

Τίτλος άρθρου: Χειμερινός λήθαργος φυλλοβόλων οπωροφόρων και ακρόδρυων δένδρων

2. Μοντέλα υπολογισμού και δεδομένα συσσώρευσης ψύχους σε περιοχές της Ελλάδας και Κύπρου

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ΒΙΒΛΙΟΓΡΑΦΙΑ

- Aslani Aslamarz A.A., K. Vahdati, M. Rahemi, D. Hassani 2009. Estimation of the chilling and heat requirement of some Persian walnut cultivars. *HortScience*, 44: 697-701.
- Alburquerque, N., F. Garcia-Montiel, et al., 2008. Chilling and heat requirements of sweet cherry cultivars and the relationship between altitude and the probability of satisfying the chill requirements. *Envir. Exper. Bot.* 64: 162-170.
- Atkinson, C.J., Brennan, R.M., Jones, H.G., 2013. Declining chilling and its impact on temperate perennial crops. *Envir. Exper. Bot.* 91: 48-62.
- Baldocchi, D., Wong, S., 2008. Accumulated winter chill is decreasing in the fruit growing regions of California. *Clim. Change* 87: S153-S166.
- Blanke, M.M., and Kunz, A. 2017. Cherry phenology as a bioindicator for climate change. *Acta Hort.* 1162: 1-8.
- Campoy et al., 2012. The fulfillment of chilling requirements and the adaptation of apricot (*Prunus armeniaca* L.) in warm winter climates: An approach in Murcia (Spain) and the Western Cape (South Africa). *Eur. J. Agronomy* 37: 43-45.
- Charrier G, Bonhomme M, Lacoite A, Améglio T. 2011. Are budburst dates, dormancy and cold acclimation in walnut trees (*Juglans regia* L.) under mainly genotypic or environmental control? *Int J Biometeorol.* 55:763-74.
- Costa, C., Stassen, P.J.C., Mudzunga, J., 2004. Chemical rest breaking agents for the South African pome and stone fruit industry. *Acta Hort.* 636: 295-302.
- Darbyshire, R., Webb, L., Goodwin, I., Barlow, S., 2011. Winter chilling trends for deciduous fruit trees in Australia. *Agricultural and Forest Meteorology.* 151(8): 1074-1085.
- Dennis, F.G., 2003. Problems in standardizing methods for evaluating the chilling requirements for the breaking of dormancy in buds of woody plants. *HortSci.* 38: 347-350.
- Drogoudi P., K. Kazantzis & M.M. Blanke 2017. Climate change effects on cherry flowering in Northern Greece. *Acta Hort.* 1162: 45-49.
- Egea, J., Ortega, E., Martínez-Gómez, P., Dicenta, F., 2003. Chilling and heat requirements of almond cultivars for flowering. *Environmental and Experimental Botany.* 50(1): 79-85.
- Elloumi, O., Ghrab, M., Kessentini, H., Ben Mimoun, M., 2013. Chilling accumulation effects on performance of pistachio trees cv. Ma-teur in dry and warm area climate. *Sci. Hort.* 159: 80-87.
- Erez, A. 2000. Bud dormancy; phenomenon, problems and solutions in the tropics and subtropics. Temperate fruit crops in warm climates. A. Erez. Dordrecht, The Netherlands, Kluwer Academic Publishers: 17-48.
- Erez et al., 1990. The dynamic model for rest completion in peach buds. *Acta Hort.* 276: 165-174.
- Erez, A., 1995. Means to compensate for insufficient chilling to improve bloom and leafing. *Acta Hort.* 395: 81-95.
- Fishman, S., Erez, A., Couvillon, G.A., 1987. The temperature dependence of dormancy breaking in plants—mathematical analysis of a two-step model involving a cooperative transition. *J. Theor. Biol.* 124: 473-483.
- Funes et al., 2016. Future climate change impacts on apple flowering date in a Mediterranean subbasin. *Agr. Water Manag.* 164: 19-27.
- Garbone and Schwartz, 1993. Potential impact of winter temperature increases on South Carolina peach production. *Clim. Res.* 2: 225-233.
- Ghrab, M., Ben Mimoun, M., Masmoudi, M.M., Ben Mechlia, N., 2014. The behaviour of peach cultivars under warm climatic conditions in the Mediterranean area. *Int. J. Env. St.*, 71: 3-14.
- Kolářová, E., Nekovář, J., Adamík, P., 2014. Long-term temporal changes in central European tree phenology (1946-2010) confirm the recent extension of growing seasons. *International Journal of Biometeorology.* 58(8): 1739-1748.
- Lammerts, W.E., 1941. An evaluation of peach and nectarine varieties in terms of winter chilling requirements and breeding possibilities. *P. Am. Soc. Hortic. Sci.* 39: 205-211.
- Linsley-Noakes, G. C. and P. Allan 1994. Comparison of two models for the prediction of rest completion in peaches. *Sci. Hort.* 59: 107-113.
- Luedeling et al. 2009. Validation of winter chill models using historic records of walnut phenology. *Agric. For Meteorol.* 149: 1854-1864.
- Luedeling, E., Brown, P.H., 2011. A global analysis of the comparability of winter chill models for fruit and nut trees. *Int. J. Biometeorol.* 55: 411-421.
- Luedeling, E., L. Guo, et al., 2013. "Differential responses of trees to temperature variation during the chilling and forcing phases." *Agric. Forest Met.* 181: 33-42.
- Luedeling, E., M. Zhang, et al., 2009. Validation of winter chill models using historic records of walnut phenology. *Agric. Forest Met.* 149: 1854-1864.
- Luedeling, E., Zhang, M., Girvetz, E.H., 2009a. Climatic changes lead to declining winter chill for fruit and nut trees in California during 1950-2009. *PLoS One*, 4, e6166.
- Luedeling, E., M. Zhang, G. McGranahan, C. Leslie, 2009b. Validation of winter chill models using historic records of walnut phenology. *Agric Forest Meteorology* 149: 1854-1864.
- Luedeling, E., Blanke, M., Gebauer, J., 2015. Chilling Challenges in a Warming World. *Acta Hort.* 1099: 901-908.
- Miranda (2013) Evaluation and fitting of models for determining peach phenological stages at a regional scale. *Agric Forest Meteo* 178-179: 129-139.
- Okie, 1998. Handbook of peach and nectarine varieties. *Agr. Handbook No. 714*, USA.
- Palasciano M, and Gaeta L. 2017. Comparison of different models for chilling requirements evaluation of sweet cherry cultivars in a Mediterranean area. *Acta Hort.* 1161: 405-410.
- Palasciano, M., Gaeta, L., 2017. Comparison of different models for chilling requirements evaluation of sweet cherry cultivars in a Mediterranean area. *Acta Hort.* 1161: 405-410.
- Ramirez, L., K. X. Sagredo, et al. 2010. Prediction models for chilling and heat requirements to estimate full bloom of almond cultivars in the Central Valley of Chile. *Acta Hort.* 872: 107-112.
- Richardson, E.A., Seeley, S.D., Walker, D.R., 1974. A model for estimating the completion of rest for Redhaven and Elberta peach trees. *HortSci.* 9: 331-332.
- Ruiz, D., J. A. Campoy, et al. 2007. Chilling and heat requirements of apricot cultivars for flowering. *Envir. Exper. Botany* 61: 254-263.
- Segura et al., 2017. Late-blooming in almond: A controversial objective. *Sci. Hort.* 224: 61-67.

