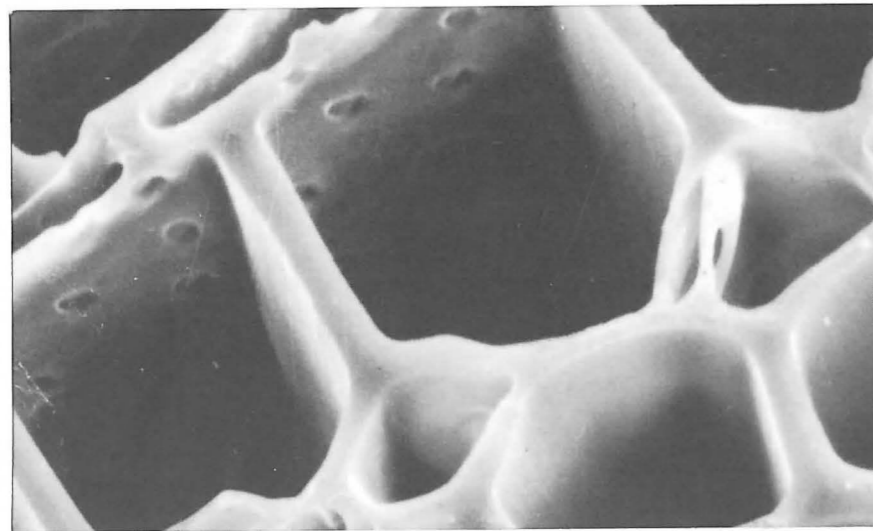




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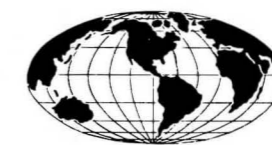
1975/2
Directory Issue



IAWA BULLETIN

1975/2
Directory Issue

Published quarterly to advance the knowledge of wood anatomy



INTERNATIONAL ASSOCIATION OF WOOD ANATOMISTS
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SYRACUSE, NEW YORK 13210
U.S.A.

We are pleased with the reactions received about the new IAWA Bulletin. It is satisfying to know that there are some who notice and who care about the Association and its activities. With interest of this kind we are encouraged to continue to improve the image of I.A.W.A. and its service to members

Perhaps it was predictable that our supply of articles would "dry up" just as we were ready to take advantage of the new format of the Bulletin. There have been promises of a few papers for the future, but in this issue you will see that we turned to a device to fill some pages. Fortunately, a new membership directory was needed. With the cooperation of our members, the 1975/3 issue will contain more technical material.

Beginning with the 1975 issues the pages of the Bulletin will run consecutively through the four issues. This practice has been suggested in the past and has been adopted. Some members would like to see a change from the year/issue number (1975/2) system to a volume and number designation. There is no basic objection to this, but there is a question about how to begin. For example, should 1975 be Volume 1 or Volume 20? How many volumes have there been in the past? If the name of the Bulletin could be changed to, say: Journal of Wood Anatomy or to: Wood Structure, then Volume 1 would be a logical start. Let us have your thoughts on this question.

W. A. Côté
C. H. de Zeeuw

OUR COVER

Subjecting wood to very large doses of gamma radiation (500+ Megarads) causes its depolymerization. It then fractures in uncharacteristic fashion as in this sample of eastern spruce (*Picea* sp.).

Front cover: 650X, Back cover 1300X

For additional information on this phenomenon, see the article by Antoine, Avella and Van Eyseren in the 1971/4 issue of the IAWA Bulletin.

A BURNED WOOD SPECIMEN FROM AN ARCHAEOLOGICAL EXCAVATION IN JERUSALEM

by
A. Fahn¹

Identification of burned wood from archaeological excavations provides technical difficulties. Appropriate sections cannot be obtained even from material embedded in paraffin or plastic. With the aid of a microscope with incident light it is possible to examine broken surfaces of charcoal pieces and to get a fairly good picture of the shape and arrangement of the various wood elements. However, precise characteristics such as pits and pit membranes, for example, cannot be clearly defined.

