A Research of Some Fertilization Technologies Differentiated in Apple Culture

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SUMMARY

The best fertilization under the environmental report is the organic (manure, compost, animal urine, juice cans). Applied alone, organic fertilizers have a higher efficiency than the chemical. The efficacy of organic fertilizers depends on the index of nitrogen, the clay content and the soil pH, in terms of these indices we differentiate the doses of organic fertilizer for the fruit-growing plantings in rod.

The given doses of organic fertilizers for tree plantations in rod, on a mechanized field (Pascal, 1980)

<table>
<thead>
<tr>
<th>IN</th>
<th>&lt;1,5</th>
<th></th>
<th>&gt;1,5</th>
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</thead>
<tbody>
<tr>
<td>pH</td>
<td>&lt;35</td>
<td>20-35</td>
<td>&gt;35</td>
<td>20-35</td>
</tr>
<tr>
<td>Clay %</td>
<td>&gt;35</td>
<td>20-35</td>
<td>&gt;35</td>
<td>20-35</td>
</tr>
<tr>
<td>Org. Fert. t/ha</td>
<td>40</td>
<td>35</td>
<td>20</td>
<td>35</td>
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The positive influence of the organic fertilization on the production of fruits, in the apple orchards, has been reported also by Bordeianu and by Dumitrache (1968.), Which had obtained the best results using periodic manures (6kg/mp to 2 years or 8kg/mp 3 years). Good results in tree growth and development were achieved by using peat land and some turbo-composturs given to the planting hole in quantities of 70-80t/ha in intensive orchards and 80-100t/ha in the classical ones, in the sends conditions from NW of Romania. The plants used as green manure for large quantities of green and root mass (20-45t/ha) provide a quantity of organic matter in soils, that is equivalent to 8-12 t/ha manure. It was found that nitrogen fertilizers are applied only once, in the fall or in the spring, their efficacy is less than at the fractional application 1/3 in autumn and 2/3 early in the spring. In the apple orchards located on sandy soils, the optimum NPK during the first 5 years of harvest is in the limit of 250-300Kg/ha, and after this period is between 400-500 kg/ha. It can be obtained growths of production, statistically assured (12.8-13.4%) in case of applying a 10t/ha manure, for each year, with 60kg/ha N and 50kg/ha P\textsubscript{2}O\textsubscript{5}. The growths of production of 17-18.8% in the first 9 years of fructification of the planted trees on soils with the average fertility, can be done by an annually use of 20 t/ha manure or 120kg/ha N + 100 kg/ha P\textsubscript{2}O\textsubscript{5} + 80kg / ha K\textsubscript{2}O.

REFERENCES