

Convenient Selective Synthesis of Substituted Pyrido[2,3-*d*]pyrimidones and Annulated Derivatives

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The reaction of 6-aminouracil (**1**) with the appropriate α,β -unsaturated ketones, gave the corresponding pyrido[2,3-*d*]pyrimidin-2,4-diones **3**, **6**, **8** and **10**, respectively. Treatment of **1** with salicylaldehyde, 6-carboethoxy-3,5-diphenyl-2-cyclohexenone (**13**) or 2,6-bis(phenylmethylidene)cyclohexanone (**15**) afforded the corresponding pyrimido[4,5-*d*]quinoline-2,4-diones **12**, **14** and **16**, respectively. Furthermore, a pyrido[2,3-*d*]pyrimidine incorporating 3,2'-bis(quinoline) derivative **18** was synthesized. Annulation of pyrido[2,3-*d*]pyrimidine with pyrazole or imidazole moieties was achieved *via* reaction of **1** with benzylidene derivatives of pyrazolone, imidazolone or 3-carboethoxycoumarin (**23**) to give **21**, **22** and **24**, respectively.

Key words: Uracil, Annulation, Biselectrophilic Reagent, Cyclocondensation