The scanning electron microscope appears to be the easiest and most suitable tool for identification of burned wood. An example of the use of this method for the identification of archaeological specimens follows (Figs. 1-7). The samples examined were from beams, about 30 cm thick, part of the ceiling of a patrician house, which was burned down by fire during the destruction of Jerusalem in the year 70 A.D. The site of the house has been excavated recently in the Jewish Quarter in the Old City of Jerusalem by Professor N. Avigad of the Institute of Archaeology of the Hebrew University of Jerusalem.

The burned wood could already be identified with the aid of a microscope with incident light as conifer wood lacking resin ducts, both normal and traumatic, and having rays up to 30 cells high. However, these

characteristics became more evident from the scanning electron micrographs (Figs. 1 and 2).

Examination of radial wood surfaces with the scanning microscope (Fig. 3) made it possible to see clearly the relatively thin, smooth or sometimes faintly beaded tangential walls of the ray cells. These walls were oriented oblique or perpendicular. The rays were seen to be homocellular.

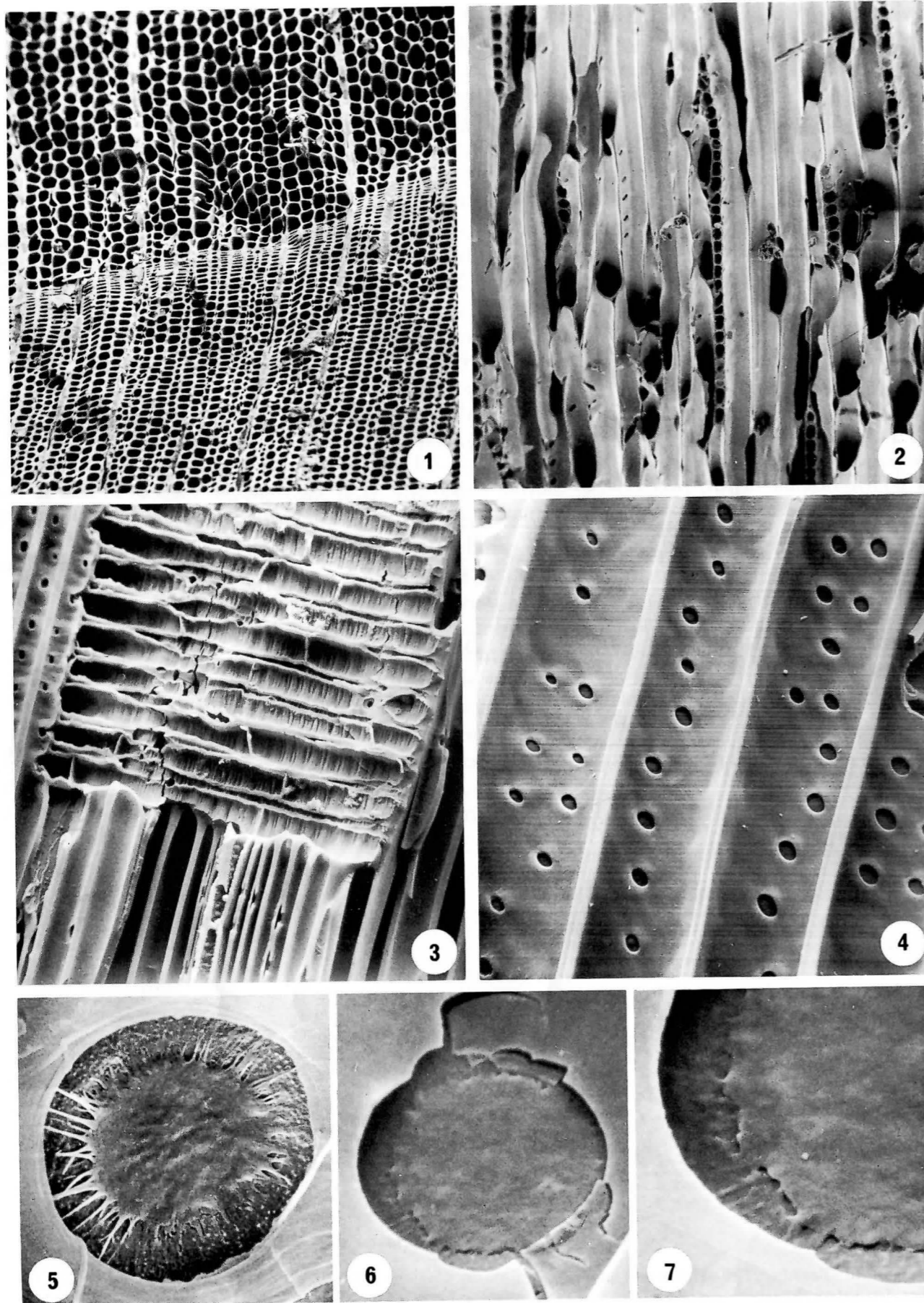
The pit apertures were round to oval (Fig. 4).

