

# Synthese furanoider Zuckeramino­säuren ausgehend von fermentativ gewonnener 2-Oxo-D-gluconsäure

Synthesis of Furanoid Sugar Amino Acids Starting from Fermentatively Produced 2-Oxo-D-gluconic Acid

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Z. Naturforsch. **60b**, 1168 – 1174 (2005); eingegangen am 29. August 2005

2-Oxo-D-gluconic acid obtained by fermentation of D-glucose was used as starting material for syntheses of amino acids. We trapped the carbohydrate in its furanoid configuration and synthesized an  $\alpha$ - and an  $\omega$ -amino acid. After deprotection of the hydroxyl groups the latter did not isomerize to the substituted piperidine (aza-sugar) as expected, but remained in the furanose form. The starting structure **2** was proven by crystal structure analysis. The conformational identification of the other substances was done by NMR measurements following known rules for furanoses.

*Key words:* 2-Oxo-D-gluconic Acid, Sugar Amino Acids, Furanoses