

# Anti-Hepatitis B Virus Activity of New 1,2,4-Triazol-2-yl- and 1,3,4-Oxadiazol-2-yl-2-pyridinone Derivatives

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Z. Naturforsch. **63c**, 667–674 (2008); received March 26/May 13, 2008

A number of 1,3,4-oxadiazole, **3–9**, and 1,2,4-triazole derivatives, **13–15**, were synthesized starting from the acid hydrazide **1**. The 1,3,4-thiadiazole derivative **12** was prepared from the substituted phenylthiosemicarbazide derivative **11** by treatment with sulfuric acid. The aryl hydrazone derivatives **10a–c** were synthesized by reaction of the hydrazide **1** with the corresponding ketones. The thioalkyl derivatives **16a–e** were prepared by alkylation of the thiol derivatives **3** and **13** with different alkylating agents. The newly synthesized compounds were tested for their anti-HBV activity and some of these compounds showed high antiviral activity.

*Key words:* 1,2,4-Triazoles, 1,3,4-Oxadiazoles, Anti-Hepatitis B Virus