

Population Dynamics of Early Oak Defoliators in Correlation with Micro-climatic Temperature Conditions in Kragujevac Area in Serbia

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Abstract : Forest dieback that comes in waves since the early 20th century has lately grown into an epidemic, in particular in oak stands. For this reason, research was conducted of the population dynamics of early oak defoliators, which represent a grave danger in oak stands due to their gradogenic attributes. The research was carried out over a 5-year period in oak forests in the area of forest administrations Kragujevac and Gornji Milanovac. The samples used in the research were collected from bottom branches, where Geometridae were found in the largest numbers, as well as from the mid and upper parts of the crowns, where other species were found. Population levels of these pests were presented in laboratory conditions on winter branch samples and in newly foliated stands on site, depending on the basic parameters of the climatic conditions. The greatest deviation of the population level of early oak defoliators was noted in 2018 on all 6 presented localities through the analysis of winter branches and the analysis of their presence in newly foliated stands on site, and it was followed by the highest average air temperature.

Keywords : defoliators, oak, population level, population dynamics

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