NOTES

Annual Election.—The annual election of the American Society of Plant Physiologists held during the last quarter of the fiscal year has resulted in the election of Dr. A. E. Murneek, former secretary-treasurer, as president for 1935–1936. The new vice-president is Dr. D. R. Hoagland, University of California; and the new secretary-treasurer is Dr. W. F. Loehwing, University of Iowa. The results of the ballotting insure a continuation of the policies and ideals of the preceding administration which have done much to strengthen the foundations of the Society and to insure its continuous progress. Newly elected officers always appreciate the spirit of cordial cooperation on the part of members. Such cooperative effort will be especially helpful in connection with the annual meetings and programs to be presented at St. Louis in December.

Minneapolis Meeting.—The summer meetings of the Society at Minneapolis and St. Paul were very successful as measured by the criteria of attendance and interest. With the exception of the vice-presidents, the officers of the Society for 1934–1935 and 1935–1936 were present. Almost 80 members and friends attended the sessions, and great interest was shown in the various papers presented. One of the best attended programs was the symposium on seed dormancy and related problems.

About 40 members were present Wednesday at the picnic dinner at the summer home of Dr. and Mrs. R. B. Harvey on the St. Croix river. This was a most delightful social occasion, no one being allowed to be either hungry or thirsty. The visitors had the unique privilege of enjoying Dr. Harvey's fine portrait gallery of famous plant physiologists. Music and merriment added zest at the close of the picnic. The generous and cordial hospitality of the hosts was much appreciated by everyone.

St. Louis Meeting.—Preparations for the St. Louis meeting are already in progress. It is hoped that early action may be taken on all important matters concerned with accommodations and arrangements in order that appropriate announcements may be made in the October number of Plant Physiology.

It would be very helpful in preparing programs if the proposed titles could be in the hands of the program committee early. Any symposia to be organized should be arranged at the earliest possible moment, so that participants may have as much time as may be needed to prepare their contributions. Undue haste, necessitated by short time, usually lowers the value of contributions. Would it be possible to select papers from among those offered, and confine programs to a smaller number of papers, and to a reason-

able length of time? Papers which could not be accommodated with time for personal presentation might be presented as mimeographed abstracts, with opportunity for interested readers to ask questions and elaboration if desired.

These suggestions may not be practicable; but it does seem that program committees should recognize the growing need for some way to relieve the current overloading of the programs. This arises out of the effort to accommodate everyone, which has always seemed to be desirably democratic. Another way out would be to practice close segregation of related material and provide for two or more simultaneous programs in adjacent or nearby rooms.

New England Section.—A very enthusiastic report of the second annual meeting of the New England section has been received from the secretary, Dr. Linus H. Jones, Massachusetts. The meeting was held at the University of New Hampshire, Durham, May 17–18. The officers elected for the coming year are as follows: chairman, Dr. T. G. Phillips, New Hampshire; vice-chairman, Dr. B. E. Gilbert, Rhode Island; secretary-treasurer, Dr. Linus H. Jones, Massachusetts.

The meeting was attended by men from a larger number of institutions than was the first meeting in 1934. It was voted to meet at Kingston, Rhode Island next year.

In order to emphasize the value of these regional meetings, the titles of papers presented before the gathering are presented here.

Seedling culture in sand. A. A. Dunlap, Connecticut.

Carbon dioxide in the forest. H. I. Baldwin, Research Forest, Hillsboro, New Hampshire.

The effect of simultaneously varied radiation, nitrogen, and potassium on the growth of white pine seedlings. R. R. Gast, Harvard.

Micro determinations of nitrogen, phosphorus, and potassium in plant material. E. A. Snow, Harvard.

Nitrogen, phosphorus, and potassium contents of foliage of fertilized northern white pine plantations. W. H. Cummings, Harvard.

Plant transpiration as modified by potassium. A. G. Snow, Yale.

The cumulative effect of 25 years of liming with calcic vs. magnesic liming materials on the mineral nutrient composition of the edible portions of plants. D. R. WILLARD, Rhode Island.

The present status of legal recognition of the potential acidity or alkalinity of fertilizers. J. B. Smith, Rhode Island.

Testing plants with diphenylamine. L. H. Jones, Massachusetts. Assimilation of nitrogen by the tomato plant. H. E. Clark, Yale.

NOTES 583

The effect of heavy fertilization with ammonia on the glutamine content of beets. H. B. Vickery, Connecticut.

The quantities of non-glucose reducing substances in plant juices. F. S. SCHLENKER, Rhode Island.

The determination of starch in plant tissue. G. W. Pucher, Connecticut.

The nature of winter injury in apple trees. F. H. Steinmetz, Maine.

Growth hormones in plants. E. A. Navez, Harvard.

Experiments in highbush blueberry culture. J. S. Bailey, Massachusetts.

The physical basis of mycotrophy in Pinus. A. B. HATCH, Harvard.

Ethylene induced epinasty. C. G. Deuber, Yale.

The determination and recording of light intensities. R. H. WALLACE, Connecticut.

Respiratory systems of Lupinus albus. F. N. Craig, Harvard.

Purdue Section.—The Purdue Section reports another good series of meetings during the past year. The attendance has ranged from 20 to 35, with an average of 25. Dr. J. H. McGillivray was president of the section during 1934–1935, A. T. Guard secretary-treasurer, and Dr. C. L. Porter chairman of the program committee. The titles of papers and addresses presented are as follows:

October 15, 1934, Ancient cornfields of America. Paul Weatherwax, Indiana University, guest speaker.

