



RESEARCH PAPER IN BOTANY

Abstract

The experiment were conducted of the catchment area of Penganga river at Himayatnagar Dist Nanded during 2020-2021. During the experiment attempts different gradation of nitrogen maize (*zea maize L.*). The yield of green fodder, dry matter and crude protein were measured the gradation use of 60kg/ha. Was more beneficial for fodder production of maize.

Key words: Maize, nitrogen fertilizer, green fodder, dry matter and crude protein.

Introduction:

The maize is very important fodder crop in the world for various cattle like cow, buffalo because it contain large amount of crude protein its more beneficial for cattle.

It is miracle crop there is cereal on the earth. The yield of fresh fodder various from 15.7 to 28.0 tones per hectore (Narayanan and Dabaghao 1972) the vegetative growth of maize contain rich amount of carbohydrates it makes silage of good quality (Chatterjee and Patil 1978) the high yielding fodder crop like maize use chemical fertilizer like nitrogen in different dosage (30kg/ha, 60kg/ha, 90kg/ha).

The maximum green fodder of yield 24997kg/ha were observed as 60kg/ha gradation treated in 2020 and same fertilizer does given 2021 the yield obtained 2342 in 2021 similar studies were reported by Patil 1990 Bhuktar and Mungikar 1998.

Excess doses of chemical fertilizer nitrogen 120kg/ha have affected the yield as compare 30kg/ha, 60kg/ha, 90kg/ha, but in both year 2020 2021 60kg/ha produce large yield of green fodder and crude protein also.

Methods and materials

African tall variety of maize selected for expt. the summer cultivation done excellently the experiment was conducted at catchment area of penganga river during 2020-2021 area (it contain nitrogen) chemical fertilizer consist of five fertilizer treatment (by gradation method)with two replication was carried out in a (R.B. D.) randomized block design initially plot prepared 10 x 10meter)before sowing fodder yield from maize under influence of fertilizer nitrogen gradation (control ,30kg/ha ,60kg/ha, 90kg/ha , 120kg/ha) at different interval shown in given table

Fodder yields from maize influence of fertilizer nitrogen gradation during the year2020

N (kg/ha)	DM%	N%	GF/ha	DM/ha	CP/ha
C	15.4	1.75	9372	1944	158
30	15.9	1.95	17982	2859	348
60	16.2	2.07	24997	4049	493
90	15.4	2.19	21142	3256	445
120	14.3	2.33	19259	2754	401
C.D. (P=0.05)	0.27	0.02	72.75	11.59	5.79

Fodder yields from maize influence of fertilizer nitrogen gradation during the year2021

N (kg/ha)	DM%	N%	GF/ha	DM/ha	CP/ha
C	14.0	1.43	9697	1358	121
30	16.5	1.17	19892	2785	308
60	16.3	1.88	23142	3772	443
90	15.1	2.09	19982	3070	994
120	14.3	2.18	15942	2311	315
C.D. (P=0.05)	0.20	0.44	11.75	14.73	6.27

Result and conclusion

In 2020-2021 different dosage of chemical fertilizer control 30kg/ha,60kg/ha,90kg/ha, 120kg/ha applied fodder crop like maize in 2020 nitrogen dosage 60kg/ha was beneficial because in 2020 24997kg/ha green fodder obtained in 2021 23142kg green fodder yield as compare 2021 maximum yield obtained.

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