



Reacția genetică a hibrizilor de porumb (Pioneer) la atacul noului dăunător - *Diabrotica virgifera virgifera* Le Conte – în județul Arad

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A comparative crop of maize hybrids (Pioneer), from different maturity groups (extra-early - PR39D81, early - PR38R92, half-early - PR38A24, PR37D25, PR37M34, PR37W05 and half-lattes - PR35P12, PR36K67), there were tested regarding to point genetic reaction type in rhizotrophic, philotrophic and stigmatrophic interaction of *Diabrotica virgifera virgifera* Le Conte insects.

Regarding mentioned hybrids through plant protection aspect are known follows: Pr38R92 (early) – tolerant at smut *Ustilago*; PR37D25 – tolerant at *Helminthosporium* and *Ostrinia* and resistant at smut *Sarosporium*; PR37W05 – tolerant at smut *Ustilago*; regarding the new pest *Diabrotica virgifera virgifera* Le Conte, there are no references. The experience was made in Sagu locality, Arad district, in 2006 year; the interaction hybrids – pest, analyzed in 15 Jun – 1 Aug period, for larval stage and 15 Jun – 14 Aug, for adult's stage is pointed through aggressively percents.

For establish the hybrids reaction type it was used the scale "resistance source" witch show follow aspects: no aggressively (0), immune hybrid (I); aggressively of 0,1 – 2,0, so 1 - 20% - resistant hybrid (R); aggressively of 2,1 – 4,0, so 21 – 40%, tolerant and middle resistant hybrid (T; MR), and between 4,1 – 9,0 so 41 – 100% - sensitive hybrid (S). The maize hybrids (Pioneer) studied are tolerant to the attack caused by the insect *Diabrotica*; this reaction was established by the mean value of rhizotrophic, philotrophic and stigmatrophic aggression, namely 29.3-38.5%. This interval is concordant to the limits of "tolerance" amplitude (20-40% attack frequency); the tolerance is "total" or "constant" in semi tardy hybrids, less receptive (PR35 P12 and PR36R67), due to the synergic effect caused by the interaction between characteristics: high-degree root ramification, resistance to drought and long-period vegetation. In the early hybrids (PR39D81, PR38R92, PR38A24, PR37PR37M34, PR37WO5), due to the absence of the specified synergism, the tolerance is "relative" or "inconstant" and it may be lost.