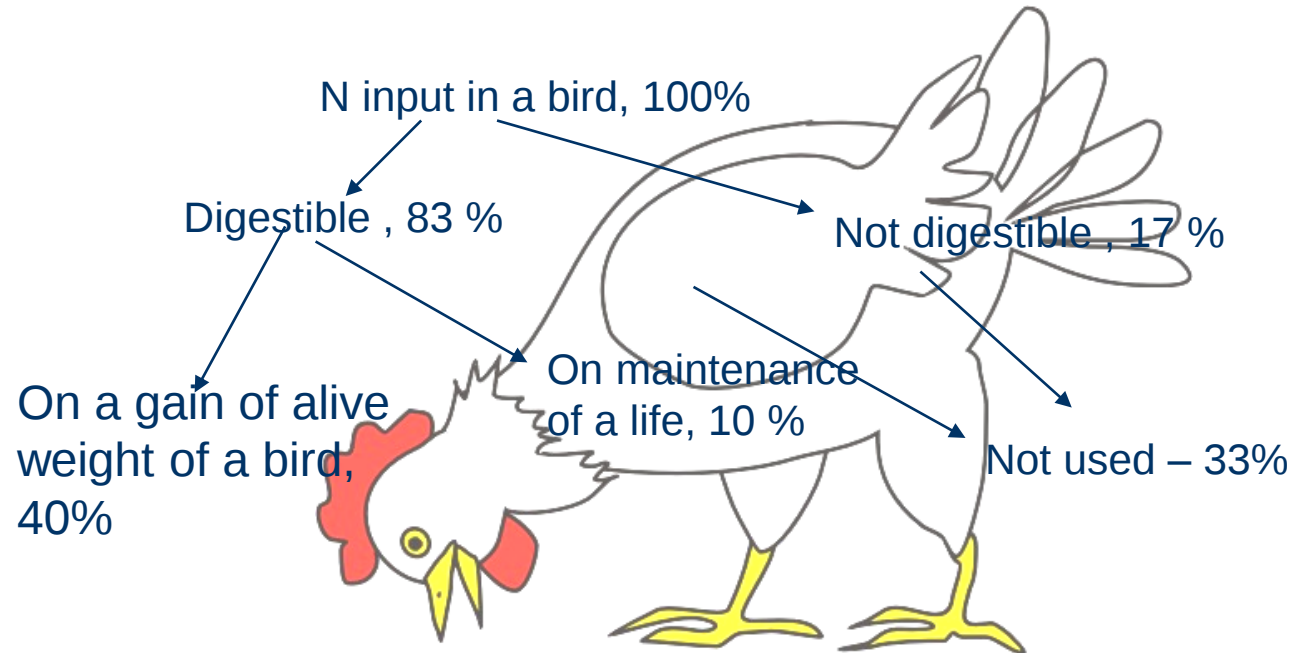


Evaluation of the nutrient content of animal waste in Russia

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HELCOM workshop on manure
nutrient content, November 19-20,
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Chemistry of N distribution in a bird



- For practical purposes the value of the nutrient content of manure showed in various reference manuals.
- Regional centers of the Russian agrochemical service can conduct analyses of organic fertilizers if they receive orders.

RD-APC 1.10.15.02-08 “Guidelines for the technological design of removal systems and preparation for the use of manure ”

- It intended for use in the design of newly constructed and reconstructed enterprises for cattle, pig and poultry farms.
- It contains a large number of different information related to the disposal of manure or litter, so the advantage is an integrated approach.

The document RD-APC 1.10.15.02-08 describes the following methods for manure handling:

- methods of removing the manure / litter from places of livestock / poultry and transportation;
- methods of composting manure and manure to produce compost;
- methods of separation of manure into fractions, followed by composting;
- methods of anaerobic treatment (biogas);
- Methods of biological treatment of the liquid fraction of manure and liquid manure;
- methods of storing manure / litter;
- methods of using organic fertilizers

Table 1. Nutrient content of different parts of manure

	Nutrient content in dry matter, %		
	N	P	K
1. Pig manure:			
- Total-	6,00	1,42	2,08
- in liquid fraction	3,30	0.14	1,04
- in solid fraction	2,70	1,28	1,04
2. Catle manure			
- Total-	3,20	1,28	4,15
- in liquid fraction	1,28	0,80	3,53
- in solid fraction	1,92	0,02	0,62

Statistical analysis of data on the nutrient content of cattle manure analyzed by IEEP ,% of dry matter

Nutrient content in cattle manure	Average	Median	Scope of fluctuations	Dispersion
N	2,93	3,30	1,41-5,18	1,50
P	0,77	0,81	0,41-1,18	0,15

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CONCLUSIONS:

- To improve the management of animal waste should create a document similar RD-APC 1.10.15.02- for the North-West region of the Russian Federation and to include the information to predict the variability in the content of these elements.
- Within the framework of the Baltic region, it is advisable to establish a common database of nutrient content in manure and conduct joint research concerning the processes of manure nutrients forming.
- On the basis of research results and the information collected in the database it will be possible to prepare actualized Baltic guidelines for the manure nutrients management and the proper expert system.

Than you for your attention!



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