SUMMARY

UDC 633:521+522

Kabanets V. M. Scientifically-technical program of NAAS of Ukraine “Bast Crops” : main results of 2009 / V. M. Kabanets, R. N. Hiliazetdinov, L. M. Zhuplatova // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P. 3-12.

Main results of researches on scientifically-technical program of NAAS of Ukraine “Bast Crops” according to fiber flax and hemp breeding, improvement of the system of primary seed-growing, harvesting and processing of bast crops, standardization pf bast and fiber raw material are given in the article.

UDC 633.522: 631.52/53

Sytnik V.P. Improvement of sex structure of monoecious hemp variety plant stand in the process of seed-growing / V. P. Sytnyk // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P. 13–18.

Results of long-term investigations of purity of sex structure of monoecious hemp varieties USO-14 and USO-31 are presented. It is proved the positive influence of long seed-growing work on monoeciousness. The biological explanation of means of such process is presented.

UDC 632.938:633.521

Chuchvaha V. I. Investigation of fiber flax variety reaction on flax fusariosis for breeding on immunity / V. I. Chuchvaha, O. Yu. Buryk // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.18–21.

Classification of fiber flax breeding samples by firmness to fusariosis is given. On the base of investigation of breeding material in conditions of artificial infectious plant nursery fiber flax samples, which can be used as donors of firmness to fusariosis were singled out.

UDC 581.4:631.52:633.522

Myhal M. D. Influence of internal factors of hemp plants on seeds productivity / M. D. Myhal, V. M. Kabanets, K. V. Konoplia // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.21–40.

The literary review of investigation of peculiarity of influence of internal factors of hemp plants on seeds productivity is made. Possibilities of their use in varieties breeding.

UDC 633.522:631.52

Mischenko S. V. Change of sex structure of population and peculiarities of flowering of monoecious hemp at reproducing / S. V. Mischenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.40–49.

The sex structure of population of families' plant nursery, super elite, elite, I-V generation of USO-31 variety was investigated. It was revealed that this variety is comparatively stable by monoecious sign : staminate monoecious hemp was only in II generation, quantity of monoecios feminized pistillate hemp increased every year and so on. Peculiarities of flowering are established also.

UDC 633.521:521.001.4

Kryvosheieva L. M. Investigation of collection samples of fiber flax by economically-valuable signs // L. M. Kryvosheieva // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.50.-55.

Results of investigation of fiber flax collection samples by economically-valuable signs are given. The best samples by duration of vegetation period, productivity of seeds, stem, fiber, fiber content, long fiber output, firmness to lodging and diseases and by complex of signs are detached.

UDC 581.9:631.52:633.522

Myhal M. D. Differences of hemp varieties by cannabinoids content / M. D. Myhal, I. L. Shulha // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.55–64.

Differences between hemp varieties by content, correlation and level of changeability of cannabinoids compound CBD, THC and CBN in perianths of female flowers in phase of plants ripening are revealed. Dates are discussed because of theoretical and practical questions of hemp breeding on drug-free sign.

UDC 632.938:633.521

Chuchvaha V I. Tolerance of fiber flax varieties to fusariosis in conditions of north-eastern Polissia of Ukraine / V. I. Chuchvaha, O. Yu. Buryk // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.65–69.

Fiber flax varieties which are susceptible to flax fusariosis the intensity of pathogens affection of the background of plants artificial infection increased substantially in comparison with stable one.

Index of level of tolerance by yield signs of varieties with different level of genetic protection has certain changeability.

UDC 633.521:631.559

Lohinov M. I. Adaptiveness of fiber flax varieties of different ecologically-geographical origin on fiber yield depending on soil fertilization in zone of north-eastern Polissia of Ukraine / M. I. Lohinov, V. M. Kabanets, A. V. Lytvynenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.70–78.

The article dills with dates of investigation of fiber flax varieties of different ecologically-geographical origin in zone of north-eastern Polissia of Ukraine. It is revealed, that varieties of different origin inadequately proved their economically-valuable signs depending on soil-climate conditions of growing zone and dozes of mineral fertilizers. By common fiber yield the highest adaptiveness revealed in fiber flax varieties Hlukhivskii yuvileinyi and Hlinum, which high fiber yield perfectly combines with ecological plasticity and stability. By the yield of long fiber more adaptive varieties were Hlinum and Eskalina.

UDC 633.522:633.99

Vyrovets V. H. Possibilities of breeding on neutralization of drug properties of sowing hemp / V. H. Vyrovets, I. M. Layko, I. I. Scherban, A. I. Kyrychenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.78–88.

In the beginning of 70^{th} years of last century in USSR the question of drug-free sowing hemp variety creation was raised because of its use as drug one. Absence of such samples and breeding methods in world practice caused certain doubts in decision of this problem. Thanks to persistent, purposeful activity of Ukrainian breeders it were researched hemp features, which provoke psychotomimetic action, worked out breeding method and created drug-free varieties with keeping high productivity and firmness to pests and diseases.

