

Title Ethylene metabolism in 'Jonagold' apple during ca storage and shelf life - a modeling approach

Author I. Bulens, B. Van de Poel, A.H. Geeraerd, B.M. Nicolai and M.L.A.T.M. Hertog

Citation ISHS ActaHorticulturae 945:331-336. 2012.

Keyword *Malus domestica*; 'Jonagold'; ethylene

Abstract

To be able to preserve climacteric fruit like *Malus domestica* for a long time suppression and control of the ripening process is crucial. Based on measurements of metabolites and enzymes of ethylene biosynthesis and taking into account the underlying pathway, a kinetic model to predict and simulate ethylene metabolism during storage and shelf life of Jonagold apple was developed. Data was gathered during ripening, storage and shelf life experiments. The obtained model explains 80% of the data.