RESEARCHES CONCERNING THE INFLUENCE OF THE SHORT TERM CROP ROTATION APPLIED TO MAIZE AS A REMAINING EFFECT UPON THE PRODUCTION AT MAIZE CULTIVATED IN THE AREA PORTARESTI-SEGARCEA, JUD. DOLJ

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SUMMARY

The experience has been executed on a cernosium soil typical from the south area of Oltenia, with 3,12% humus, 0,45% nitrogen, 7mg/100g dry soil $K_{20}$ and a PH=6,2. The average temperature on the experimenting years was of 11,5°C, the average of rainfall- of 612 mm and the humidity- of 80%. In the present paper it was pursued the influence of the agrofund applied to maize, as a remaining effect upon the wheat production, the experience being placed after the method of the subdivided plots with the graduations: $b_1$=monoculture of wheat, $b_2$=wheat-maize, $b_3$=soy-wheat-maize, $b_4$=soy-wheat-maize-sunflower.

From table 1 result the following:
- the monoculture of wheat has registered the lowest wheat production and namely, 3180 kg/ha, the 2-year rotation(wheat-maize) has accomplished the production of 3321 kg/ha. The 3-year rotation(soy-wheat-maize) has given 3612 kg/ha and the 4-year rotation(soy-wheat-maize-sunflower) has registered the production of 3685 kg/ha.

In conclusion, from the upper table results that the 3-year rotation(soy-wheat-maize) and the 4-year one(soy-wheat-maize-sunflower) have achieved, in average on 3 years, on the typical cernosium from southern Oltenia, the highest wheat production, as a remaining effect.

Table 1

<table>
<thead>
<tr>
<th>The combination of factors</th>
<th>Year 2001</th>
<th>Year 2003</th>
<th>Average 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Produc. kg/ha</td>
<td>Differen - ces kg/ha</td>
<td>Signifi - cance</td>
</tr>
<tr>
<td>B2-B1</td>
<td>3762-3680</td>
<td>82</td>
<td>-</td>
</tr>
<tr>
<td>B3-B1</td>
<td>4038-3680</td>
<td>358</td>
<td>XXX</td>
</tr>
</tbody>
</table>

DL 5% - 179
DL 1% - 207
DL 0.1% - 342

DL 5% - 125
DL 1% - 207
DL 0.1% - 242

B4-B1                     | 4076-3680  | 396       | XXX          | 3302-3012    | 290       | XXX          | 3685-3180    | 505       | XXX              |

DL 5% - 155
DL 1% - 231
DL 0.1% - 296