Synthesis of novel steroidal oxazolo quinoxaline as antibacterial agents

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Abstract Steroidal [oxazolo(4,5-b)quinoxaline-2-yl-hydrazone] derivative (7a–9a) (7b–9b) were prepared by the multi-step reactions of steroid. It is prepared via the reaction of steroidal semicarbazones with 2,3-dichloroquinoxaline at 80 °C in ethanol. The structures of the compounds were evident by IR, 1H NMR and mass spectrometry and their purities were confirmed by elemental analyses. The antibacterial activity of these compounds was evaluated by the disk diffusion assay against two Gram-positive and two Gram-negative bacteria and then the minimum inhibitory concentration (MIC) of compounds was determined. The results showed that compounds (7a, 7b, 8a, 8b) are better antibacterial agent as compared with the standard drug amoxicillin.

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