# AN X-RAY INVESTIGATION OF A CRYSTAL OF METHYL MERISTOTROPATE

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It has been reported previously that the suggested structure for meristotropic acid is 3-hydroxy-6-11(12),13(18)-dien-29-oic acid. The position of the keto group was determined on the basis of NMR spectra [1].

In the present work we have obtained preliminary x-ray characteristics of the methyl ester of meristotropic acid (MA), $C_{31}H_{46}O_4$.

The methyl ester was isolated by recrystallizing MA from ethanol and prolonged standing. The crystals had mp 280-281°C. The habitus of the crystals was elongated and prismatic, with the frequent occurrence of twinned specimens.

Single crystals were studied by Laue x-radiographic method of oscillating and reciprocal-lattice diagrams. The following parameters were obtained for the primitive rhombic cell: $a = 12.1$ Å, $b = 27.1$ Å, $c = 7.35$ Å.

On the reciprocal-lattice diagrams, the layer lines around C of reflections of the h00 and 0k0 types are also present in which $h = 2n$ and $k = 2n$. No systematic extinctions were observed for hkL. On the 0k$l$ reciprocal-lattice diagrams, reflections of the 0k0 type obey the condition $k = 2n$, while for reflections of the 00$l$ and also of the Hk$l$ types there are no limitations.

Thus, an analysis of the systematic extinctions indicated leads to the space group $D_2^3 = P\,2,2,2$.

At a density of $\rho = 1.18$ of the crystals of the methyl ester of MA, there are four formula units, $C_{31}H_{46}O_4$, packed into the rhombic cell.

## LITERATURE CITED

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