SYNTHESIS OF 4-SUBSTITUTED PYRAZOLEs

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Reactions of 2-substituted 3-(dimethylamino)propenoates [1] with various aromatic hydrazines were studied. First step in the reactions was acid-catalysed substitution of dimethylamino group with hydrazine carried out in aqueous media. In this manner some novel alkyl 3-(2-arylhydrazono)-2-acyliminopropanoates were prepared in hydrazonic form only. In the second step cyclization of previously obtained alkyl 3-(2-arylhydrazono)-2-acyliminopropanoates took place. Reaction conditions were varied. Some reactions afforded desired pyrazoles when reaction mixture was refluxed in neutral media (ethanol). It was found out later that basic-catalysed reactions (with triethlyamine) showed better results [2].