

## A C-GLUCOSIDE OF CHAMAZULENE

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*Khimiya Prirodnykh Soedinenii*, Vol. 2, No. 5, pp. 361-362, 1966

For the purposes of studying the biological activity of natural azulenes and their synthetic analogs it is of great interest to obtain water-soluble azulene compounds.

Work in this direction has been carried out only by Treibs, and this has been concerned with the synthesis of C-glucosides of the azulenes [1, 2]. When azulene, 1-isopropyl-5-methylazulene, and guaiazulene were heated with  $\alpha$ -acetobromoglucose, he obtained the corresponding C-glucosides.

Treibs also used guaiazulene to obtain the C-glucosides of some other mono-, di- and polysaccharides. The C<sub>1</sub> or the C<sub>3</sub> of the five-membered ring of the azulenes took part in the C-glucosidation reaction. Better results were achieved in the synthesis of the C-glucosides of guaiazulene. The derivatives that Treibs synthesized retained their biological activity [2].

We have attempted to obtain a C-glucoside of natural chamazulene. Using the method recommended by Treibs, with some modifications, we have succeeded in isolating from the reaction mixture a water-soluble acetate of C-glucoside of chamazulene in the form of blue crystals with mp 183° C.

Found, %: C 65.43; H 6.64. Calculated for C<sub>23</sub>H<sub>34</sub>O<sub>9</sub>, %: C 65.33; H 6.66.

By saponifying the acetate of the glucoside with sodium ethoxide, we obtained the C-glucoside of chamazulene as light blue crystals with mp 142°-146° C.

Found, %: C 68.48; H 7.76. Calculated for C<sub>20</sub>H<sub>26</sub>O<sub>5</sub>, %: C 69.32; H 7.57.

The substance dissolved readily in water, forming a blue solution.

### REFERENCES

1. W. Treibs, *Ann.* **667**, 141, 1963.
2. W. Treibs, W. German patent no. 1 179 933, 22 October 1964.

14 April 1966

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