



History of Plant Phenological Observation in Hungary and Plans for Renewal of System to detect Evidence of the Climate Change

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The first plant protection warning was issued 1760 by the Senate of the Town of Debrecen concerning the destruction of caterpillar's nest. In the middle of the 19th century the first responsible Hungarian Government issued a note in which the minister takes measurements for the phytosanitary safety of agricultural products. Though Hungary had not got independent institutional system for plant protection at the end of the 19th c., still in the middle of the 1870s, the territory of the country was protected with harmonised quarantine measures from the introduction of Colorado beetle. A new era started both in Europe and in Hungary with the devastation caused by *Phylloxera vastatrix* in vineyards. In 1876, the Act 29 definitely specified the measures to be taken for preventing the spread of the pest and the damages caused by it; and it was proclaimed in both Chambers of the Parliament. This incident resulted basically in the launching for the establishment of an independent plant protection institution. In 1880, the National Committee on *Phylloxera*, then in 1881, the National Experimental Station for *Phylloxera* was set up, this latter considered as the first nucleus of the Hungarian plant protection organisation. The international plant protection convention, concluded in 1929 and signed by our country, had a great role in the history of the development of the plant protection organisation. Hungary agreed to establish an official plant protection organization which should consist of a plant protection service and a research institute. In compliance with the Ministerial Decree 49.000/1932 the Hungarian Plant Protection Service was set up which can now be taken for the first organisation of the uniform national plant protection administration system. Plant protection stations were established in 1954. The plant phenological observation network was run by the plant protection administration but financially was maintained by OMSZ therefore the main aim of the phenological observation in Hungary is to give information for plant protection forecast. The system was time to time renewed, last time in 1984. The system was closed in 2001 because of financial restriction. Taking into consideration of necessity of systematic phenological observation mainly as a possible tool of climate change detection and seeing the results of COST Action 725 a project proposal was submitted for reconstruction of phenological network. Beside the main historical milestones of Hungarian phenological history the most important elements of the new plan will be shown. Since climate change expressed by the responses of the vegetation system our investigation is focused to long time data series like the Book of Vine Branches which contains the conditions of wine branches year by year on St. George day 24 April since 1740.