

# Dynamics of cranberry tipworm number and influence of weather conditions on pest development in Latvia

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## Abstract

Dynamics of cranberry tipworm *Dasineura vaccinii* S. (Diptera, Cecidomyiidae) in American large-fruited cranberry (*Oxycoccus macrocarpus* or *Vaccinium macrocarpon* (Ait.) Pers) plantations and influence of weather conditions on course of development of the pest were studied in 2005 – 2006 in NE part of Latvia.

Adults of *D. vaccinii* departed at the AET (above 10°C) within 312 - 446°C during the 1<sup>st</sup> and 2<sup>nd</sup> 10-day period of June, mostly influenced by maximal temperatures. Rise of air temperature favored now growth of cranberry vertical shoots, now flying out of *D. vaccinii*. The most number of damaged apical buds with eggs, larvae and pupae was determined during the 1<sup>st</sup> and 2<sup>nd</sup> 10-day period of July, at AET 745 - 965°C, what was influenced by max air temperature and amount of precipitation in former vegetation period. By reduction of temperature during the end of July and beginning of August, at AET 1314 – 1325°C, on undamaged apical shoots generative buds formed, but eggings of *D. vaccinii* did not occur, larvae migrated to topsoil for pupation and dormancy diapause.