## THE PLANT SCIENCE SEMINAR

## ABSTRACT OF THE PROCEEDINGS.

The fifteenth annual meeting of the Plant Science Seminar was held in Philadelphia and New Jersey, August 9-12, 1937.

The First Session was called to order by Chairman L. K. Darbaker on Monday afternoon at the Philadelphia College of Pharmacy and Science. President Wilmer Krusen of the College gave the address of welcome after which Professor E. N. Gathercoal spoke briefly upon the history of the Seminar. Prof. Gathercoal then introduced several old and new attendants of the Seminar meetings each of whom responded briefly. Dr. Isadore Cohen presented a paper, "Advances in Cytology and Technique." The meeting adjourned after which the members made a tour of Bartram's Garden. John Bartram (1699–1777), sometimes called the Father of American Botany, founded this garden; the first botanical garden to be established in America. The group examined the many plants in the garden showing special interest in the Frankliniana. The original house of Bartram has been restored and this together with its authentic furniture of Colonial times was of great interest to the ladies. On Monday evening the Seminar inspected the Fels Planetarium and witnessed the lecture and demonstration "Our Earth in Motion."

The Second Session was called to order by Chairman Darbaker at the Philadelphia College of Pharmacy and Science on Tuesday morning. After a brief business session for the appointment of committees, Dean Charles H. LaWall welcomed the Seminar and spoke at length on "Botany in Philadelphia." Dean LaWall discussed the work of Barton, Nuttall, Pursh, Micheaux and others, all Philadelphians, and illustrated his remarks with several books by these authors and a number of copies of "Bartonia," the proceedings of the Philadelphia Botanical Club. Dr. Arno Viehoever displayed an enormous collection of species of Glycyrrhiza collected in Turkey and Syria. Dr. Viehoever also spoke on the work of the faculty and students of the College on water supplies (springs) in Fairmont Park. Professor Edward H. MacLaughlin presented a paper, "Practical and Inexpensive Vivarium for the Biology Laboratory." The next paper, prepared by W. H. Kimmer, under the direction of Prof. Marin S. Dunn, was titled "Appearance of N. F. VI Vegetable Drugs under Ultra-Violet Light." This was discussed by Drs. Hoch, Viehoever and Darbaker. "How to Retain the Leaves on Mounted Evergreen Specimens," was the title of a paper presented by Professor L. F. Jones. Professor Wm. J. Stoneback, of P. C. P. and Sharp and Dohme, showed some common and rare adulterants used in crude drugs. One of special interest was starch molded into the shape of ergot and colored. Dr. Bacon suggested that the demand for cheap drugs encouraged adulteration. Professor Bernard Melkon next presented a study of interest to the Seminar. It was on "Notes Concerning the Relative Toxicity of the Halides of Lithium to Green Mould (Penicillium italicum)." Time did not permit discussion.

The group reassembled early Tuesday afternoon for a trip through Horticultural Hall in Fairmont Park when a number of unusual plants were inspected. After the visit to Horticultural Hall the Seminar motored to Valley Forge where well-known points of historic interest were visited. Picnic lunch boxes, furnished to each member through the courtesy of the Philadelphia College of Pharmacy and Science, were enjoyed at Valley Forge Park.

The Tuesday evening adjourned session convened at the College. Dr. Darbaker exhibited motion picture films of the Seminars of previous years. Dr. Wirth exhibited a film taken at the 1936 Seminar at Wilburton, Oklahoma. Two films in natural color taken by Robert Elich of Chicago, including the Oklahoma Seminar and the Texas Centennial Exposition, were also shown. The session concluded with films by Dr. Viehoever demonstrating the effect of strychnine and cascara sagrada on Daphnia. Dr. Viehoever discussed this subject at length.

On Wednesday morning the Seminar formed a motor caravan which, under the direction of Professor Frank Eby, visited Dupont's famous Longwood Gardens. Mr. Marx, superintendent, conducted the group through the greenhouses where flowering orchids, ripe grapes, beautiful roses and many other plants and flowers were seen. Following luncheon at Wilmington the caravan proceeded to Vineland, N. J., where it was met by Dr. E. L. Newcomb who conducted the group through the Kimble Glass plant where the members saw many familiar pieces of laboratory glassware in the process of manufacture. After this visit the group proceeded to Bridgeton, N. J.

