

Supporting Information to:

New Furanoditerpenoids from *Croton jatrophioides*

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Crystal Structure Determination of Isoteucvin (2)

A crystal with dimensions ca. $0.15 \times 0.40 \times 0.40$ mm was used for data collection. A total of 1713 unique reflections were measured within the range $0 \leq h \leq 10$, $0 \leq k \leq 14$, $0 \leq l \leq 21$. Of these, 1433 were above the significance level of $2.5 \sigma(I_{\text{obs}})$ and were treated as observed. The range of $(\sin \theta) / \lambda$ was $0.053\text{--}0.626 \text{ \AA}^{-1}$ ($4.7 \leq \theta \leq 74.8^\circ$). Two reference reflections [(2 0 0), (1 2 2)] were measured hourly and showed no decrease during the 25-h collecting time. In addition, around 500 “Friedel” reflections were measured, which were used to determine the absolute configuration. Unit-cell parameters were refined by a least-squares fitting procedure using 23 reflections with $40.33 \leq \theta \leq 43.92^\circ$. Corrections for Lorentz and polarization effects were applied. The structure was solved by the program package CRUNCH [1] and refined with XTAL [2] using scattering factors taken from Cromer and Mann and the International Tables for X-ray Crystallography [3], [4]. Structure validation, including the making of figures and tables, was carried out with PLATON [5]. The hydrogens were kept fixed at calculated positions, each with an isotropic atomic displacement parameter ($U = 0.10 \text{ \AA}^2$). Anisotropic full-matrix least-squares refinement on F converged to $R_F = 0.078$, $R_{\text{w}F} = 0.089$, $(\Delta/\sigma)_{\text{max}} = 0.01$, $S = 1.04$. A weighting scheme $w = [3. + 0.01 * (\sigma(\text{Fobs}))^2 + 0.001 / (\sigma(\text{Fobs}))]^{-1}$ was used. The secondary isotropic extinction coefficient refined to $g = 2291(291)$ [6], [7]. The absolute-structure Flack parameter refined to $X_{\text{abs}} = 0.2$, indicating that the correct enantiomer had been refined [8]. However, the large s.u. (= 12) of X_{abs} implies that the absolute structure is not established unambiguously. A final difference Fourier map revealed a residual electron density between -0.34 and 0.37 e\AA^{-3} . The atom numbering of the refined crystal structure model is shown in **Fig. 1S**. The bond lengths and bond angles are close to values reported in the Cambridge Structural Database [9] for similar types of compounds.

Crystal Structure Determination of Jatrophoidin (3)

A crystal with dimensions ca. $0.20 \times 0.30 \times 0.75$ mm was used for data collection. A total of 2022 unique reflections were measured within the range $0 \leq h \leq 8$, $0 \leq k \leq 19$, $-10 \leq l \leq 10$. Of these, 1884 were above the significance level of $2.5 \sigma(I_{\text{obs}})$ and were treated as observed. The range of $(\sin \theta) / \lambda$ was $0.058\text{--}0.626 \text{ \AA}^{-1}$ ($5.1 \leq \theta \leq 74.8^\circ$). Two reference reflections [($\bar{2}$ 0 2), (1 1 2)] were measured hourly and showed no decrease during the 70-h collecting time.

In addition, around 1500 “Friedel” reflections were measured, which were used to determine the absolute configuration. Unit-cell parameters were refined by a least-squares fitting procedure using 23 reflections with $40.00 \leq \theta \leq 50.61^\circ$. Corrections for Lorentz and polarization effects were applied. The structure was solved by the program package CRUNCH [1] and refined with XTAL [2] using scattering factors taken from Cromer and Mann and the International Tables for X-ray Crystallography [3], [4]. Structure validation, including the making of figures and tables, was carried out with PLATON [5]. The hydrogens were kept fixed at calculated positions, each with an isotropic atomic displacement parameter ($U = 0.10 \text{ \AA}^2$). Anisotropic full-matrix least-squares refinement on F converged to $R = 0.075$, $R_w = 0.070$, $(\Delta/\sigma)_{\text{max}} = 0.10$, $S = 1.05$. A weighting scheme $w = [0.9 + 0.01 * (\sigma(\text{Fobs}))^2 + 0.001 / (\sigma(\text{Fobs}))]^{-1}$ was used. The secondary isotropic extinction coefficient refined to $g = 1236(92)$ [6], [7S]. The absolute structure Flack parameter refined to $X_{\text{abs}} = -0.2(6)$, indicating that the correct enantiomer was refined [8]. A final difference Fourier map revealed a residual electron density between -0.23 and 0.28 e\AA^{-3} . The atom numbering of the refined crystal structure model is shown in **Fig. 2S**. The bond lengths and bond angles are close to values reported in the Cambridge Structural Database [9] for similar types of compounds.

