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The Behavior of Some Unsymmetrical α -Quinones towards Cyclic Secondary Amines. Structural Confirmation Based on X-ray Crystallography.

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Abstract : The reaction of 4-triphenylmethyl-1,2-benzoquinone with morpholine in acetonitrile gave 2-morpholino-4-tritylphenol, 2,6-dimorpholino-4-tritylphenol and 3-morpholino-5-tritylbenzene-1,2-diol, respectively. By the same manner, it was reacted with piperidine, N-methylpiperazine and pyrrolidine to yield the corresponding adducts. 3,5-Di-*tert*-*o*-benzoquinone with morpholine in acetonitrile led to the formation of 2,4-di-*tert*-butyl-6-morpholinophenol and 2,4-di-*tert*-butyl-6-(morpholin-3-ylidene)cyclohexa-2,4-dienone. Similarly, it reacted with piperidine to yield 2,4-Di-*tert*-butyl-6-(piperidin-1-yl)phenol and 2,4-Di-*tert*-butyl-6-(piperidin-2-ylidene)cyclohexa-2,4-dienone. All new compounds were identified by spectroscopic tools.

Keywords: 4-triphenylmethyl-1,2-benzoquinone, 3,5-Di-*tert*-*o*-benzoquinone, morpholine, piperidine, pyrrolidine, Structural confirmation, x-ray crystallography.

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