Agresivitatea rizotrofică, filotrofică şi stigmatrofică a noului dăunător al porumbului Diabrotica Virgifera Virgifera Le Conte, în funcţie de factorii climatici

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We have supervised, in dynamics, the rhizotrophic action exerted by Diabrotica larvae (15 June, 3 July, 1 August) and philotrophic (15 June, 3 July, 1 August, 14 August) and stigmatrophic activity (1 – 14 August) exerted by adults, stages connected to the patosystems Zea mays – Helminthosporium turcicum, Zea mays – Fusarium roseum, Zea mays – Ustilago zeae, present in 2006, in a comparative crop of Pioneer maize hybrid, from different maturity groups (PR39D81 – extra-early, PR38R92 –early, PR38A24, PR37D25, PR37M34, PR37W05 – half-early and PR35P12, PR36K67 – half-lattes). Successive to the research of the relationship between the new pest and the climatic factors from Arad region, where we have performed our experiments in 2006, we may conclude: the climatic factors favoring the insect Diabrotica virgifera virgifera Le Conte are: temperatures of 23-25ºC, medium rainfall and air relative humidity of 70-75%. Thermal and hydric requirements of this insect are similar to those of the pathogens from the maize patosystems (Helminthosporium, Fusarium, Ustilago – with some differences for the blight Ustilago). There is a positive correlation between temperature, rainfall, atmospheric humidity and rhizospheric, philotrophic and stigmatrophic aggression; the bigger the climatic values are, concordant to the trophic optimal values, the bigger the attack aggression will be: 6.3-13.8%, 7.5-47.7%, respectively 46.4-51.0%.
The rhizotrophic larvae action has a reduced aggression compared to the nutrition on a single leaf epidermis and on the stigmas of the future maize cobs; the specified activity gets emphasized within the phenophasic interval “7-8 leaves” – “milk ripeness”, when maize sensibility to pathogens is increased.