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CROP CAPACITY OF OIL-FLAX SEEDS UNDER DIFFERENT METHODS OF MICROFERTILIZERS APPLICATION

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Flax oil is an alternative to sunflower and rapeseed in the structure of crop rotations Steppe. The application of fertilizers is an important part of activities to increase the yield of flax seeds. Trace elements in the form of complexions (chelates) metals are the most effective. However, their use in the cultivation of flax is poorly understood. The aim of our study was to identify the optimal methods of application of fertilizers to maximize yield of linseed with the best quality seeds.We conducted research in 2011-2012. The soil of the experimental plot is Chernozem ordinary deep. Grew four varieties of linseed: Iceberg, Chibic, Reliable and Southern night. Experience of field docfactory consisted of 8 variants in triplicate. Factor A: the use of mineral fertilizers. Factor B: the use of micronutrients: no finish (0); seed treatment (H); treatment of vegetating plants (P); combination of two processing methods (HP).Mineral fertilizers made in the form of ammonium nitrate at sowing ($N_{20}P_{20}K_{20}$).Linen seeds before sowing treated with micronutrients; plants sprayed during the growing season, the rate of fertilizers 3 l / ha. The composition of micronutrients Reacom-lin: g / l Cu-15-20, Zn-25-30, Co-0,03-0,05, Mo-1-1,5, B-5-7. Varieties of linseed Chibik and South night found a more pronounced response to the application of mineral fertilizers.The highest seed yield of linseed was obtained from the variety of Reliable for total use fertilizers (HP) and the application of micronutrient fertilizers – 2,2 t/ha. For this variety and variety Iceberg processing plants during the growing season are less effective than seed treatment. Increasing the number of fruits leads to the formation of smaller seeds in all tested cultivars. Different ways to use microfertilizers don`t affect the weight of 1000 seeds of flax.

Key words: *number of boxes of linen; flax oil; weight of 1000 seeds; microfertilizers; mineral fertilizers; variety; yield.*

References

1. Tikhosova G.A., Golovenko T.M., Menyailo I.O. Investment appeal of innovation technology for processing of oil-flax stalks. http://www.viem.edu.ua

2. Koval'ov V.B., Semenij O.G., Dmitrenko T.F. The influence of fertilization on structure of crop for different kind of flax and oil yield// Zbirnyk naukjvykh prac' NNC "Institute of agriculture UAAN"/ V.112, 2010. P. 126-133.

3. Polyakov A.I., Ruchka V.A., Nikitenko O.V. The influence of growing condition on oil-flax productivity. Naukovo-tekhnichnyj byuleten' IOK UAAN, 2005. V.10. P. 179-183.

4. Bulygin S.Yu., Demishev L.F., Doronin V.A. The microelements in agriculture: 3 iss. Supplemented. Dnipropetrovsk: Sich, 2007. 100 p.

5. Galkin F.M., Sorochinskaya M.A. Correlation characteristics of hybrids F1 of oil-flax. Naucno-tekhnicheskij bulleten' VNII maslichnykh kul'tur, 1984. V.86. P.15-17.

6. Pit'ko A.G. Study of collection samples of oil-flax in conditions of Cuban' for the purpose of choose the source material. Nauchno-tekhnicheskij byulleten' VNII rastenievodstva, 1989. №189. P. 55-58.

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УРОЖАЙНОСТЬ СЕМЯН ЛЬНА МАСЛИЧНОГО ПРИ РАЗНЫХ СПОСОБАХ ПРИМЕНЕНИЯ МИКРОУДОБРЕНИЙ

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Исследовали влияние разных способов применения микроудобрений (обработка семян или обработка растений) на фоне минеральных макроудобрений и без них на урожай семян льна масличного разных сортов. Установили, что наивысшая средняя урожайность формируется у сорта

Надежный в результате совокупного применения микроудобрения для обработки и семян, и растений на фоне припосевного внесения минеральных макроудобрений ($N_{20}P_{20}K_{20}$). Увеличение количества плодов вызывает формирование более мелких семян у растений всех исследуемых сортов. Способ применения микроудобрения не влияет на массу 1000 семян льна.

***Ключевые слова**: количество коробочек льна; лён масличный; масса 1000 семян; микроудобрение; минеральные удобрения; сорт; урожайность.*