

The influence of climatic factors in biomass production in some grain sorghum hybrids grown in the south-eastern area of Romania

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Abstract

Grain sorghum is a cereal whose cultivation is increasingly common both in Romania and worldwide. Grain sorghum is recognized for having very good yields relative to unit area and crop establishment costs. In addition to the production of raw material represented by grains, grain sorghum offers the possibility of harvesting an important amount of biomass which can be used both for the purpose of feeding animals and for the purpose of energy production. Biomass production is closely dependent on the climatic conditions but also on the type of hybrid. Thus, the higher the phreatic intake, the higher the biomass production. This study was carried out in the 2020-2021 and 2021-2022 agricultural years in the South-East of Romania, in Brăila County, an area that has faced in recent years with climatic difficulties that force the efficient utilization of the crops used. For the most efficient utilization of the grain sorghum crop, it is very important that the biomass production is superior to be used for energy purposes or as animal feed.

Key words: Biomass yield, dry matter, green mass, grain sorghum