Research on the influence of some technological factors on production components of biomass in maize (Zea Maïs l.) for bioenergy under the foreststeppe conditions of Moldova

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Maize is an important source of renewable biomass for energy that can be done during 150-180 days. The energetic content of maize is not constant because of biological variability and management factors. The research was done in 2008 and 2009, at Ezăreni Farm under the pedo-climatic conditions of Moldova forest-steppe and had in view the influence of sowing density, mineral fertilization and hybrid on production of dry matter (DM) at the cultivated maize in order to obtain biofuels. The results showed that under the conditions tested, the highest DM production at the whole plant (17.48 t / ha) was obtained in PR 37M34 hybrid, the density of 64,500 plants / ha and fertilization with N60P40, production growth is of 40% compared to the control sample. At the same hybrid and density, but at the fertilization with N100P40 highest production of cobs (8.52 t / ha) was obtained, with 28% more compared to the control sample. The highest percent of the total production of cobs was obtained in DR 440 hybrid, the density of 64,500 plants / ha in the unfertilized variant.