (nitrogen, phosphorus, potassium) in it, the organic mass

in plants and nutrition elements estranged with crops and applied into soil with plant residues were determined. This makes it possible to estimate the importance of crop in crop rotation and its influence on cultural process of soil development.

**Borona V. P., Zadorozhny V. S., Karasevych V. V.** Environmental aspect of herbicide application in the integrated system of soybean weed control // Feeds and Feed Production. – 2012. – Issue 74. – P. 170–175.

Peculiarities of herbicide application depending on weed species are presented. Necessity of adding adjuvant to working solutions of herbicides is grounded.

**Kurhak V. G, Havryk S. S.** Optimization of mineral fertilizer doses and modes of use of seeded cereal grass stand // Feeds and Feed Production. – 2012. – Issue 74. – P. 176–182.

The article deals with the results of studies on the effect of fertilizers and modes of use on the productivity of seeded cereal grass stand on gray forest soils. The impact of the doses and ratios of nitrogen, phosphorus and potassium on grass productivity is described by the equation of the second degree, which allows to predict it.

**Kovtun K.P., Veklenko Y.A., Sydoruk G.P., Senyk I.I., Bezvuhlyak L. I.** The effect of modes of use and fertilization methods on the phytocenotic features of formation and quality of forage of legume-cereal mixtures // Feeds and Feed Production. – 2012. – Issue 74. – P. 183–190.

The results of research of the influence of fertilization methods and modes of use on the botanical and chemical composition of legume-cereal agrophytocenosis on the dark gray soil under conditions of the western Forest-Steppe are considered.

**Samokhval T. P.** Ways of productivity increase of fodder galega on arable lands of the right-bank Forest-Steppe // Feeds and Feed Production. – 2012. – Issue 74. – P. 191–193.

The influence of doses of mineral fertilizers, pre-sowing seed treatment by inoculants and growth stimulators on the formation of yield and feed quality of forage galega under conditions of the right-bank Forest-Steppe

**Obertyukh Y. V., Kurnaev O. M., Stasyuk O. K., Khryplyvy V. V., Gerasymchuk A. I.** Influence of the canned moist corn grain on the productivity, quality indexes and fatty-acid composition of milk of cows // Feeds and Feed Production. – 2012. – Issue 74. – P. 194–201.

The results of researches on determination of productive action and fatty-acid composition of cows' milk fed in the ration of 3,5 kg of flattened canned moist corn grain as compared to 3 kg of dry corn grain are presented. Substantial increase of average daily milk yield by 11,29 % ( $P < 0,05$ ), decline of fat by 7,64 % and increase of protein in milk by 0,85 % are registered. The increase of content of long-chain fat acids is set due to middle-chain, which is desirable in the diet of people. There is a substantial increase of content of conjugates of linolic acid by 7,63 % ( $P < 0,05$ ).

**Vlasenko V. V.** Modern views on the influence of pathogens in agrophytocenosis for feed harvesting and conserving // Feeds and Feed Production. – 2012. – Issue 74. – P. 202–207.

The problems of biological contamination of agrophytocenosis by phytopathogens and the effect of pathogenic properties of *Fusarium* fungi on the quality and safety of fodder are considered. It is shown that among investigated 481 samples of different feed zones of Ukraine in 2002-2010 *Fusarium* was isolated from 230 (47.8%), 86 (38.9%) of the studied cultures of *Fusarium* had toxic properties. In Ukraine this disease manifests itself strongly and steadily.

**Fedoruk R. S., Matiukha I. O.** Physiological state and reproductive function of heifer organism when feeding soybean milk from traditional and transgenic soybean varieties // Feeds and Feed Production. – 2012. – Issue 74. – P. 208–212.

Investigation of the physiological state and reproductive function of heifer organism when fed soybean milk from soybean of traditional and transgenic varieties is carried out. The effect of soybean milk for feeding dairy heifers in the period of growth on productivity and reproductive capacity is established.

**Stasyuk O. K., Tymchuk S. S.** Milk yield of cows fed with brewery waste against a background of green fodder // Feeds and Feed Production. – 2012. – Issue 74. – P. 213–217.

Wastes of beer manufacturing - the brewer's grain and malt sprouts by the nutritious value replace corn and barley in the diets of dairy cows against a background of green fodder, there is no difference in animal productivity and milk quality, costs for concentrated feed are reduced 1,3 times.

