

## THE ROLE OF ENEMIES OF SUNFLOWER IN SETTLEMENT OF PATHOGENS.

F.Németh. Bácsalmás State Farm. Bácsalmás. Hungary

The practical observations in the researches directed by the Sunflower Production System of Bácsalmás proved the role of the sunflower damaging insects in settlement of pathogens.

From enemies of young sunflower the soil born ELATERIDAE, MELOLONTHIDAE and NOCTUIDAE species help considerably settlement of *Sclerotinia sclerotiorum* /Lib./ de BY., *Macrophomina phaseolina* /Tassi/ Goid., *Plasmopara halstedii* /Farl./ Berl. et de Toni., even of *Diaporthe* /*Phomopsis helianthi* Munt. - Cvet. et al. According to our observations in a season of steady rain in a later phenological stage, especially the *Agrotis segetum* DENIS et SCHIFFERMÜLLER increases by damaging the collar the *Sclerotinia* infection. In the researches of our production systeme we described first the injury of the MIRIDAE species on sunflower. Especially is important the damage caused by the *Lygus pratensis* LINNÉ. The wounds on the place of sucking und egg-laying can be seen first on the petiole, stem, later on the bud and on the head. The main injury is caused by the larvae sucking with pleasure on the ovule. By this sucking they cause not only quantitative but also qualitative damages. On the sunflower develop 1-2 generations. According to the field experiments from 6-leaves stage until the end of the vegetation period they contribute to the *Sclerotinia sclerotiorum* /Lib./ de BY. infection. Soil disinfection with insecticides and stock control at the appearance of the bugs may reduce the infection possibility.