Resultats des experiences avec les herbicides ecologiques – Atrasine et Simasine – appliques au maïs et a la vigne dans les conditions pedoclimatiques de la roumanie et de la Republique de Moldavie

N. SARPE - ASAS Bucuresti
S. POIENARU - Colegiul Universitar Agricol Calarasi
G. SUSU - Universitatea Agricola de Stat Chisinau, Republica Moldova
I. SARPE - ASAS Bucuresti

The weed killers atrasine and simasine have an exceptional physiological selectivity for maize, which, thanks to the enzymatic complex, decompose up to CO2 and H2O2 – scilicet in nontoxic substances. Chemical analyses effectuate by Maier - Bode (1971) in many experiments of Germany, of the residues of atrasine and simasine or metabolites do not have find in the grains of maize.
In Romania and Republic of Moldavia, the weed killers based on atrasine and simasine have been studied for one period of 45 years (1951-2004) and brackets on million hectares cultivate with maize and vine.
The experiments with the atrasine and simasine weed killers have been effectuated in the agricultural institutes of research of Romania and Republic of Moldavia, according to the method of the blocks randomize with 4 repetitions on pieces on the surface of 25 m2. After the application of the weed killers, periodic observations have been made concerning the selective one compared to maize and has the vine, as well as the effectiveness in the fight against bad grasses. During the harvest, taking away have been carry out for chemical analyses concerning the content of starch, proteins and greases (in maize), sugar and acidity (in must and the wine). There is determining also the atrasine residues in the grains of maize.
Under the terms of the many experiments of Romania and Republic of Moldavia, we have synthetizated the conclusion that in the pieces treated with weed killers, of the residues of atrasine and simasine do not have been find in the grains of maize, and the content of starch, proteins, greases, sugar and acidity is augmented in an obvious way compared to the pieces not treated (maize infested with bad grasses).