Chinazolinderivate durch Cyclodehydrierung von N-(2-substituierten Aryl)-Piperidinen

Quinazoline Derivatives by Cyclodehydrogenation of N-(2-Substituted Aryl)-Piperidines

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Dehydrogenation of the N-[2-(aminocarbonyl)phenyl]piperidines **1**–**5** using Hg(II)-EDTA, generated the quinazolinones **6**–**9**. Increasing size of the 4-substituent in the piperidine decreased the oxidation rate and the product yield.

N-[2-(Hydroxyiminomethyl)phenyl]piperidines **18**–**22** showed a different behaviour. While **18** with Hg(II)-EDTA in water produced the oxime lactam **24** in quantitative yield, the 4-substituted piperidines **19**–**21** caused not only a lower reaction rate but also an altered product pattern. The double dehydrogenation to lactams was reduced and the cyclic nitrones, formed by two electron withdrawal, became dominant. From the spiro compounds **21** and **22**, solely the quinazoline-N-oxides **29** and **30** resulted. The mechanism of the reactions is discussed.