

Synthesis of Glycosides with 4-(4-Hydroxyphenyl)-1,2,3-thia- and -selenadiazole Aglycones

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Abstract—Glycosylation of 4-(4-hydroxyphenyl)-1,2,3-thia(selena)diazoles with 1- α -bromo-2,3,4,6-tetra-*O*-acetyl-D-glucopyranose, 1- α -bromo-2,3,4,6-tetra-*O*-acetyl-D-galactopyranose, and 1- α -bromo-2,3,5-tri-*O*-acetyl-D-xylopyranose under the conditions of interphase catalysis has afforded the corresponding acetylated glycosides. An alternative pathway of selenadiazole glycosides synthesis from semicarbazones of 1- β -*O*-(4-acetylphenyl)-2,3,4,6-tetra-*O*-acetyl-D-glucopyranose, -2,3,4,6-tetra-*O*-acetyl-D-galactopyranose, and -2,3,5-tri-*O*-acetyl-D-xylopyranose via oxidation with selenium dioxide has been elaborated.

Keywords: glycosylation, Königs–Knorr reaction, interphase catalysis, 1,2,3-thiadiazoles, semicarbazides, 1,2,3-selenadiazoles

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