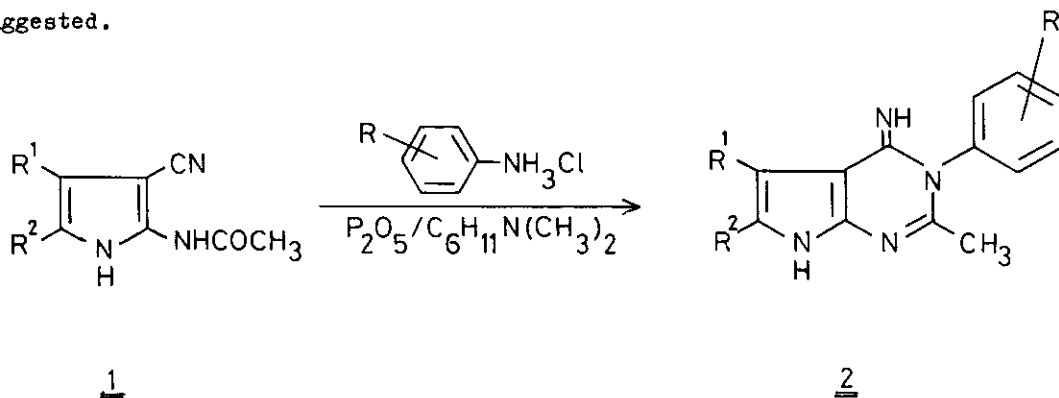


ONE-STEP SYNTHESIS OF PYRROLO[2,3-d]PYRIMIDIN-4-IMINES

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3-Aryl-3,7-dihydro-4H-pyrrolo[2,3-d]pyrimidin-4-imines 2 were obtained by treating 2-acetylamino-3-cyanopyrroles 1 with a mixture of phosphorus pentoxide, N,N-dimethylcyclohexylamine and an appropriate arylamine hydrochloride at 150-200°C for 1-2 hours. The importance of using absolutely anhydrous arylamine hydrochlorides is stressed. A possible reaction mechanism is also suggested.

a, R¹ = CH₃; R² = Hb, R¹ = C₆H₅; R² = Hc, R¹ = CH₃; R² = *iso*-C₄H₉d, R¹ = CH₃; R² = CH₂C₆H₅R = H, 4-Cl, 2-F, 4-F, 3-CH₃,4-CH₃, 4-C₂H₅,4-*n*-C₄H₉, 2,4-Cl₂,2,6-(CH₃)₂