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Short Communication

Synthesis And Biological Screening Of Some Novel Quinazolinone And Quinazoline Thiones Derivatives

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ABSTRACT

Many of the quinazolinones derivatives show antibacterial, antifungal, antiviral, antitumor, anticonvulsant activities as well as the inhibitory effects for thymidylate synthase and poly- (ADP-ribose) polymerase[1-10].On the other hand, quinazolinone ring containing substituted amino thiazole nucleus also exhibit various pharmacological activities. To keeping the above fact in the mind, we have synthesized substituted thiazolyl quinazoline-4(3H) one and substituted thiazolyl quinazoline-4(3H)-thione derivatives. In this work, some novel quinazolinones derivatives have been synthesized in two steps, in the step-I, various substituted benzoxazin-4(3H) one are prepared by the reaction of anthranilic acid and benzoyl chloride /acetic anhydride/propanoic anhydride. In step II, prepared substituted benzoxazine -4(3H) one, are coupled with various substituted thaizole compounds. The resulting novel thiazolyl quinazolinone derivatives were characterized by 1_H NMR spectra & mass spectral analysis. To broaden the scope of pharmacological activity of above prepared compound; sulphur group has been introduced in quinazolinone ring using phosphorous pentasulfide as sulfonation agent to synthesize thiazolyl quinazoline-4(3H) thione derivatives. The resulting novel thiazolyl quinazoline-4(3H) thione derivatives were characterized by1_H NMR spectra and mass spectral analysis.

Keywords: Anthranilic acid, substituted 2-aminothiazole, quinazoline-4(3H)-4 one, Quinazoline-4(3H)-4 thione, NMR & Mass & biological activity.