



EFFECT OF CLIMATIC CHANGES ON NEOGREGARINE INFECTION DETERMINED *ANISOPLIA SEGETUM* HERBST.

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The study was planned to determine the effect of climatic changes on Neogregarine infection in *Anisoplia* (Coleoptera: Scarabaeidae) species. Especially in Turkey, *Anisoplia segetum* Herbst is a common species of this genus. Both adults and larvae of *A. segetum* are harmful. And this beetle is generally managed by using conventional chemical insecticides which are adversely affecting the human health and the environment. Based on this problem, and due to the large beetle population, we aimed to determine natural enemies of *A. segetum* in wheat fields in different cities of Turkey with the present study. The purpose of this study is to determine the effect of climatic changes of different city in Turkey (Nevşehir, Konya, Aksaray, Adana, Gaziantep, Şanlıurfa, Osmaniye, Tekirdağ, Edirne, Erzurum and Bayburt). Effect of climatic changes has found so influential only Konya, Osmaniye and Nevşehir on infection of *A. segetum*. According to correlation coefficient statistical analyses, changes of years and months, temperature, humidity and precipitation data show differences and infection rates shows an important increase during years ($P < 0.01$). The infection rate showed strong positive correlation between years ($r = 0.325^{**}$). In addition, there is positive strong correlate on between infection rate and precipitation ($r = 0.095^{**}$). On the other hand, months, temperature and humidity showed negative correlation with infection rates ($P < 0.01$).

Keywords: *Anisoplia*, Humidity, Infection, Temperature, Wheat

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