1,2,3- and 1,2,4-triazine derivatives

R 0640 04 - 197 Condensed 1,2,4-Triazines: Synthesis of 5-Benzyl-5H-imidazo(4,5-e)-1,2, 4-triazine 1-Oxides (9-Benzyl-6-azapurine 6-Oxides). — With a view to testing their biological activity the bioisosteric isomers of antiviral 9-benzylpurines such as (IV), (VI) and (VII) are synthesized. The key step in this approach is the formation of the N- oxide (II). The position of the N-oxide moiety is clarified by X-ray analysis of compound (IV) (no biological data given). — (TZENG, C.-C.; WEI, D.-C.; HWANG, L.-C.; CHENG, M.-C.; WANG, Y.; J. Chem. Soc., Perkin Trans. I (1994) 16, 2253-2256; Sch. Chem., Kaohsiung Med. Coll., Kaohsiung City 807, Taiwan; EN)

$$II \quad \xrightarrow{\text{NH}_2 - \text{NH}_2}_{\text{EtOH, reflux}} \quad \xrightarrow{\text{H}_2 \text{N}}_{\text{N}} \quad \xrightarrow{\text{N}_1 + \text{N}_2}_{\text{N}} \quad \xrightarrow{\text{N}_1 + \text{N}_2}_{\text{N}} \quad \xrightarrow{\text{1. HgO, EtOH, reflux } (55\%)}_{\text{2. CH(0-Et)}_3 \text{ (III), conc. HCl}} \quad \xrightarrow{\text{N}_1 + \text{N}_2 \text{N}_1 + \text{N}_2}_{\text{N}_1 + \text{N}_2} \quad \xrightarrow{\text{N}_2 + \text{N}_2 \text{N}_2 + \text{N}_2}_{\text{N}_1 + \text{N}_2}}_{\text{N}_1 + \text{N}_2 + \text{N}_2} \quad \xrightarrow{\text{N}_2 + \text{N}_2 + \text{N}_2}_{\text{N}_1 + \text{N}_2}}_{\text{N}_2 + \text{N}_2 + \text{N}_2} \quad \xrightarrow{\text{N}_2 + \text{N}_2 + \text{N}_2}_{\text{N}_1 + \text{N}_2}}_{\text{N}_1 + \text{N}_2} \quad \xrightarrow{\text{N}_2 + \text{N}_2 + \text{N}_2}_{\text{N}_2 + \text{N}_2}}_{\text{N}_1 + \text{N}_2}$$