The Third and final regular Session of the Seminar was held at the Cumberland Hotel in Bridgeton, N. J., Wednesday evening. Dr. E. L. Newcomb, the founder of the Seminar, was introduced and spoke at length concerning the early aims of the Seminar. Dr. Newcomb expressed his regret that he had been unable to attend the last few annual meetings. He complimented the members of the Seminar on their spirit and urged that practical work and demonstrations should always be a part of the Seminar's programs. Professor Paul D. Carpenter spoke informally on the subject of botanical and histological terms used in the literature. He distributed mimeographed copies of the glossary prepared by Dr. Youngken some few years ago. Dr. Youngken and several others discussed the revision of this list and it was the general opinion that the Seminar should continue such work. Upon Dr. Newcomb's motion, a voluntary committee, consisting of Dr. Dunn, Dr. Hoch, Dr. Ireland, Prof. MacLaughlin, with Professor Carpenter as chairman, was appointed to carry on the work.

A final business session followed. The Seminar elected to make its office of Secretary a permanent one. The following officers for 1937-1938 were elected: Chairman, Loyd E. Harris; Vice-Chairman, Marin S. Dunn; Permanent Secretary, Elmer H. Wirth; Delegate to the House of Delegates, A. Ph. A., L. F. Jones, and Associate Delegates, Katherine Graham, Frank Eby and Paul D. Carpenter. A vote of thanks was extended to Professor and Mrs. Marin S. Dunn and to the Philadelphia College of Pharmacy and Science for the splendid and enjoyable program and entertainment. Chairman Darbaker installed the new officers after which the meeting adjourned, all being served refreshments, with the compliments of Dr. Newcomb.

On Thursday morning Dr. Newcomb led the Seminar to Parvin's State Park. The group followed the trail through a cedar swamp observing many specimens of medicinal plants. The automobiles then left for Cape May, N. J. After luncheon at Sunset Beach those interested were taken on a botanizing trip under the direction of Mr. Brown who was very familiar with the flora of the region. This was the last of the planned programs and the cars moved up the Jersey coast to Atlantic City. Those who so desired were presented with complimentary tickets to the Steel Pier on Friday evening. Most of the members continued to New York to attend the meetings of the National Conference on Pharmaceutical Research and the American Pharmaceutical Association.

Members and visitors in attendance at the 1937 Seminar included: Dr. and Mrs. Franklin J. Bacon and Miss Alice Bacon, Cleveland, O.; Prof. and Mrs. Gordon A. Bergy and son, Morgantown, W. Va.; Prof. and Mrs. Leslie B. Barrett and Gordon Barrett, New Haven, Conn.; Prof. Paul D. Carpenter, Chicago, Ill.; Professor E. Fullerton Cook, Philadelphia, Pa.; Prof. and Mrs. L. K. Darbaker, Pittsburgh, Pa.; Prof. and Mrs. Marin S. Dunn, Philadelphia, Pa.; Prof. and Mrs. Frank H. Eby and Hobart Eby, Philadelphia, Pa.; Prof. and Mrs. E. N. Gathercoal, Chicago, Ill.; Dr. Katherine Graham, Chicago, Ill.; Miss Lorene Harris, Norman, Oklahoma; Prof. and Mrs. J. Hamilton Hoch, Charleston, S. C.; Dr. Edward J. Ireland, Gainesville, Fla.; Prof. and Mrs. L. F. Jones, Indianapolis, Ind.; Dr. Wilmer Krusen, Philadelphia, Pa.; Dean Charles H. LaWall, Philadelphia, Pa.; Prof. E. H. MacLaughlin, Philadelphia, Pa.; Prof. Bernard Melkon, Philadelphia, Pa.; Mrs. Frank Myers, Apache, Okla.; Dr. E. L. Newcomb, New York, N. Y.; Mr. and Mrs. John E. Seybert, Indianapolis, Ind.; Dr. Albert H. Schuyler, Lucerne, Switzerland; Prof. Wm. J. Stoneback, Philadelphia, Pa.; Mrs. C. P. van Schaack, Wilmette, Ill.; Dr. Arno Viehoever, Philadelphia, Pa.; Dr. Elmer H. Wirth, Chicago, Ill., and Dr. and Mrs. Heber W. Youngken and son, Boston, Mass.