NOTES

Synthesis of 2-phenyl imino-3-substituted phenyl-5-(ω-methoxy carbonyl heptyl)-4-thiazolidinone

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2-Phenyl imino-3-substituted phenyl-5-(ω-methoxy carbonyl heptyl)-4-thiazolidinones have been synthesised by the treatment of thionyl chloride and methanol on 2-phenyl imino-3-substituted phenyl-5-(ω-carboxy heptyl)-4-thiazolidinones.

In continuation of our work on 4-thiazolidinones[1], we herein report the synthesis of some new 2-phenyl imino-3-substituted phenyl-5-(ω-methoxy carbonyl heptyl)-4-thiazolidinones. For the preparation of title compounds, 2-phenyl imino-3-substituted phenyl-5-(ω-carboxy heptyl)-4-thiazolidinones were reacted with thionyl chloride and methanol (Scheme 1).

Melting points were taken in open capillaries and were uncorrected. Infrared spectra were recorded on Perkin-Elmer 237 spectrophotometer. The elemental analysis was performed on Carlo-Erba-1108 analyser. The purity of the compounds in addition to elemental analysis was checked on TLC.

Preparation of diester of sebacic acid and monoester of sebacic acid were carried out by reported methods[2, 3]. Thioureas were also prepared by the method described earlier[4]. 2-Bromosebacic acid was prepared by reported method[5].

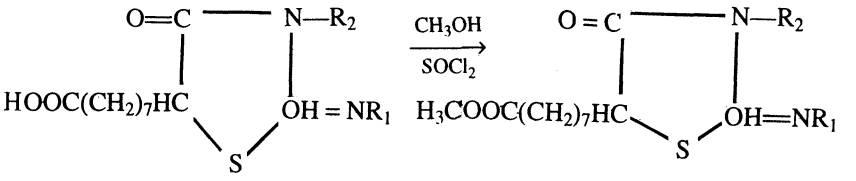
Preparation of 2-phenyl imino-3-substituted phenyl-5-(ω-carboxy heptyl) -4-thiazolidinones

2-Bromosebacic acid and appropriately substituted thioureas were refluxed in absolute ethyl alcohol in presence of pyridine as catalyst. After refluxion, solvent evaporated and residue was dissolved in sodium bicarbonate solution and reprecipitated at pH 3.0. The product thus obtained was filtered, washed with water and dried.

Preparation of 2-phenyl imino-3-substituted phenyl-5-(ω-methoxy carbonyl heptyl)-4-thiazolidinones I

2-Phenyl imino-3-substituted phenyl-5-(ω-carboxy heptyl)-4-thiazolidinone was dissolved in 10 mL of methanol. 3.0 mL of pure thionyl chloride were added to it. The mixture was kept in ice-bath for 1 h and then left overnight. Next day, solvent and excess of thionyl chloride were removed. To it was added saturated

sodium bicarbonate solution. The title compound was extracted with ether. On evaporation of ether, ester was obtained; the compounds were recrystallised from ethyl alcohol. The compounds prepared by this method are shown below:



Scheme I

	Compounds	m.p. (°C)		Compounds	m.p. (°C)
1.	$R_1 = R_2 = —C_6H_5$	90	5.	$R_1 = R_2 = —p\text{-}C_6H_4Cl$	Limpid
2.	$R_1 = R_2 = —m\text{-}C_6H_4CH_3$	144	6.	$R_1 = R_2 = —o\text{-}C_6H_4Cl$	Limpid
3.	$R_1 = R_2 = —p\text{-}C_6H_4CH_3$	167	7.	$R_1 = R_2 = —o\text{-}C_6H_4OCH_3$	178
4.	$R_1 = R_2 = —p\text{-}C_6H_4OCH_3$	223	8.	$R_1 = R_2 = —p\text{-}C_6H_4OC_2H_5$	144

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