



Flowering date trends of some native plants

M. Hunkár (1), E. Vincze (2), and Á. Németh (2)

(1) Georgikon Faculty at University of Pannonia, Keszthely, Hungary (hunkar@georgikon.hu), (2) Hungarian Meteorological Service, Budapest, Hungary (vincze.e@met.hu; nemeth.a@met.hu)

Flowering dates of perennial native plants are good indicators of spring warming. Long time data series (1961-2000) derived from different places in Hungary were used to mapping the average flowering dates in decade resolution. Seven native plants were studied: common chicory (*Cichorium intybus*), Lily of the Valley (*Convallaria majalis*), locust (*Robinia pseudoacacia*), elderberry (*Sambucus nigra*), lilac (*Syringa vulgaris*) and dandelion (*Taraxacum officinale*), Small-leaved Linden (*Tilia cordata*). The density and the location of the observation network had changed time to time; average decade dates of flowering come from yearly maps constructed with the method of Spline interpolation. On the series of maps the changes of “pheno-climate” can be studied. Although the used interpolation method does not contain topographical correction height differences are visible on maps. By the studied native plants there are increasing early flowering areas in the last decade.