ОБОСНОВАНИЕ ЭНЕРГОСБЕРЕГАЮЩИХ ТЕХНОЛОГИЧЕСКИХ ПРИЕМОВ РАЗДАЧИ КОРМОВ И НАВОЗОУДАЛЕНИЯ ПРИ ПРОИЗВОДСТВЕ МОЛОКА

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Ключевые слова: -

Energy analysis allows us to establish differentially the efficiency of energy costs (human labor, fuel and electricity, machinery and equipment, materials, buildings and structures, etc.) when performing technological processes and operations, and to determine the total energy intensity of these processes.

The article presents the results of an energy analysis of the process of preparing and distributing feed and manure removal on farms and milk production complexes of various capacities agricultural production branch "Budagovo" (268 heads), milk farm "Zhazhelka" (750 heads), dairy complex "Berezovitsa" (850 heads), dairy complex "Rassoshnoye" (1000 heads), state enterprise "ZhodinoAgroPlemElita" in Smolevichi district and dairy complex "Ustensky" (1200 heads) in Orsha district. It has been established that the highest energy costs for the preparation and distribution of feed per head were set at the agricultural production branch "Budagovo" (231.17 kg of reference fuel), the smallest at the dairy complex "Rassoshnoye" (122.99 kg of reference fuel per head). In terms of 1 head of livestock, the most energy-intensive process was manure removal, carried out by a bulldozer at the milk farm "Zhazhelka" (103.44 kg of reference fuel), the least energy-intensive was carried out by scraper installations at the Berezovitsa complex (23.30 kg of reference fuel). The most common and less energy-intensive systems for removing manure from premises for dairy cows with loose box housing are scrapers (23.30 46.07 kg of reference fuel per head).

Based on the energy analysis, technological methods are substantiated in the direction of the formation of energy-saving technologies for the preparation and distribution of feed and manure removal, which consist in the use of economical machines and units for loading and distributing feed, for cleaning, loading and transporting manure, as well as energy-saving methods for mechanizing the preparation and distribution of feed and manure removal; elimination of unnecessary and reduction of idle runs of feeders and tractors during manure cleaning, optimal loading of feeders and trailers for the delivery of feed and manure, the rational placement of livestock enterprises and fodder production facilities, sites for storage and biothermal disinfection of manure; the use of low-energy pumps for mixing and pumping manure; reduction of labor costs of machine operators-tractor drivers by combining the performance of technological operations for the distribution of feed and manure cleaning.

***Key words**: cows, dairy complex, feed preparation and distribution, feeders, manure removal, energy analysis.*

Введение.

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Основная часть.

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. **Совокупные и поэлементные затраты энергии на приготовление и раздачу кормов для молочных ферм и комплексов в расчете на 1 голову, кг у.т/гол.**

	219	380	591	800	738
	6,02	2,21	2,06	2,30	2,39
	35,24	44,40	44,58	49,71	30,57
	28,33	17,78	17,30	19,32	15,12
	116,42	59,94	45,28	27,75	52,32
	29,23	14,48	12,41	18,75	20,36
	15,93	8,78	5,97	5,15	4,74
	231,17	147,59	127,60	122,99	125,49

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. **Совокупные и поэлементные затраты энергии на выполнение процесса удаления навоза на молочных фермах и комплексах за 2021 год, кг у.т/гол.**

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	219	3,01		10,04	18,41	29,23	46,07
	380		49,33	11,55	31,70	14,48	103,44
	591	2,06		6,86	7,70	12,41	23,30
	800	2,30		7,68	6,50	18,75	24,59
	738	2,39		7,96	7,17	20,36	27,42

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Заключение.

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