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## ABOUT GRANULATION OF BIRD DROPPINGS

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Poultry farms produce much more waste than meat and eggs. Poultry farms spend money on the disposal of valuable organic raw materials. Poultry droppings contain aggressive chemicals that make it impossible to dispose of, as this leads to soil and water poisoning [1]. One of the main ways to dispose of droppings is to convert them into pellets [2]. This form can be used to fertilize soils and even for heating [3].

Poultry manure pelleting is one of the modern methods for processing the vital activity of birds. As a result, a compressed granule with optimal quantitative content of macro- and microelements and normal moisture content is obtained [4,5]. It is the pellets made from poultry droppings that are a more valuable pelletizing product than from the waste products of other animals. They are readily soluble, contain many nutrients, and are well absorbed by plants. Today, there are well-established technologies that will make an ordinary poultry farm a modern, waste-free and profitable production that meets the requirements of sanitary standards. The produced granules can be used for organic fertilization of all types of plants and soils. The processing of poultry manure into granular fertilizer allows obtaining a fertilizer of higher quality than loose compost [4].

Such granules have the following advantages: they solve the problem of storage and disposal; guarantee the absence of harmful microorganisms; can be introduced into the soil by agricultural machinery; contain all minerals in optimal quantities; an environmentally friendly and non-toxic product for humans; have a long shelf life.

In the process of making pellets from poultry droppings, it is important:

- pre-dry the raw material so that its moisture content does not exceed 10-20%. Taking into account the peculiarities of biowaste, it is safer and faster to use a drying complex for this;
- grind the resulting mass, as it can crumple during drying. The size of the fraction should correspond to the diameter of the future granules. Small granules from large pieces are prone to destruction;
- when using additional types of raw materials (pellets), it is necessary to mix the mass until completely homogeneous, only in this case the granules will be identical in composition;
- to granulate the prepared manure on equipment with suitable characteristics;
- chill pellets before packing. It is best to bring bio-waste to room temperature in a cooling complex. This way the process will take place quickly and the operator's contact with the granules is minimized, it will be safer for his respiratory tract.

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