THE BEHAVIOR OF SPRING BLEND CROP
IN CLUJ-NAPOCA ENVIRONMENT

Mârghitaş Al., Cristina Mârghitaş

University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca

SUMMARY

The experimental field was located at „Șapca Verde” on the western part of Cluj-Napoca.

The climate is a boreal temperate continental climate with some local differences. The average temperature around the experimental field is 8,3°C, fluviometric regime about 590,8 mm the soil in experimental field is a typical aluvial soil with a slightly – moderate alkaline reaction (7,71-8,03), middle light humus rich in nitrogen, very rich in phosphorus and potassium.

On start-up of blended crop we used spring vetch and oat.

The quantity of seed used was: 120 Kg/ha; 80 Kg/ha vetch.

The used experimental procedure was the one with blocks randomized in 5 variants and 4 repetitions. The crop start-up was carried out between 10-15 March for the mixture oat + vetch. The fertilization was performed differentially with complex minerals.

V1- control; V2 = 20N 10P₂O₅ 10K₂O₂ kg/ha; V3 = 40N 20P₂O₅ 20K₂O₂ kg/ha
V4 = 60N 30P₂O₅ 30K₂O₂ kg/ha; V5 = 80N 40P₂O₅ 40K₂O₂ kg/ha

As a result of the performed experiments the following production gains were evidentiated owing to the differentiated use of mineral fertilisers: with the oat-vetch mixture one has acquired production gains at the green mass between 5,5 t/ha and 10,7 t/ha, and for the production of dry substance one has gained between 5,5 t/ha and 7,14 t/ha, as shown in the statistic interpretation in table 1.

<table>
<thead>
<tr>
<th>variant</th>
<th>t/ha</th>
<th>%</th>
<th>difference</th>
<th>signification</th>
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<tbody>
<tr>
<td>V1</td>
<td>5,5</td>
<td>100,0</td>
<td>0,00</td>
<td>Mt</td>
</tr>
<tr>
<td>V2</td>
<td>6,10</td>
<td>122,0</td>
<td>1,10</td>
<td>*</td>
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<tr>
<td>V3</td>
<td>6,50</td>
<td>130,0</td>
<td>1,50</td>
<td>**</td>
</tr>
<tr>
<td>V4</td>
<td>7,06</td>
<td>141,2</td>
<td>2,06</td>
<td>***</td>
</tr>
<tr>
<td>V5</td>
<td>7,14</td>
<td>142,8</td>
<td>2,14</td>
<td>***</td>
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</tbody>
</table>

DL(p 5%) +0,79 DL(p 1%) +1,11 DL(p 0,1%) +1,56

Table 1
The crop gains as a result of mineral fertilization are realized (fig. 1) by increasing the number of oat plants and herbage. Large doses of nitrogen have a stressing effect on the spring vetch, causing a decrease from 44% at 16%.

REFERENCES

1. Moga I., Maria Schitea, 2000, Cultura plantelor furajere pentru sămânță, Editura Ceres București
2. Erdelyi St., A. Ionel, N. Arvat, N. Iacob, Al. Ignat, N. Simtea, 1990, Producerea și conservarea furajelor Tipo Agronomia