

Секція 3.

ЕЛЕКТРОЕНЕРГЕТИКА, ЕНЕРГЕТИКА ТА ЕЛЕКТРОТЕХНІЧНІ СИСТЕМИ В АПК

ELECTRICAL ENERGETIC, ENERGETIC AND ELECTRICAL ENGINEERING SYSTEMS IN THE AGRO INDUSTRIAL COMPLEX

QUALITATIVE ANALYSIS OF THE PELLET MADE OF TOBACCO

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Abstract:

The aim of this research was estimation of the characteristic properties (energy and qualitative) of pellets, which were made from tobacco without any additives.

In this research the experimental tobacco pellets were used. The analyses were conducted in the laboratory of the Faculty of Production and Power Engineering University of Agriculture in Kraków, in February 2019. The following parameters were analyzed: moisture content, density, durability, ash content, temperature of ash melting, total heating value (calorimeter IKA C6000 was used) and calorific value.

The aim of the qualitative evaluation of these pellets was to conduct moisture, density, ash content, temperature of ash melting, total heating value, calorific value mechanical durability.

Factor	Value
Moisture [%]	6,7
Density [kg/m ³]	266,16
Ash content [%]	8,97
Ash melting temperature [°C]	-ST 1046 -DT 1137 -HT 1213 -FT 1228
Total heating value [kJ/g]	15,53
Calorific value [kJ/g]	14,58
Mechanical durability [%]	95,1

Keywords: pellets, total heating value, biomass, quality