

**Hodnotenie výskytu Fyloxéry viničovej (*Dactylophaera vitifoliae*) vo fenofázach BBCH
13 – 71 vo vegetačnom roku 2024**

**Evaluation of grape phylloxera's (*Dactylophaera vitifoliae*) occurrence during the
BBCH 13-71 phenophases in the 2024 vegetation year**

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The phylloxera pest is spreading rapidly nowadays. Factors contributing to this phenomenon likely include climate change, resistance to insecticides, and the use of gentle cultivation practices, which limit the use of active ingredients significantly. Regarding the severity of the harm caused, the root form is the most dangerous, as evidenced by the extensive damage the pest caused to European viticulture at the end of the 19th century. The aim of this research was to study the temporal dynamics of the overwintering population's migration and to correlate this data to the climatic factors and the phenology of the vine. The research was conducted in Nitra, belonging to the Nitra wine-growing region, during the phenophases BBCH 13 to 71. The variant used during the study was Cabernet Sauvignon, rootstock SO4, in a 16-year-old vineyard. The monitoring of the pest's root form was executed via the bucket emergency traps method of Powell et al. (2007), for the duration of 13 weeks. Conversely, the monitoring of the pest's leaf form was executed via regular visual assessment of the leaves, once every seven days. The captured insects were evaluated by a microscope with a camera, and by assessing meteorological factors in relation to soil moisture and temperature.

No trace of the pest's root form was detected on the vines during the 13 weeklong monitoring process using 9 bucket traps. These findings are related to weather fluctuations present during the spring of 2024, which experienced multiple alternations of severely hot and cold temperature periods. Moreover, the atmospheric precipitation volume was above average, and the rootstock used possessed roots resistant to the pest. During the BBCH 57 phenophase, the leaf form of the pest began to proliferate in the area, specifically on the rootstocks SO4, K5BB, and even on the interspecific variety Hibernál. The proliferation was prominent during the subsequent phenophases as well. The number of leaf galls on a single leaf averaged 32 and the number of eggs in a single leaf gall averaged 57. The second generation of phylloxera's leaf form invades the soil as well and infests the roots of the noble vine. The pest's infestation of interspecific grapevine hybrids (PIWI) has not yet been thoroughly researched, while mainly table varieties are often sold as straight rooted without resistant rootstock.

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