Letters to the Editor

The reaction of methyl 2-(3,5-dimethoxy-4-oxocyclohexa-2,5-dienylidene)-3,3,3-trifluoropropionate with ethyl 3-methylaminocrotonate

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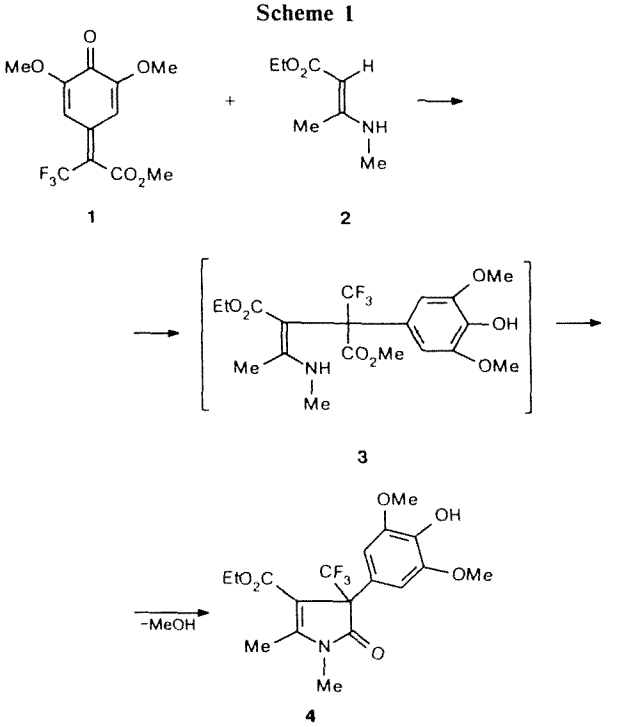
Reactions of *p*-methylenequinones with different CH-acids occur, as a rule, in the presence of a basic catalyst to give products of 1,6-addition,[1] but reactions of *p*-methylenequinones with enamines are poorly studied. We have found that *p*-methylenequinone (**1**)[2] reacts with ethyl 3-methylaminocrotonate (**2**) in benzene without any catalyst at 20° C for 7 days to form ethyl 4-trifluoromethyl-4-(4-hydroxy-3,5-dimethoxyphenyl)-1,2-dimethyl-5-oxo-4,5-dihydropyrrole-3-carboxylate (**4**) (Scheme 1). Apparently, a product of *C*-alkylation (**3**) is an intermediate in this reaction.

Tl. yield of pyrro! ., 75.6%, .p. 151—152 °C, R_f 0.28 (acetone—CCl_4, 1 : 3). ^{1}H NMR (acetone-d_6), δ: 1.10 (t, 3 H, Me CH_2); 2.65 (s, 3 H, NMe); 3.15 (s, 3 H, Me); 3.70 (s, 6 H, 2 OMe); 4.10 (m, 2 H, OCH_2); 6.70 (s, 2 H, 2 C_6H_2); 7.50 (s, 1 H, OH). Found (%): C, 53.51; H, 5.05; N, 6.79. $C_{18}H_{20}F_3NO_6$. Calculated (%): C, 53.60; H, 4.96; N, 6.90.

Scheme 1



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