observations thus far made does not appear above ground, nor have they been found to leave their earthen cells until the following spring.

Following the usual biology of the Trombidiidae oviposition does not take place until the following spring. There is but one generation a year. The very moist conditions held by some authors to be necessary for development have not been verified by the work thus far performed. Some adults have been reared under very dry conditions while others from the same host have reached maturity under quite moist surroundings.

Further details and additional studies on *Trombicula tlalzahuatl* Murray will appear at a later date.

August E. Miller

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THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

SOCIETIES RELATED TO SECTION O (AGRICULTURE) AT WASHINGTON

(A report for Section O appeared in Science for February 6.)

The American Society of Agronomy

President, C. W. Warburton.

Secretary, P. E. Brown, Iowa State College, Ames, Iowa.

(Report by P. E. Brown)

The society held a joint program with Section O as shown in the report of the section, and also participated in the agricultural dinner. No separate meeting of the society was held.

The American Society for Horticultural Science President, M. J. Dorsey.

Secretary, C. P. Close, U. S. Department of Agriculture, Washington, D. C.

(Report by C. P. Close)

The American Society for Horticultural Science held its annual meeting on December 29, 30 and 31. The program was so crowded that it was necessary to divide into sections on two half days, making eight sessions in all. There was one joint session with Section O of the American Association for the Advancement of Science, at which the teaching of horticultural courses and methods of experimentation were especially considered. A session was devoted to extension work in horticulture, in which methods and results of this work were discussed. There was one session on vegetable topics and another on fruit

topics. The other sessions were general, covering both fruits and vegetables. The attendance was the largest in the history of the society, about 100 members being present.

The Society of American Foresters

President, Walter Mulford.

Secretary, R. V. Reynolds, U. S. Forest Service, Washington, D. C.

(Report by R. V. Reynolds)

The twenty-fourth annual meeting of the society was held on December 30 and 31, in the spacious library of Central High School, allotted them through the efficient management of the A. A. A. S. At the close of the first quarter century of the society's existence the program presented a review of the development of forestry in the United States, a sober estimate of the present standing and achievements of the profession, and a forward glance at ways and means for future accomplishment adapted to American needs. A dozen leading speakers covered some of the principal subjects in the wide field of forestry, while others commented briefly and amplified the ideas of the principals.

The attendance probably constituted the largest assemblage of professional foresters ever convened in the United States, including federal and state officials, foresters in private and corporate employ, and the leading educators from the foremost forestry schools. The registered attendance was 182, including six of the eight fellows, 112 seniors, 26 members, six associates, and 32 guests. The members present represented 12 of the 14 sections composing the society and came from 23 states, the District of Columbia and Canada. The membership has tripled since 1917, and now amounts to 1,094 members, in six grades.

The executive council transacted a large amount of business before the annual meeting. It was voted to employ an executive secretary on part time, as a preliminary step to an eventual increase of dues and a full-time secretary. The council is unanimous in considering that this move is essential. The *Journal of Forestry*, previously issued eight times yearly, will become a monthly in 1925. A standing Committee on International Relations in Forestry was established.

One of the most enjoyable events of the meeting period was a smoker held at the Cosmos Club on the evening of December 30, at which all visiting and local foresters were guests of the Washington Section of the society and an entertainment committee organized by the United States Forest Service. Over 200 men attended, heard short addresses and music, watched motion pictures related to forestry and con-

servation, sang the songs of undergraduate days and consumed vast quantities of refreshments and tobacco. Here the comradeships of camp and field were renewed. Old friends met after years of separation and new attachments were formed. The annual meeting of 1924 will not soon be forgotten by those who attended.

The Potato Association of America President, A. G. Tolaas.

Secretary-treasurer, Wm. Stuart, U. S. Department of Agriculture, Washington, D. C.

(Report by Wm. Stuart)

The eleventh annual meeting of the Potato Association, which was held Monday, Tuesday and Wednesday of convocation week, proved to be one of the most satisfactory ever held. A membership increase of over 90 per cent. during the year 1924 was reported. The report of the research committee included a summary of the year's literature, chiefly with respect to pathological investigations. Seed certification standards employed in 1924 were summarized by states and provinces in the report of the "Seed improvement and certification committee." The symposiums on "Seed-potato improvement," "Rest period and storage of potatoes" and "Potato spraying and dusting" proved very valuable. Two resolutions were adopted. The first urged the United States Department of Agriculture to make and publish all practicable investigations on the production and marketing of this and past potato crops, in order that both producers and consumers may utilize the 1924 potato crop to the best advantage of all, and also urged upon farmers the use of poor-quality potatoes as feed for livestock when the low price of potatoes renders such use more profitable than that of grain for feeding. The second resolution expressed the appreciation of the association for the many courtesies extended to it by the American Association for the Advancement of Science and the local committees for the Washington meeting.

The Association of Official Seed Analysts President, Miss Anna M. Lute.

Secretary, A. L. Stone, University of Wisconsin, Madison, Wis.

