CALCULATION OF FUEL EFFICIENCY AND ENVIRONMENTAL PERFORMANCE OF TRANSPORT PROCESS DURING HARVESTING OF CROPS

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Abstract. *In paper the current method for determining fuel efficiency and environmental performance of the transport process, depending on various factors. The possibility to improve fuel efficiency and environmental performance of the transport process during the harvesting of crops and transportation of silos, due to the choice of optimal parameters of the operation. Thus, the mass emissions of individual exhaust gas components is determined as the sum of emissions depending on different operating conditions.*

First, when the vehicle is on the field, waiting until discharged by the combine and move across the field at low speed, moreover this can be attributed to the presence of vehicles in the granary, waiting for the weighing and process weighing and unloading of the body with the engine running. Second, the time the vehicle spends on the movement from field to granary, now caused by the large runs of vehicles and permissible speeds.

The possibility to improve fuel efficiency and environmental performance of the transport process during the harvesting of crops and transportation of silos, due to the choice of optimal parameters of the operation. Provided the calculation method gives the possibility of more accurately than known methods, to determine the fuel consumption and emissions of harmful substances from motor vehicles in particular operating conditions that will improve direct road transport and make them less costly and more effective.

Key words: ***method, fuel efficiency, environmental performance, grain***