

RESEARCHES CONCERNING THE N:P:K REPORT OF THE TEMPORARY MEADOWS OF THE OLTENIA HILL REGION

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SUMMARY

Numerous investigations which took place both in the country [1] and in the hill region of Oltenia [2,4] have stated numerous fertilization technology links of the temporary meadows. In Preajba, Gorj district, a series of results have proved the necessity of using a larger dose of phosphorus and potassium, even in the case of the association with a medium nitrogen dose [3]. In order to bring new proofs for this matter, in 2005 it took place a bifactorial experience where the factor A was represented by the nitrogen dose and the factor B was represented by the N:P:K report (table 1). On the three year average production (2006-2008) the quantity harvested of dry matter has oscillated depending on the nitrogen dose, from 5.53 t/ha (80 N) to 6.76 t/ha (160 N). In general, these results confirm the experimental data previously achieved (table 1).

Table 1

The influence of N dose and of the N:P:K report upon the temporary meadows (t/ha d.m., average of 2006-2008)

Factor B N:P:K report	Factor A – nitrogen dose			Average factor B t/ha d.m.
	80 N	120 N	160 N	
1:0.5:0.5	5.01	5.73	6.48	5.74
1:0.75:0.75	5.58	6.14	6.69	6.13
1:1:1	6.01	6.62	7.13	6.60
Average factor A t/ha d.m.	5.53	6.16	6.76	

Factor A
DL 5 % = 0.47 t/ha d.m.
DL 1 % = 0.77 t/ha d.m.
DL 0.1 % = 1.47 t/ha d.m.

Factor B
0.25 t/ha d.m.
0.36 t/ha d.m.
0.50 t/ha d.m.

Ax B
0.44 t/ha d.m.
0.62 t/ha d.m.
0.87 t/ha d.m.

The N:P:K report had also an important influence upon the production. If at the report 1:0.5:0.5 the medium production was of only 5.74 t/ha, at the report 1:0.75:0.75 the production rised by 0.30 t (considerable distinct output), and at the report 1:1:1 the output was of 0.86 t/ha (very important). The combined influence of the 2 factors has underlined the report 1:1:1 followed by the report 1:0.75:0.75, regardless of the nitrogen dose.

In conclusion, the temporary meadows of the north of Oltenia need a complete fertilization, where the nitrogen will be administered in a dose of 120-160 kg/ha. According to the nitrogen dose, the phosphorus and the potassium will be administered so that it would be realized a N:P:K report 1:0.75-1:0.75-1.

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