

Annotation

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Peculiarities of using agricultural lands in Cherkasy region

Productivity of agriculture is mostly determined by the efficiency of land resource use. Arable lands and perennial plantings are the most intensively used. These lands produce the largest amount of agricultural products.

Nowadays, the wrong structure of sown areas is one of the reasons of the growth of humus deficiency in the soil which is the bio energetic basis of its fertility. In recent years, a significant number of farmers do not adhere to scientifically based crop rotations growing a limited amount of crops, mainly cultivated crops. This situation leads to the development of crop diseases, soil exhausting, increasing the risk of erosion processes. As a consequence, it is reducing of the agricultural productivity.

Part of fertilized areas with mineral fertilizers in 2013 and 2014 was respectively 87.0 and 87.5%, and with organic fertilizers – 3.3 and 4.8%. For 1 ha of the arable area in 2013 106 kg of mineral fertilizers was applied and in 2014 it was 97 kg. Organic fertilizers were applied in the amount of 1.1 and 1.3 tons, respectively. Modern structure of cultivated areas leads to the saturation of areas with cultivated crops to 37.6%. Under conditions of insufficient application of mineral and organic fertilizers it leads to rapid mineralization of humus and soil erosion.

Such changes are caused by a significant decrease in areas of planted oats, millet, buckwheat, legumes, and sugar beet. At the same time, there is an increasing of the cultivated areas of corn, sunflower, soybean, and canola. These factors lead to the development of crop diseases, soil exhaustion, reducing fertility, increasing the risk of erosion processes and as a consequence there is the reducing of agricultural productivity.

Key words: mineral and organic fertilizers, structure of arable area, crop.