

ASSESSMENT OF HUMAN HEALTH RISK OF TWELVE PESTICIDES APPLIED IN DOUBLE DOSE IN AN APPLE ORCHARD

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Abstract. *The aim of this work was to assess the human health risk associated with the consumption of a variety of apples for which five treatments with pesticides in double dose were applied. Six fungicides, five insecticides, and one acaricide were used in the study. Human health risk analyses were based on fruit consumption data released by Freshfel Consumption Monitor of 167.62 g/person/day on average for the European member states (EU-28) in 2014, for 2012. The results of health risk analysis based on consumption data in EU-28 revealed that the pesticide propargite can pose a risk to children health, when applied in double dose, even in two months after harvest. When compared to reference doses (RfDs), the lifetime exposure dose values for each of the analysed pesticides are suggesting that risks to adults and children in their lifetime are negligible.*

Keywords: fruit consumption estimates, lifetime exposure dose, pesticides, risk assessment

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