ABSTRACT

Lipophilicity determination of pyrazine chalcone derivatives

Degree paper

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The lipophilicity (R_{MW}) of 1,3-diphenylprop-2-en-1-one derivatives and 3-phenyl-1-pyrazin-2-ylprop-2-en-1-one derivatives has been determined by reversed-phase thin-layer chromatography. RP-TLC experiments were carried out with tetrahydrofurane – phosphate buffer (pH 7,0) mobile phase, R_{MW} values were obtained by extrapolation of R_M valules (determined by RP-TLC) to tetrahydrofurane-free conditions. The influence of various substituents on R_{MW} values was investigated.

Furthermore the correlation between a RP-TLC retention parameter R_{MW} and various calculated log *P* values was investigated in the series of 3-phenyl-1-pyrazin-2-ylprop-2-en-1-one derivatives. Highly significant correlation was found between R_{MW} values and calculated log *P* values.