. ENGLISH ABSTRACT

In the rigorous thesis are described the influence of replacement oxo group for thioxo group in the series of halogenated 3-(4-ethylphenyl)benzoxazine-2,4(3*H*)-diones and 6-chloro-3-(4-butylphenyl)benzoxazine-2,4(3*H*)-dione. The starting ethyl (or butyl) salicylanilides were synthesis from substituted salicylic acid and ethyl (or butyl) aniline in toluene by the presence of phosphorus trichloride. (The set of halogenated salicyl acids compounds: 4-chloro-, 5-chloro-, 5-bromo- and 3,5-dibromosalicylic acid). The halogenated 4´-ethylsalicylanilides were reacted in dry pyridine with methyl-chloroformiate to form 3-(4-ethylphenyl)benzoxazine-2,4(3*H*)-diones. Similar were prepared 6-chloro-3-(4-butylphenyl)benzoxazine-2,4(3*H*)-diones. The mixture of 3-(4-ethyphenyl)-4-thioxo-2*H*-1,3-benzoxazine-2(3*H*)-one and 3-(4-ethylphenyl)-2*H*-1,3-benzoxazine-2,4(3*H*)-dithione was prepared by the reaction of the halogenated 3-(4-ethylphenyl)- 2*H*-1,3-benzoxazine-2,4(3*H*)-diones with phosphorus pentasulfide. The products were separated by chromatography. The 3-(4-ethylphenyl)-6-chloro-4-thioxo-2*H*-1,3-benzoxazine-2(3*H*)-ones and 6-chloro-3-(4-ethylphenyl)-2*H*-1,3-benzoxazine-2,4(3*H*)-dithiones were prepared by similar way. The compounds were tested *in vitro* for antimycobacterial activity against *Mycobacterium tuberculosis, M. kansasii* (two strains) and *M. avium.* The thioxo (or two thioxo) derivatives form the group of high active antimycobacteral compounds, active against INH-resistant strain *M. kansasii* and *M. avium* as well. The most active derivatives were against *Mycobacterium tuberculosis* more active as isonicotinhydrazide (INH). The study is interesting for orientation on compounds of the new mechanism of activity. It brings a biochemical interest in this way.