

## **Annotation**

**Yeshchenko V. E.**

### ***Straw of grain cereals as a source of soil organic matter enrichment***

*The use of straw as the grain cereals by-product is varied. One part of the straw is used as fodder and livestock bedding, and in the absence of livestock breeding it can be used as a raw material for paper or carton production in the textile and construction industries. In recent years the straw has been used to make briquettes for heating residential and industrial premises. In England, with an annual production of 9.3-9.5 million tons of straw, 36% of the straw is burned, about half is used in livestock production, and only 2% is ploughed to enrich soil organic matter. However, due to its low humification efficiency ploughing the straw into soil for 18 years had almost no effect on the humus content of soil. But the ploughed straw of grain cereals with its allelopathic properties sharply decreased germination capacity of the following crops. According to our records the water extract of barley straw decreased the laboratory germination of soybean seeds by 27%. The length of seedlings on the tenth day of seed germination decreased by 40%. The ploughed biomass of winter wheat was a source of root rot spreading on the following winter wheat. It caused up to 35% of root rot spreading while on the areas without ploughed wheat straw the affect index was 18%. All told can be a warning against using current recommendations for ploughing straw into soil without scientific grounds.*

**Key words:** *straw of grain cereals, production, use.*