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**All-Russian Williams Fodder Research Institute**

Отчет  
на создание научно-технической продукции  
– «Оценка эффективности действия Гербагрина  
на сенокосном травостое»

(по договору № 5 от 21 июля 2008 г.

с ООО «НерудИмпЭкс»)

**Report on study of**  
**“Estimates of the effect of Herbagreen fertilizer on haying**  
**herbages”**

(ordered by NerudImpex Ltd (contract N5 dd 21.06.2008) )

**Lugovaya, 2008**

Луговая, 2008

## Conclusions

1. Processing cereal grass stand by Herbagreen® in a doze of 2 kg/ha with a combination to entering nitric fertilizer (N<sub>60</sub>) promoted essential increase of individual share in its structure of a valuable riding cereal of haying type – meadow foxtail (*Alopecurus pratensis*) with 54 up to 70 %. At decrease in doze of Herbagreen® to 1,5 kg/ha (without fertilizer and on background N<sub>60</sub>), a leading position of in a herbage was kept, however its maintenance in a herbage was below (60 - 62 %).
2. Under influence of Herbagreen® (2 kg/ha on background N<sub>60</sub>) in dry substance of a grass raised a concentration of a crude protein with 10,3 up to 11,1 % that promoted reception more energy saturated forages with the maintenance in 1 kg of dry substance 10,2 MJ (0,83 feed unites) against 9,6 MJ (0,74 feed unites) in the control. On protein and energy nutritive value the received raw material is suitable for I class of quality hay production, and also for feeding repair and fattening young large horned livestock, cows with average productivity.
3. Efficiency of a haying cereal grass stand as a result of the developed reception - entering of 2 kg/ha of Herbagreen® on background of N<sub>60</sub> - has increased in comparison with the control over 93 % (with 1360 up to 2623 feed unites) and on 6 % in comparison with a background of nitrogen fertilizing (2479 feed unites/ha) owing to improvement of botanical structure and quality of a forage.

## **Discussion on the obtained results**

Results of Herbagreen® efficiency studying researches executed in reconnoiters short-term field experience in second half of vegetative period have allowed to reveal positive influence of the preparation in a doze of 2 kg/ha on background of N<sub>60</sub>, shown in improvement of botanical structure, quality of a forage and increase of efficiency of a cereal haying grass stand. It allows to prove a scientific hypothesis about an opportunity of reception of higher efficiency of Herbagreen® under condition of carrying out of researches during all vegetative period (since spring) and fractional entering of investigated dozes of a preparation under a hay crop or a cycle of research on pastures at fuller realization of biological potential of photosynthesis and fuller use of soil-climatic factors of a wood zone. Besides it is advisable to expand objects of application of a preparation Herbagreen®, for example, on a hedgehog of the combined team, efficiency described by a more potential, and also on legume-cereal grass stands with the purpose of stimulation symbiotic nitro fixation for reduce requirement of fodder grasses in mineral nitric fertilizers. More long influence Herbagreen® on biochemical processes will allow assessing also this preparation on efficiency of photosynthesis and using by plants of a renewed energy source - solar radiation. It corresponds to actual tasks of agro biological researches spent in other countries aimed on maintenance and increase of efficiency of power expenses.