

Assessment of Exhaust Emissions and Fuel Consumption from Means of Transport in Agriculture

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Abstract : The paper discusses the problem of load transport using farm tractors and road tractor units. This type of carriage of goods is often done with farm vehicles. The tests were performed with the PEMS equipment (Portable Emission Measurement System) under actual traffic conditions. The vehicles carried a load of 20000 kg. This research method is one of the most desired because it provides reliable information on the actual vehicle emissions and fuel consumption (carbon balance method). For the tests, a route was selected that simulated a trip from a small town to a food-processing facility located in a city. The analysis of the obtained results gave a clear answer as to what vehicles need to be used for the carriage of this type of cargo in terms of exhaust emissions and fuel consumption.

Keywords : emission, transport, fuel consumption, PEMS

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