UDC 631.52:633.522(089)

Kyrychenko H. I. Effectiveness of use of initial material of hemp collection samples / H. I. Kyrychenko, V. H. Vyrovets, I. M. Layko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.89–94.

The base hemp collection, which includes 460 variety samples of different geographical types was created in the Institute of Bast Crops NAAS. Donors, sources and perspective material for breeding practice and samples-standards for creation sign and work collections were singled out.

UDK 633.521:631.816.12

Loborchuk S. K. Efficiency of outside the roots signups of fiber flax by the complex water soluble fertilizer «Akvarin 4» / S. K. Loborchuk,

I. Z. Duts, G. Y. Kornelyuk, O. S. Orischuk // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.95–100.

The article deals with results of researches of influence of outside the roots signups by the complex water soluble fertilizer «Akvarin 4» on growth, development, fiber flax productivity, firmness to diseases. The most effective charts of bringing are revealed.

UDC 633.52:631.512+631.82+631.871.5

Shuvar A. A role of physical factors of treatment of seed of fiber flax in realization of variety genetic potential / A. Shuvar // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.100–103.

Results of researches in relation to efficiency of preliminary treatment of fiber flax seeds by UHF are given in the article. Influence of UHF on the degree of defeat of flax plants by basic diseases and on flax productivity is set.

UDC 333:633.85:631.303(477.72)

Kovalenko O. A. Economic and bioenergetics efficiency of hemp growing in Step zone depending on agrotechnical modes / O. A. Kovalenko // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.103–110.

Results of economic and bioenergetics evaluation of technology of hemp growing on non-irrigated soils of south Step of Ukraine at different sowing modes, sowing norms and fertilization are given in the article.

UDC 631.358:633.52

Makaev V. I. Mechanization of production processes in flax-growing / V. I. Makaev // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.111–118.

Failings and advantages of tradition fiber flax harvesting technology for seeds and fiber receiving are given in the article. Alternative energysaving technology of fiber flax harvesting for seeds and fiber receiving is described.

UDK 633:522.631

Horshkov A. P. Theoretical analysis of reasons of hemp seeds losses at harvesting by hemp-harvesting machines / A. P. Horshkov, I. V. Voloshko, B. I. Vovk // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.118–124.

This article considers technological process of hemp-harvester ZHK-1.9 work under the influence of which take place the largest hemp-seed losses. The calculations of possible losses of seeds during the

harvesting with working out the device for catching the hemp-seeds on sectional hemp-harvester machine ZHK-1.9 is made here.

UDC 633.522:631.66.047

Lukyanenko P. V. Determination of influence of main factors on duration of drying and quality indexes of hemp seeds, harvested by grain combine / P. V. Lukyanenko, O. P. Riabchenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.125–130.

Influence of main factors such, as thickness of layer, speed of air stream and temperature of heating on duration of drying and quality indexes of hemp seeds, harvested by grain combine, such us is investigated is investigated.

UDC 631.55:633.522

Prymakov O. A. Investigation of the process of straw braking as the element of new harvesting technology / O. A. Prymakov, V. I. Makaev // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.130–135.

Use of operation of hemp straw braking formed in roller with the aim to prepare straw material for picking up by baler is proposed.

UDC 633.522:631.17

Horshkov A. P. Calculation of force alienation of seeds from plant by working organs of hemp threshing-machine MS-1 and its experimental investigations analysis / A. P. Horshkov, P. V. Lukyanenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.136–140.

The force alienation of seeds from plant by working organs of hemp threshing-machine MS-1 is calculated. The analysis of the process of hemp stems threshing is realized.

UDC 633.521

Koropchenko S. P. Flax seeds – valuable ecological product / S. P. Koropchenko // Bast and technical crops : collection of scientific works. – Sumy : ВН «Papirus», 2011. – Vol. 1(6). – P.140–144.

The chemical structure and main technologies of flax oil receiving are described in the article. Main directions of products use received from flax seeds are given also.

UDC 677.11.021:677.1

Mokher Yu. V. Analysis of normative base in the field of determination of bast raw material moisture content / Yu, V. Mokher, L. M. Zhuplatova, O. V. Holoviy [and other] // Bast and technical crops :

collection of scientific works. – Sumy : BH "Papirus", 2011.– Vol. 1(6). – P.144–149.

Comparative analysis of normative documents of different levels in the field of determination of bast raw material moisture content is given. Ways of harmonization of national normative documents are given in the article also.

UDC 633.58

Moskalenko B. I. Investigation of firmness to break of hemp stems / B. I. Moskalenko, R. N. Hiliazetdinov // Bast and technical crops : collection of scientific works. – Sumy : BH «Papirus», 2011. – Vol. 1(6). – P.150–154.

Results of investigation of firmness to break of hemp stems depending on physically-mechanical properties of plants of different varieties are given in the article.