



## **GIS evaluation of selected plants generative phenophases for allergology purposes**

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Czech hydrometeorological institute manages network of phenological stations

of field crops, fruit trees and wild plants. In this contribution are compiled average data of entry generative phenophases of the crops with allergological signification which are observed in the CHMI phenological network by using of geography information systems. We have used DEM-SMOOTH method which comprises compiling data on elevation. From the list of crops with very important allergology significance were executed cereals like *HORDEUM vulgare L.* and *TRITICUM vulgare Vill.* (the most extended sorts of cereals in the CHMI network) for the period 1985 – 2005 and *BETULA pendula Roth.* from the list of wild plants. The wild plants are compiled for the period 1991 – 2005. From the wild plants with allergology important signification are cultivated *CORYLUS avellana L.*, *ALNUS glutinosa L.* and *SAMBUCUS nigra L.* and from the wild plants with middle allergology signification

is processed *TILIA cordata Mill.*

Booting, heading, beginning of flowering and end of flowering were chosen from the generative phenophases by field plants. From observed wild plants were selected generative phenophases first button visible, beginning and end of flowering. These generative phenophases were chosen for the indication and possible further forecast of whole pollen period in Czech Republic. Altitude of used stations has the extent between 155 – 1102 a. m.