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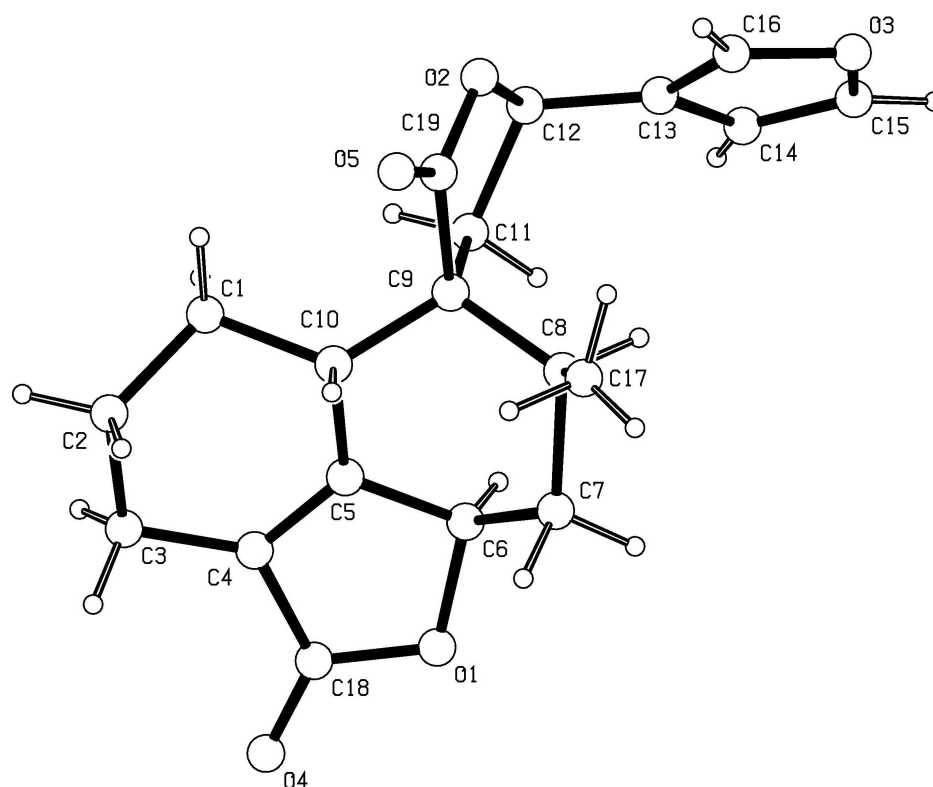


Fig. 1S Isoteucvin (2).

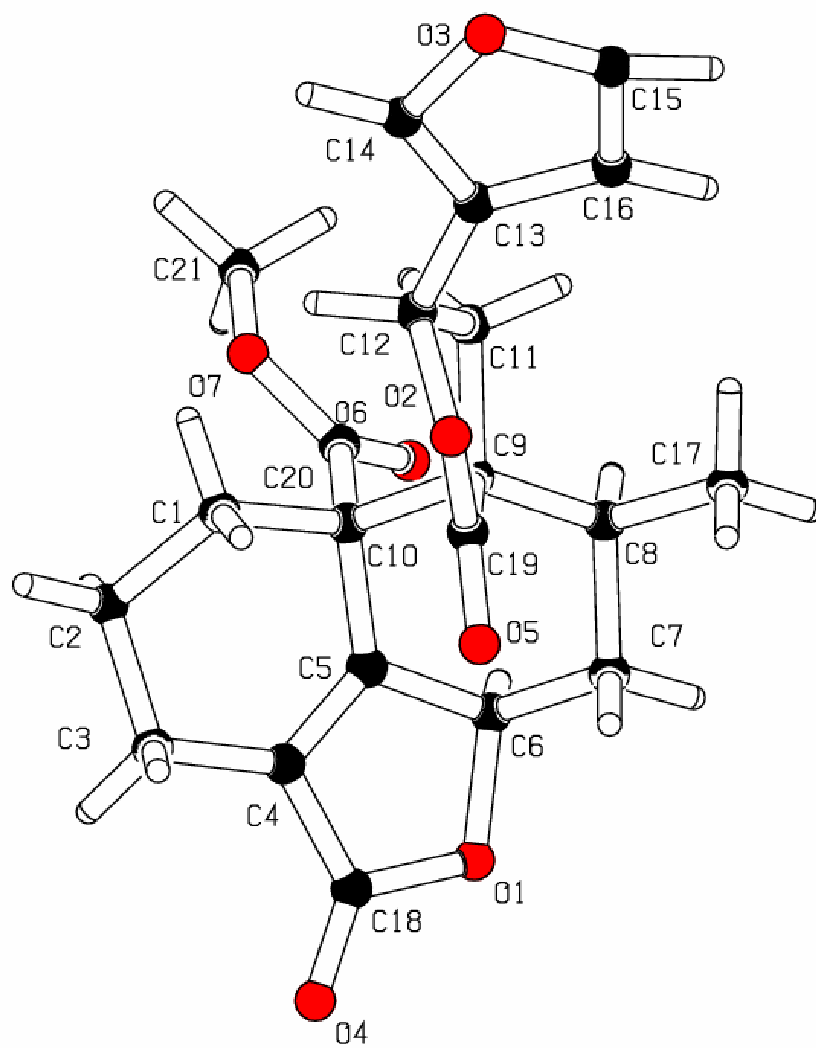


Fig. 2S Jatrophaoidin (**3**).