The torus was distinct, thick and flat, with very small protrusions at its periphery. The margo fibrils were relatively thick (Figs. 6 and 7).

All the above characteristics and comparison with sections of recent material (e.g. Fig. 5) lead to the conclusion that the burned beams were taken from *Cupressus sempervirens* L. trunks.

- Figures:**
1. Scanning electron micrographs of burned wood × 110.
 2. × 200.
 3. × 390.
 4. × 630.
 6. × 6,000.
 7. × 12,000.
 5. Pit membrane of *Cupressus sempervirens* wood × 6,000.

¹Department of Botany, The Hebrew University of Jerusalem, Jerusalem, Israel



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 Mr. Takeshi Furuno

Change to Retired Status

Dr. Irving H. Isenberg
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Dr. Isenberg retired recently from the staff of the Institute of Paper Chemistry at Appleton, Wisconsin. He had taught and carried on research in wood and fiber structure. Many will be familiar with Dr. Isenberg's book, *Pulp and Paper Microscopy*. We wish him a satisfying period of retirement.

Assistance Requested

The Office of the Executive Secretary seeks assistance in obtaining the current mailing addresses for two members of the Association: **Prof. Dr. R. Hejazi** and **Mr. P. A. Wanaraks**.

Information Needed

The Office of the Executive Secretary received a check in the amount of \$10.00 from the Schweizerischer Bankverein, Basel, Switzerland on or about February 10, 1975. The check number was BC 310-260363. Unfortunately, there was no identification of the sender included with the check so we are unable to credit the payor. Please advise us if you are to receive this credit.

WOOD ANATOMY ACTIVITIES AROUND THE WORLD

Tropical Timber Information Center

January 1975 marked the inauguration of a new service to the North American timber importers and the overseas suppliers directly concerned with the trade in tropical hardwoods. At present there are forty-three companies of varying size and interests which have joined with the State University of New York College of Environmental Science and Forestry to form the Tropical Timber Information Center at Syracuse, New York.

The Tropical Timber Information Center was organized with two objectives. First, to help the importing business with its problems in identification of the many new kinds of wood which are now being handled. Secondly, to assemble information from the world literature on those woods which are imported so that the knowledge that has been reported in many obscure sources will be available to the industry. A series of bulletins and information summaries has been started.

The operations of the Tropical Timber Information Center are located at the SUNY College of Environmental Science and Forestry at Syracuse under the directions of Prof. Dr. Carl de Zeeuw, Dr. Richard L Gray and Prof. Russell C. Deckert.

XII International Botanical Congress

Since the publication of the program of the I.A.W.A. Technical Sessions to be held as part of the XII International Botanical Congress in Leningrad, July 3-10, there have been many changes. Participation by Dr. F. W. Taylor, Dr. H. J. Braun and Dr. H. Gottwald has been withdrawn. We are informed from Leningrad that papers by Dr. L. Murmanis and Dr. G. S. Paliwal, both I.A.W.A. members, have been submitted there. In addition, a list of twenty-two papers by non-members have been added to the I.A.W.A. program. Accordingly, the time allowed to present a paper has been reduced from twenty minutes to ten minutes, the standard format of other Congress sessions. Discussion will be limited to a ten-minute period at the close of each session.

It is anticipated that there will be many more changes in the plans for the I.A.W.A. Technical Sessions at Leningrad. A final one for this issue of the Bulletin is that Sessions 4 and 5 have been reversed on the time schedule to provide more time for the business meeting of the Association.

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