Effect of Nitrogen Rates on Forage Yields of Napier, Mauritius, Hamil and Ruzi Grass under Irrigated Ratchaburi Soils

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Abstract

Studied the effect of nitrogen application at the rate of 0, 20 and 40 kg N/rai on the yield of 4 grasses under irrigation was conducted at Chainat Animal Nutrition Research Center during October, 1987 to November, 1989. Design of experiment was split plot in randomized complete block, 4 grasses as main plot and 3 nitrogen rates as subplot, 4 replications. The experiment showed no different on DM yield among grasses in the 1st year. Yield of Napier, Mauritius, Hamil and Ruzi were 3,742, 3,754, 2,973 and 2,636 kg/rai/yr. In the 2nd year, Mauritius yielding was 2,454 kg/rai/yr get better production \((P < .05)\) than 1939 kg/rai/yr of Hamil and 1,534 kg/rai/yr of Ruzi, and the yield of Napier was 2,157 kg/rai/yr. The nitrogen application at the rate of 20 kg N/rai was not improved DM production in the 1st year, but the yield of grasses increased \((P < .05)\) with the increasing rates of nitrogen in the 2nd year.

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Nutritional component of Napier and Ruzi grasses were better than Mauritius and Hamil grasses. The increasing rates of Nitrogen were increased; Mauritius and Ruzi CP, Napier Lignin and Hamil ADF, but decreased on Mauritius ADF.