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About the Institute
The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Plastic mounting medium

Materials: brown gallon jug
toluene, ethocel, Dow resin, methanol (liquid reagents obtained from chemistry stores)

Dow resin obtained free by Don Schwartz, Purchasing.

Specifications: ethocel: Ethyl cellulose (ETHOCEL) standard 10 cps
(Dow Chemical)
Dow Resin 276 V-2

Procedure

Mix together toluene, methanol, and resin, the following manner:

Weigh out 150 grams resin in tared tin can

Measure 500 cc toluene and use part to rinse can of resin; pour into jug

Add(using funnel) 500 grams ethocel (1.1 ek)

Measure out 1000 cc toluene and add (total thus of 1500 cc toluene)

Add 400 cc methanol

Let stand until all ingredients are dissolved (about 24 hours or more)

Helen make 4 copies.

Plastic for Mounting

1 part (in grams) Dow Resin 276 V-2
3 1/3 parts (in grams) Ethocel (Ethyl cellulose, Standard 7 CPS)
Both obtainable from Dow Chemical Co. Midland, Michigan
2 1/2 parts (in cc.) of methanol
9 1/2 parts (in cc.) of Toluene

The methanol and toluene may be increased or decreased about 10 percent to make a more liquid or more viscous plastic solution.

To make up one gallon, I use:

100	200 grams Resin
335	670 grams Ethocel
250	500 cc. Methanol
950	1900 cc. Toluene

To prepare, place resin in stock container (we use 1 gal. wide mouth glass jar with metal screw top) add part of the toluene and dissolve the resin, then add the rest of the toluene and then the methanol. Stir well, then add the Ethocel in quantities of 50-100 gr., stir in each portion but do not wait for it to dissolve completely, when all of the Ethocel has been added, stir every 5 - 10 minutes until the plastic is clear. The Ethocel tends to form lumps which rise to the surface but they will dissolve completely in about an hour.

To clean the liquid plastic from equipment etc. toluene seems to be the best solvent.

We use either a half pint oil can (with long tappered dispenser) or an oil can with a hydralic apparatus which permits pressure application. The simpler type is recommended unless large quantities of material are to be mounted.

Rolla M. Tryon, Jr.
Missouri Botanical Garden

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3000 RIDGE RD. E. or P. O. BOX 24
ROCHESTER 9, NEW YORK
July 22, 1954

Professor David J. Rogers
Department of Biology and Geology
Allegheny College
Meadville, Pennsylvania

Dear Professor Rogers:

Thank you for your inquiry. Unfortunately, our Bio-Plastic, the only type of Plastic that we distribute, is unsuited for the purpose you have in mind. I am sorry to say that we are not familiar with a type of Plastic such as that described in your letter, and so do not know where to refer you.

There are two pertinent references which may be of use to you; very likely you are already aware of them, but I thought I would include the information just in case you are not. One publication is "Preservation of Agricultural Specimens in Plastics", by G. R. Fessenden, Miscellaneous Publications #697, U. S. Dpeartment of Agriculture. The other reference is, "Preservation of the Color and Shape of Flowers," by R. C. Specht, Florida Engineering and Industrial Experiment Station, College of Engineering, University of Florida, Gainesville, Florida, Bulletin Series #40, December, 1950.

I sincerely hope that these two references may either give you the information you need, or suggest a source that could be followed further.

Sincerely yours,

WARD'S NATURAL SCIENCE ESTABLISHMENT, INC.

Henry L. Gresham

Henry L. Gresham

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