

Obtaining alternative fuel from sweet sorghum in the conditions of the Republic of Tatarstan

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Abstract

© Published under licence by IOP Publishing Ltd. In the agro-industrial complex of the Russian Federation the main types of energy resources is the FCM (fuel-lubricating materials), electricity, coal and gas. Priority energy is determined depending on the orientation of the activity of the agricultural enterprise. In the cost of getting products one of the key factors is its energy intensity. Under the energy intensity means the amount of energy expended per unit of finished product. Domestic manufacturers lag behind on this indicator from their foreign colleagues. Greatly influenced by the climatic conditions of production, which affects the amount of energy expended annually becoming more expensive. In the article, the authors address a topical issue of renewable(alternative) fuels from sweet sorghum in the stems of which contains from 14 to 21 % sugar. In the Republic of Tatarstan tested and introduced varieties of sweet sorghum. On the basis of literary data and carried out their own research given a set of equipment and presents non-waste production chain of biodiesel and fuel pellets from stems of sweet sorghum.

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