thiadiazine derivatives

R 0660 45 - 209 A Facile One-Pot Synthesis of 3-Substituted 1,2,4-Triazolo(4,3-b)-(4,1,2)benzothiadiazine-8-ones. — Reaction of the 4-amino-3-mercapto-1,2,4-triazoles (I) with two equivalents of p-benzoquinone (II) produces the title compounds (III) (no yields given). The mechanism is discussed. Compound (IIIa) is converted to the ester (VI) by reductive acetylation. The thiols (Ib) and (IX) react with the quinones (VII) and (II) to form the adducts (VIII) - (X). — (RANI, B. R.; RAHMAN, M. F.; BHALERAO, U. T.; Org. Prep. Proced. Int. 23 (1991) 2, 157-162; Indian Inst. Chem. Technol., Hyderabad-500007, India; EN)

$$IIIa \xrightarrow[reflux, [1 min]]{Ac_2D (V)} \underbrace{NNS}_{Me} \underbrace{NNS}_{Ac} \underbrace{O-Ac}_{O-Ac} \qquad Ib \xrightarrow[-25^{\circ}C, [4 h]]{Ib_{NN}} \underbrace{NNS}_{NH_2} \underbrace{OH}_{NNH_2} \underbrace{OH}$$

VI 63%

но

VIII 80%

1