Ring Size Influence on the Cyclocondensation Mode of GABA – Nitrile Imine Adducts

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γ-Aminobutyric acid (GABA) adds onto nitrile imine 1,3-dipolar species (generated *in situ* from their *N*-arylhydrazonoyl chloride precursors **1a-c**) to deliver the corresponding acyclic amidrazone adducts **10a-c**. In the presence of 1,1'-carbonyldiimidazole, the latter adducts undergo cyclocondensation involving the activated carboxyl and the amidrazone–CH_2NH groups to afford the respective *N*-[1-(arylhydrazono)-2-oxopropan-1-yl] pyrrolidin-2-ones (**11a-c**). The constitution of **10** and **11** is evidenced from analytical and spectral (IR , MS and NMR) data.

Key words: γ-Aminobutyric Acid (GABA), Nitrile Imine-GABA Adducts, Cyclocondensation, Pyrrolidin-2-ones