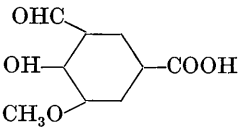
Acta Cryst. (1964). **17**, 1487

The unit cell and space group of 5-formylvanillic acid.

By H. MORITA and H. KODAMA, *Soil Research Institute, Canada Department of Agriculture. Ottawa* 3, *Canada*

(*Received* 15 *May* 1964)

5-Formylvanillic acid (I), $C_9H_8O_5$, is a phenolic acid which can be obtained as a degradation product of



(I)

certain plant constituents. For the present work the compound was crystallized from water to give transparent monoclinic needles which melted at 224–225 °C. The published melting point is 223–224 °C (Pearl & Beyer, 1952).

Cell dimensions and space group were determined from rotating-crystal, Weissenberg and precession photographs, with Cu $K\alpha$ radiation ($\lambda = 1{\cdot}5418$ Å). The results are:

$a = 3{\cdot}84$, $b = 7{\cdot}52$, $c = 29{\cdot}99$ Å; $\beta = 93°\ 50'$; $V = 864{\cdot}8$ Å^3.

The observed systematic extinctions, $h0l$ absent l odd, lead to two possible space groups Pc (C_s^2) and $P2/c$ (C_{2h}^4), but since the compound is optically inactive the space group must be $P2/c$.

The observed density by the flotation method was 1·53 g.cm^{-3}, which agrees with a calculated density of 1·505 for a unit cell containing four molecules.

All powder reflections have been indexed with the use of the unit-cell dimensions obtained by the single-crystal study.

A triclinic form of 5-formylvanillic acid has been isolated by crystallization from a mixture of dioxane and light petroleum. Crystallographic study of this isomer as well as other homologues of the acid is contemplated.

Reference

PEARL, I. A. & BEYER, D. L. (1952). *J. Amer. Chem. Soc.* **74**, 4263.

Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the General Secretary of the International Union of Crystallography (D. W. Smits, Rekencentrum der Rijksuniversiteit, Grote Appelstraat 11, *Groningen, The Netherlands). Publication of an item in a particular issue cannot be guaranteed unless the draft is received* 8 *weeks before the date of publication.*

International Union of Crystallography World Directory of Crystallographers

The Sixth General Assembly of the Union approved the publication of a third edition of the *World Directory of Crystallographers* after the second edition, which appeared in 1960, has become out-of-date.

It is the intention that as for the previous edition, the collection of the biographical information for the third edition be carried out by national Sub-editors. Questionnaires will therefore be distributed by, and should be returned to, these Sub-editors.

As crystallography is an essential part of many fundamental and applied scientfic applications, it is difficult to state precisely what the qualifications of a person should be for inclusion in the *Directory*. The Executive Committee has suggested that for inclusion a person should be a member of a national crystallographic organization, or have published on a crystallographic subject, or be a graduate student in the field of crystallography. Of course, these qualifications should not be considered as strict rules and in many cases one should judge for himself if his name should be listed in the *Directory*. The term 'crystallographic' should, of course, be understood in its widest sense.

Readers of this notice whose names ought to be included but who have not received a questionnaire by 15 November, are requested to write to the Secretary of their National Committee (see page 1489), or to the General Secretary of the Union, Dr D. W. Smits, Rekencentrum der Rijksuniversiteit, Grote Appelstraat 11, Groningen, The Netherlands.