**Tuchykh A. V., Kulyk M. F., Obertyukh Y. V.** Zinc and copper content in milk of cows of different productivity // Feeds and Feed Production. – 2012. – Issue 74. – P. 218–221.

The results of researches on determination of zinc and copper in milk of cows of different level of productivity are presented. It is shown that balancing of rations of dairy cows by zinc content is provided under its content of 40-50 mgs and copper content of 10 mgs per kg of dry matter.

**Kylymnyuk A. I.** Influence of the structure of protein amino acid of pig diets on the intensity of their growth and feed consumption // Feeds and Feed Production. – 2012. – Issue 74. – P. 222–227.

The results of researches on the improvement of protein quality for pig diets with high its level due to adding crystalline lysine, making amino acids ratio almost "ideal" are presented.

**Mazhilovskaya K. R.** Development of targeted premixes for pigs // Feeds and Feed Production. – 2012. – Issue 74. – P. 228–230.

The presence of trace elements like iron, copper, manganese, cobalt and zinc in mixed fodders used in rations of fattening pigs to reduce production costs and ensure

the needs of animals in the minerals and the development of new targeted premix for pigs are studied.

**Palats O. O., Chornolata L. P., Kulyk M. F.** Investigation of the extent of feed contamination by aflatoxins and their influence on animal products // Feeds and Feed Production. – 2012. – Issue 74. – P. 231–235.

Researches concerning the influence of aflatoxins on animals and humans are analyzed. Feed contamination by aflatoxins is becoming dangerous for their health. Therefore, adherence to the technology of harvesting and storage of feeds, control of the level of aflatoxins in feeds is an urgent problem of fodder production.

**Novakovskaya V. Y., Chornolata L. P.** Using new quality parameters of carbohydrates // Feeds and Feed Production. – 2012. – Issue 74. – P. 236–240.

It is proposed to improve the scheme of zootechnical feed analysis by adding the values of the NDF and the ADF. Regression equations to predict the level of consumption of bulk feed of plant origin are developed, nutritional value of feed taking into account new parameters of fiber is defined.

**Chornolata L. P., Zdor L. P., Palats O. Y., Zaparnyuk V. I.** Trace element composition of soils on the farms of Vinnytsia region with conventional and organic cultivation of plant material // Feeds and Feed Production. – 2012. – Issue 74. – P. 241–246.

The data that characterize the content of iron, manganese, zinc, and copper in soils of farms of Vinnitsa region that are engaged in traditional and organic cultivation of plant material are presented.

**Rybachenko O. M., Susha S. K., Voronetska I. S., Sprynchuk N. A.** Methodical approaches to the definition of economic efficiency of innovation technologies in feed production // Feeds and Feed Production. – 2012. – Issue 74. – P. 252–257.

Basic economic approaches to assessing economic effectiveness of innovative technologies based on the systematization of publicly accepted approaches in global and domestic science are determined. The system of basic and derived indices of calculation of efficiency indicators of innovative technologies in feed production is proposed.

**Shkura O. V.** Clusterization of perspective species and varieties of lawn grasses by the basic growth parameters // Feeds and Feed Production. – 2012. – Issue 74. – P. 258–262.

Basic indicators of growth and development of lawn grasses depending on their specific features are considered. Using cluster analysis, a comparative evaluation of lawn grasses for plant height, number of vegetative shoots and leaf surface is carried out. The results of these experiments set perspective views of lawn grass for these indicators under the conditions of the right-bank of Ukrainian Polissya.



**Pashtetsky V. S.** Value and territorial problems of optimization of natural-resource potential: improvement of assessment and coordination of economic and environmental interests // Feeds and Feed Production. – 2012. – Issue 74. – P. 263–268.

Ways of assessment improvement of natural-resource potential of the region, coordination of economic and environmental interests, solution of value and territorial problems of optimizing the use of natural resources are shown.

**Hetman N. Y., Susha S. K.** History of research development of conveyor production of green fodder on arable land // Feeds and Feed Production. – 2012. – Issue 74. – P. 269–272.

Short history of research development on the issues of conveyor production of green fodder is highlighted.

**Zadorozhna I. S.** From the history of researches on weed control of forage crops in Ukraine // Feeds and Feed Production. – 2012. – Issue 74. – P. 273–277.

Pages from the history of researches on weed control of forage crops in Ukraine are elucidated.