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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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