

عنوان مقاله:

Design, Synthesis, Spectral Characterization, and Study of Biological Effect of Novel azobenzen-p,p'-di(Y-amine-1, W, Fthiadiazol-۵-yl) Derivatives

محل انتشار:

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خلاصه مقاله:

The compound azobenzen-p,p'-di(Y-amine-1, Y,F-thiadiazol-&-yl) (A) was formed by reacting F,F'-(diazene-1,Y-diyl)dibenzoyl chloride with thiosemicarbazide. Ten substituted amino derivatives of azobenzen-p,p'-di(Y-amine-1, W,Fthiadiazol-۵-yl) were synthesized by reaction of compound (A) with formaldehyde and acetaldehyde to give Schiff base. The compound (A) reaction with sodiumcyanat and potassiumisothiocyanat gave uredo and thiouredo-1, W, Fthiadizol-۵-yl. However, its reaction with benzenesulphonyl chloride and F-methyl benzene sulphonyl chloride gave sulphonamido compounds, while its reaction with acetylchloride and benzoyl chloride gave acetamido and benzamido derivatives. Its reaction with succinic and glutaric acid gave succinamido and glutaramido, in a 1:Y molar ratio, respectively. All these compounds were characterized by FT-IR, 1H-NMR, 1mC-NMR, CHN, and mass spectral analyses. Azobenzen-p,p'-di(Y-amine-1, Y,F-thiadiazol-۵-yl) and its derivatives were examined against two types of Escherichia coli gram-negative and Staphylococcus aurous gram- positive bacteria and one type of fungus pincilium, the results showed good to moderate strength towards the biological activity comparison with amoxicillin and .tetracycline pharmaceutical compounds

کلمات کلیدی: عر ۲- azodibenzoic acid Thiosemicarbazide ۱, ۳, ۴- thiadiazole Antimicrioable ۴,۴

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