



Cultivation of maize for silage and for energy purposes

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In years 2003 - 2005 in a location with elevation above 380m experiments testing silage maize hybrids with FAO 200 - Pedro, FAO - Romario, FAO 300 – Chambord started. Used plant density 80 000, 95 000, 110 000 plants.ha⁻¹. Nitrogen fertilizing applied in three steps - basic rate 150 kg N.ha⁻¹ and models using additional fertilizing rate of 20 kg N.ha⁻¹ in the vegetation phase of 4-5 leaves (solid fertilizer) and Campofort Plus - folial fertilizer. In mentioned location there was no evidence of dry matter content drop with rising FAO number for tested hybrids. Drop in dry matter content with rising plant density was recorded with nitrogen fertilising application and with application of mean rate of nitrogen folial fertilizer. With rising FAO number there was evident rise in dry matter yield. Selected hybrids proved higher dry matter yield with increased plant density. Additional folial fertilizing rate brought dry matter content yield. The experiment proved very high yield potential of maize hybrids for energy purposes. Higher yield of methane was recorded with maize silage in lower elevations and with Atletico hybrid. In higher elevations there is potential risk of late harvested maize with lower content of dry matter and risk of plant freeze.