

# Fatty Acid Profiles of Main Lipid Classes in Adult *Chrysomela vigintipunctata* (Scopoli) (Coleoptera:Chrysomelidae)

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The fatty acid composition of the willow leaf beetle *Chrysomela vigintipunctata* (Scopoli) (Coleoptera: Chrysomelidae) is presented in this paper. Fatty acids in the total lipid extract, triacylglycerols, free fatty acids and polar lipids were compared. One hundred and fifteen fatty acids were identified in the total lipids. The mixture comprised compounds with normal and branched-chains of 12–30 carbon atoms and zero to six double bonds in different positions in the carbon chain. Substantial amounts of unsaturated eicosanoic fatty acids known as important precursor of eicosanoids in insects were detected in the lipids as were biologically significant positionally isomeric dienes, trienes and tetraenes of the series (n-3) and (n-6) of C16, C18, and C22 fatty acids. Also present was a mixture of hydroxy-FA. Triacylglycerols contained mostly saturated and monounsaturated fatty acids. Polyunsaturated fatty acids were found mostly in free fatty acids and especially in polar lipids.