Molecular Structure of Xylerythrin — a Fungus Pigment

SIXTEN ABRAHAMSSON and MAUREEN INNES

Crystallography Group, Institute of Medical Biochemistry, University of Göteborg, Göteborg, Sweden

Xylerythrin is a pigment from the fungus Peniophora sanguinea Bres. It has been isolated and studied chemically by Gripenberg.¹ He suggested that we determine the molecular structure by X-ray methods of the bistbromoacetate of the pigment. The crystals are triclinic with

\[
\begin{align*}
a &= 11.36 \text{ Å} \\
b &= 9.24 \text{ Å} \\
c &= 13.36 \text{ Å} \\
\alpha &= 78.1° \\
\beta &= 89.2° \\
\gamma &= 81.0°
\end{align*}
\]

The space-group was assumed to be \( Pt \) and this was not contradicted during the structure refinement. There are two molecules per unit cell. The structure was solved by the usual heavy-atom technique and refined by anisotropic least-squares treatment. The present \( R \)-value for the 1745 independent reflections is 10.4%. By this investigation the molecular structure of the pigment has been determined in all details to be (I) without using any chemical information. Gripenberg describes the chemical implications in an accompanying paper.¹ A spacial drawing of the bistbromoacetate derivative is shown in Fig. 1. A full account of the structure analysis will be published later.


Received October 14, 1965.

---

Fig. 1. Spacial drawing of the xylerythrin bistbromoacetate molecule as seen along the c-axis.

Acta Chem. Scand. 19 (1965) No. 9