Synthese und Ringumwandlungen von 1,2,5-Oxadiazinan-3,6-dionen

Synthesis and Ring Transformations of 1,2,5-Oxadiazinan-3,6-diones

Detlef Geffken, Hans von Zydowitz und Alf Ploetz

Institut für Pharmazie, Abteilung für Pharmazeutische Chemie, Universität Hamburg,
Bundesstraße 45, D-20146 Hamburg

Sonderdruckanforderungen an Prof. Dr. D. Geffken. Fax: 49 40 42838 3477.
E-mail: geffken@chemie.uni-hamburg.de

Z. Naturforsch. **60b,** 967 – 972 (2005); eingegangen am 14. Juli 2005

1,2,5-Oxadiazinan-3,6-diones (**8**), easily available by cyclic carbonylation of α-amino-carbohydroxamic acids **7** with 1,1'-carbonyldiimidazole, are reacted with hydrazine to give 3-aminohydantoins (**10**). Depending on the substituents R^1/R' **8** was found to undergo an imidazole catalyzed oxidoreduction to 4-imidazolidinones (**11**) or α-iminophenylacetamides (**12**).

Key words: 1,2,5-Oxadiazinan-3,6-diones, 3-Aminohydantoins, 4-Imidazolidinones, α-Iminophenylacetamides