November 5, Reproduction in fungi. G. B. CUMMINS.

November 19, Special problems of fungus nutrition. R. B. Bains.

December 3, Reproduction in flowering plants. A. T. GUARD.

December 17, Plant hormones. D. M. Doty.

January 21, 1935, Reports of the A. A. A. S. meetings.

February 4, Relationships existing between the functions and structures of plants. E. J. Kohl.

February 18, Present status of mineral nutrition. S. F. THORNTON.

March 4, Nitrogen metabolism. H. R. KRAYBILL.

March 18, Soil types and plant growth. S. D. Conner.

April 1, Practical applications of fermentation phenomena. P. A. Tetrault.

April 15, Modern trends in plant physiology. R. E. Girton.

The meeting on April 15 closed the activities of the year, the address closing the annual dinner festivities. The officers elected for the ensuing year are J. T. Sullivan, president; R. B. Zumstein, secretary-treasurer; and E. C. Stair, chairman of the program committee.

Chemical Methods Reprints.—Reprints of the supplementary report of the chemical methods committee may be obtained from the chairman of the committee, Dr. W. E. TOTTINGHAM, Agricultural Chemistry Building,

University of Wisconsin, Madison, Wisconsin. The price authorized for these reprints is 15 cents per copy post free. Lots of 8 ordered at one time may be obtained for \$1.00 post free. Laboratories with groups of students will find this club rate economical.

The original reports published some years ago can no longer be supplied in complete sets, as some of the parts are exhausted. There are still available 4 copies of the section on soluble carbohydrates, and 38 copies of the section on peptides and basic forms of nitrogen. These also are held by Dr. Tottingham, who will furnish them as long as the few remaining sections last.

Hugo de Vries.—With the death of Hugo de Vries at Lunteren, Holland, on May 21, 1935, biological science has lost one of its most revered and beloved leaders. Born February 16, 1848, his life spanned the entire period of modern biological thought. To the development of experimental biology he brought a rich experience in the dramatic development of biological speculative philosophy which occurred during the several decades following the publication of the Origin of Species. He was a leader in the movement from speculative to experimental work during the last quarter of the 19th century. His great achievements in plant physiology and genetics will stand as an enduring monument to his genius. To us and to future generations of biologists his life will stand as an inspiration and a challenge to emulate his example of patient industry and creative thinking. His name will always stand high among the illustrious biological philosophers of the late 19th and early 20th century period.

Friedrich August Ferdinand Christian Went.—On July 26, 1935, Professor Went, for many years professor of Botany at the University of Utrecht, passed away. He was elected president of the Sixth International Botanical Congress which is to convene at Amsterdam early in September, and will be greatly missed during the deliberations of the congress. He has been a great leader in the study of plant responses, and especially in the field of hormones. He was a corresponding member of the American Society of Plant Physiologists. His passing will be deeply mourned by all plant physiologists.

Annual Review of Biochemistry.—Volume IV of the Annual Review of Biochemistry has just been issued by the Stanford University Press. It maintains the high standards set by the preceding volumes, and does great credit to the editors of the series, to the reviewers, and to the publishers. In the few years since this annual review was started, it has become an indispensable guide to the rapid developments in this expanding field of research.

NOTES 585

The current volume contains 27 reviews, a number of which will be especially useful to plant physiologists. Among these are mentioned the sections on permeability, biological oxidations and reductions, enzymes, plant pigments, the alkaloids, mineral nutrition of plants, growth substances in plants, chemistry of bacteria, etc.

The reviewers have a very difficult task to perform, since they must choose those papers for review that in their judgment contribute most seriously to the advancement in the general field covered. The sifting and winnowing of the far flung literature that is produced each year is no mean task in any field; and the provision of a reliable guide to the currents of advancement requires clear vision and sound judgment. The writer of this note feels that the great majority of the reviewers have done unusually well with their assignments.

The series is issued in handsome binding, and the press work is uniformly good. The price of volume IV is the same as for the preceding annual volumes, \$5.00 per copy. The series constitutes a valuable history of the development of biochemistry in our times. Orders for this or any of the earlier volumes may be sent to the Stanford University Press.

Temperature and Living Matter.—The eighth volume of the Protoplasma-Monographien published by Gebrüder Borntraeger, Berlin, is entitled Temperature and Living Matter. The author is Jan Bělehrádek, Professor of General Biogology, Caroline University, Prague. It is written in English, and will therefore be more readily available to American students. It contains eleven chapters with titles as follows: general principles of biological temperature action; rate of biological processes at biokinetic temperatures; variation of temperature coefficients with external and internal factors; theories of temperature coefficients; chemical properties of living systems at biokinetic temperatures; variations of morphological equilibria at biokinetic temperatures; physical properties of living systems at biokinetic temperatures; freezing and frost resistance; chilling, chill coma, and death by chilling; injury by heat and heat resistance; and stimulative effects of temperature.

There are 229 pages of text, 37 pages of bibliography and author index, and 11 pages of subject index. The work is written in simple, direct style that will be appreciated by busy readers. The ground is well enough covered on the animal side, not quite so well on the plant side. It is frequently the case that general biology is mainly animal biology in general terms. It presents a good summary of the general effects of temperature on living protoplasm.

The price quoted for this volume, RM 18, is for cloth binding uniform to the series.