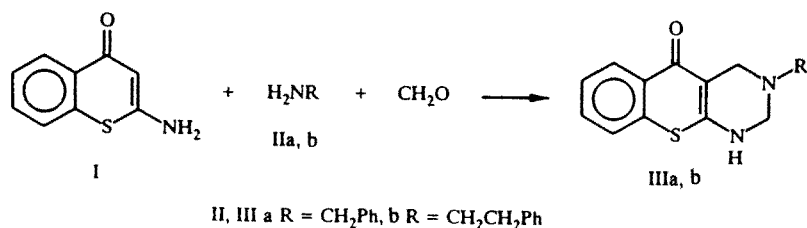


## LETTERS TO THE EDITOR

### SYNTHESIS OF A NEW HETEROCYCLIC SYSTEM, 1,2,3,4-TETRAHYDRO-5H-THIACHROMENO[2,3-*d*]PYRIMIDINONE-5

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It has been shown previously [1] that aminomethylation of 2-aminothiachromone (I) with a secondary amine gave the 3-aminomethyl derivative of I [1]. We have found that heating the amine I (5.5 mmole) with a primary amine (IIa, IIb, 5.5 mmole) and an excess of formaldehyde (20 mmole) to boiling in ethanol and then keeping the mixture for 12 h gave derivatives of thiachromeno[2,3-*d*]pyrimidine IIIa and IIIb as a result of alkylation at C(3) and the nitrogen atom, followed by cyclization.



**3-Benzyl-1,2,3,4-tetrahydro-5H-thiachromeno[2,3-*d*]pyrimidinone-5 (IIIa, C<sub>18</sub>H<sub>16</sub>N<sub>2</sub>OS).** mp 205-206°C (ethanol, decomp.). Yield 87.5%. *R<sub>f</sub>* 0.72 (TLC, Al<sub>2</sub>O<sub>3</sub>, activity IV, chloroform). IR spectrum (in Nujol): 3240 (NH), 1590, 1575, and 1560 cm<sup>-1</sup> (C=O, C=C). <sup>1</sup>H NMR spectrum (in DMSO-*d*<sub>6</sub>): 3.74 (4 H, s, 2-H, 4-H), 4.17 (2 H, s CH<sub>2</sub>Ph), 7.50-7.93 ppm (9 H, m, aromatic). Mass spectrum, *m/z* (%): M<sup>+</sup> 308 (11.5), 279(7), 220(6), 219(4), 218(11), 217(82), 203(6), 192(9), 190(18), 189(2), 176(0.5), 162(9), 147(2), 137(12), 136(7), 134(4), 119(2), 109(7.5), 108(6.5), 92(10), 91(100), 74(4).

**3-(2-Phenylethyl)-1,2,3,4-tetrahydro-5H-thiachromeno[2,3-*d*]pyrimidinone-5 (IIIb, C<sub>19</sub>H<sub>18</sub>N<sub>2</sub>OS).** mp 184-185°C (ethanol, dec.). Yield 75.0%. *R<sub>f</sub>* 0.35 (TLC, Al<sub>2</sub>O<sub>3</sub>, activity IV, chloroform). Mass spectrum *m/z* (%): M<sup>+</sup> 322 (20), 232(5), 231(32), 229(5), 217(6), 212(8), 204(8), 203(26), 202(100), 200(8), 192(8), 190(6), 189(2), 175(6), 174(3), 163(3), 162(7), 147(12), 137(9), 136(11), 134(5), 133(13), 132(28), 121(3), 108(8), 106(3), 105(32), 104(11), 91(44).

#### REFERENCES

1. L. A. Zhmurenko, O. M. Glozman, and V. A. Zagorevskii, *Khim. Geterotsikl. Soedin.*, No. 2, 182 (1978).