39. UC Davis. Fruit and Nut research and information center. Dynamic Model & Chill Accumulation http://ucanr.edu/sites/fruittree/how-to_guides/dynamic_model_-_chill_accumulation/
40. Viti, R., L. Andreini, et al., 2010. Effect of climatic conditions on the overcoming of dormancy in apricot flower buds in two Mediterranean areas: Murcia (Spain) and Tuscany (Italy). *Sci. Hortic.* 124: 217-224.
41. Wall, C., Dozier, W., Ebel, R.C., Wilkins, B., Woods, F., Foshee III, W., 2008. Vegetative and floral chilling requirements of four new kiwi cultivars of *Actinidia chinensis* and *A. deliciosa*. *HortSci.* 43: 644-647.
42. Weinberger, J.H., 1950. Chilling requirements of peach varieties. *P. Am. Soc. Hortic. Sci.* 56: 122-128.
43. Vahdati K, A. Aslani Aslamarz, M. Rahemi, D. Hassani, C. Leslie, 2012. Mechanism of seed dormancy and its relationship to bud dormancy in Persian walnut. *Environmental and Experimental Botany* 75: 74–82.
44. USDA Risk Management Agency Valdosta Regional Office, 2017. Peach Variety Listing Table, 2017. https://www.rma.usda.gov/fields/ga_rso/2017/peachvl.html