UDC 504.054 ADVANTAGES OF BIOGAS TECHNOLOGIES USEING FOR ORGANIC WASTE MANAGEMENT

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Increase in production and consumption capacity leads to extension of waste formation. Considerable part of waste is made organic (waste of livestock production, crop production; waste of water treatment; waste of food industry). Biogas technologies using is one of ways to manage this group of waste. These technologies have many energy, ecological and agrotechnical advantages.

The energy aspect consists in a possibility of biogas using as a fuel for ensuring own needs of the agricultural enterprise with heat and electric energy.

The ecological component is characterized by the fact that an anaerobic digestion causes the decomposition of the most part of the organic matter which is contained in biomass. It leads to reduction of greenhouse gases emissions in atmospheric air including from manure lagoons due to introduction of a new systems of remove, storage and use of manure. Biogas technologies permit to decrease pathogenic organisms content in digestion biomass and allow to lower a pollution of soils and a surface water. Also the intensity of a smell of biomass decreases.

As an agrotechnical component it is possible to allocate receiving and use of biohumus – the product received after biogas processing of organic waste. It has a number of advantages in comparison with traditional mineral fertilizers because contains nitrogen forms, more available to plants, and also is scraped seeds of weed plants and pathogenic organisms.