(Report by A. L. Stone)

The Official Seed Analysts held six well-attended sessions, three of which were executive, extending from Wednesday to Friday, inclusive. The papers given covered many subjects of vital interest to the members, including possible improvements in tech-

nique and methods of seed analysis. One afternoon was partly devoted to a visit to the seed testing laboratory of the United States Department of Agriculture, where various methods of making purity and germination tests were demonstrated. Special problems of seed analysis and germination were discussed and special methods for their solution were recommended. The members then proceeded to the general exhibition of the American Association for the Advancement of Science, which proved very interesting and instructive. The outstanding feature of the meeting was Retiring President Munn's report on the meeting of the International Seed Testing Congress held in London July, 1924. He gave a short résumé of each of the important papers presented at the congress and described his visits to several European seed laboratories. Attention was drawn to the very great difference in the status of seed laboratories in North America and in Europe. Some of the latter have very large buildings and trial grounds, with as many as thirty permanent employees, the work of these laboratories being an indispensable and extremely important feature of the agricultural program in Europe. It was pointed out that the seed laboratories in this country are not supported in a manner commensurate with the value of their services to the agriculture of the nation. The annual address of the retiring president, Professor M. T. Munn, was delivered at the annual dinner on Thursday evening. It was an able and earnest discussion of the problems and opportunities confronting seed analysts.

Friday forenoon was devoted to a round-table discussion of topics of vital interest to the work of the association. At this session the association voted unanimously to become a member of the International Seed Testing Association. The open sessions of the meeting were attended by a number of commercial seed analysts and by representatives of seed houses who showed great interest in the proceedings. It was a very successful meeting.

The Geneticists Interested in Agriculture

Secretary ad interim, Sewall Wright, U. S. Department of Agriculture, Washington, D. C.

The fifth annual meeting of the geneticists interested in agriculture was held jointly with Section O of the American Association for the Advancement of Science on Monday, December 29, with about 70 in attendance. The topic for discussion was "Plant and animal judging in relation to genetics." Dr. John W. Gowen, of the Maine Agricultural Experiment Station, presented a paper on judging of dairy cattle. He discussed the correlation between various

physical characters of dairy cattle and milk production, showing among other things that even a 7-day test gives a more reliable indication of future producing ability than any combination of score card characters. Perfection of type must be valued in the main for its own sake rather than as an indication of production. Mr. F. D. Richey, of the U. S. Bureau of Plant Industry, spoke on corn judging and the productiveness of corn. He compared the prizewinning type of ear of the early shows with the different type that extensive studies have shown to be really most closely correlated with yield. A lively discussion of the general subject of judging was led by Professor L. J. Cole, of the University of Wisconsin. Dr. E. D. Ball, of the U. S. Department of Agriculture, was elected secretary.

The Crop Protection Institute Chairman, W. C. O'Kane.

Secretary, Paul Moore, National Research Council, Washington, D. C.

(Report by Paul Moore)

The institute took a forward step at the annual meeting on Wednesday evening, December 31st. The secretary proposed incorporation under the laws of the District of Columbia and the seeking of an endowment. This was approved by the board of governors and unanimously adopted at the annual meeting. In the past the institute has been supported entirely by membership dues, while special projects have been financed by industrial members interested in particular projects. Some fundamental studies of certain chemicals and trade preparations as applied to insect or fungus control have been financially supported by industries, but the investigations have been wholly in the hands of scientific men appointed by special committees chosen by the board of governors and they have been carried out at established institutions of repute under the direction of specialists. Dr. G. H. Coons and Professor P. J. Parrott reported on the sulphur investigations, most of which have been carried on at the Missouri Botanical Garden, the Geneva, N. Y., Experiment Station and Ohio State University. In describing the work with "scalecide" Dr. C. A. Orton said more than fifteen thousand measurements had been made on leaves and that this year it was hoped to get more data on fire blight. Professor Parrott spoke briefly of the calcium arsenate study, and Dr. A. J. Riker of the "Crown gall investigation" under way in Wisconsin and Iowa. Dr. E. C. Stakman, who has led in the cereal treatment investigation, said the report on this was in shape for distribution. The institute passed a vote of confidence in the board of governors and an expression of appreciation of their work. The chairman of the board indicated that two new investigations were about to begin-one on copper at the Boyce Thompson Institute, Dr. Crocker acting as chairman of the committee, and the other on a product of the Standard Oil Company, of Indiana, under a committee composed of W. P. Flint, J. J. Davis and J. S. Houser. The new members of the board are: Dr. N. J. Giddings, of West Virginia, representing the American Phytopathological Society, and Dr. W. P. Flint, of Illinois, representing the American Association of Economic Entomologists. Other members besides the chairman and secretary are: Dr. H. J. Patterson, director of the Maryland Agricultural Experiment Station; Dr. B. H. Hartwell, director of the Rhode Island Agricultural Experiment Station; Dr. C. A. Orton, professor of plant pathology, State College, Pa.; Professor M. F. Barrus, of Cornell University, and Professor P. J. Parrott, of the New York State Agricultural Experiment Station, Geneva,

The Crop Institute was organized several years ago by the National Research Council, one of the main purposes being to bring into closer working cooperation men in the different sciences with the manufacturing and business interests. The institute has been able to do this. The board of governors, which directs the work, is appointed by four scientific organizations.

THE PHI DELTA KAPPA EDUCATION FRATERNITY AT WASHINGTON

(A report for Section Q appeared in Science for February 6.)

President, Lewis W. Williams.

Secretary, Abel J. McAllister, 2118 West 109th St., Chicago, Ill.

(Report by L. A. Pechstein)

Phi Delta Kappa and Section Q (Education) of the American Association for the Advancement of Science held a joint dinner at the Y. M. C. A. Building on the evening of Wednesday, December 31st. One hundred and six were present. Dean L. A. Pechstein, chairman of Section Q, presided and two addresses were given. The first was by Dr. Otis W. Caldwell, director of Lincoln School, upon the work of the special committee of the American Association for the Advancement of Science, on the "Place of the sciences in education." The second address was by Dr. Charles H. Judd, of the University of Chicago, upon "Cooperative research in education." attending the dinner went on record unanimously as favoring an annual dinner meeting of Phi Delts Kappa and Section Q.