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REACTIONS OF 1,2,4-TRIAZINES WITH 4,5-DIMETHYL-1,2-DEHYDROBENZENE

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Abstract. Arynes are known intermediates in reactions with azaheterocycles. However, the reactions of fist ones with 1,2,4-triazines are not well studied so far. In continuation of our studies on interactions of 3,5-substituted-1,2,4-triazines with arynes we wish to report herein our results observed in reactions of these heterocycles with 4,5-dimethyl-1,2-dehydrobenzene. This dimethyl-aryne was generated *in situ* from the corresponding anthranilic acid as precursor by the reaction with *iso*-Amyl-ONO in 1,4-dioxane and the following reaction with 5,6-diaryl-3-(pyridyl-2)-1,2,4-trazines 1 in refluxed toluene for 2 hours. In all the cases the reaction afforded the domino-products, namely pyrido[1,2-a]indoles 2, as major products, while the "classical" ID Diels-Alder products, such as *iso*-quinolines 3, were obtained only in trace amounts.

In conclusion, new aryne derivative, 4,5-dimethyl-1,2-dehydrobenzene, was inverstigarted in the reactions with 1,2,4-arynes. Similarly to our previous results the reaction afforded the domino-products, pyrido[1,2-a]indoles, as major ones. The structure of the obtained products were confirmed by NMR-spectroscopy, MS-spectrometry and elemental analysis.

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