Grimm alfalfa came from the valley region of Baden, which is said to be one of the warmest and most fruitful districts, not only of Germany, but of Europe; a section in which the almond, walnut and vine flourish. Hence we have in the latter case an instance of the introduction of a valuable crop by an immigrant and also an undoubted example of a high degree of acclimatization brought about by natural selection unconsciously aided by man.

The Minnesota climate is exceedingly severe and during the early years Grimm alfalfa suffered many vicissitudes. Several years ago a member of the Minnesota Agricultural Society, discussing this valuable strain, said:

> When they first commenced to plant it some of them were badly discouraged . . . but finally they made a success of it, and I attribute that success to its having acclimated itself to the country. I can remember that clover growing in this county (Carver), well I should say pretty close to forty years.

Fields between twenty and thirty years old visited by the writer during the past summer have from 10 to 50 per cent. of a stand. Hardy as the strain has become, winters of unusual severity in any particular respect carry the selective acclimatization still farther. Fields examined in the summer of 1905 had suffered considerable losses in stand from the previous winter; fully 50 per cent. of the selected Grimm plants in the nursery at the Minnesota Experiment Station were winter-killed during the same winter (1904–5), while common alfalfa was killed out almost completely.

Wendelin Grimm died eighteen years ago, hence exact details as to his experiences are lacking. Nevertheless, it is apparent that in the early years of his attempt to grow alfalfa in Minnesota he suffered many setbacks. With characteristic German persistence, realizing neither the practical nor the scientific importance of his unconscious experiment in acclimatization, he patiently saved generation after generation of seed from the plants that survived each successive winter, planting new fields to replace the deteriorated ones on his own farm, and selling his surplus seed to his neighbors. He was probably oblivious both to the difficulty of the task he had undertaken and to the great value of the result, and took as a matter of course the yearly degeneration of his stands.

The fact that in its original home in Germany this variety was called upon to bear minimum temperatures less severe than those observed at Albuquerque, N. M., shows what this German immigrant accomplished in the way of acclimatization of alfalfa in Minnesota.

The Grimm strain is one of the hardiest of which we have knowledge. A six-year-old field at Fargo, N. D., has repeatedly endured temperatures lower than 30° F. below zero. It is for this quality that it is so highly prized. It came from a climate little calculated to develop resistance to cold, and as it stands to-day it is undoubtedly the direct product of fifty-one years of perpetuation of fit and elimination of unfit individuals under climatic conditions whose rigors are unknown in Germany.

Charles J. Brand
Bureau of Plant Industry,
U. S. Department of Agriculture,
November 13, 1907

THE CONVOCATION WEEK MEETINGS OF SCIENTIFIC SOCIETIES

The American Association for the Advancement of Science and the national scientific societies named below will meet at the Johns Hopkins University, at Baltimore, during convocation week, beginning on December 28, 1908.

American Association for the Advancement of Science.—Retiring president, Professor E. L. Nichols, Cornell University; president-elect, Professor T. C. Chamberlin, University of Chicago; permanent secretary, Dr. L. O. Howard, Cosmos Club, Washington, D. C.; general secretary, Dr. J. Paul Goode, University of Chicago.

Local Executive Committee.—William H. Welch, M.D., chairman local committee; Henry Barton Jacobs, M.D., chairman executive committee; William J. A. Bliss, secretary, Joseph S. Ames, William B. Clark, R. Brent Keyser, Eugene A. Noble, Ira Remsen, John E. Semmes, Francis A. Soper, Hugh H. Young.

Section A, Mathematics and Astronomy.—Vice-president, C. J. Keyser, Columbia University; secretary, Professor G. A. Miller, University of Illinois, Urbana, Illinois.

Section B, Physics.—Vice-president, Professor Carl E. Guthe, State University of Iowa; secretary, Professor A. D. Cole, Vassar College, Poughkeepsie, N. Y.

Section C, Chemistry.—Vice-president, Professor Louis Kahlenberg, University of Wisconsin; secretary, C. H. Herty, University of North Carolina, Chapel Hill, N. C.

Section D, Mechanical Science and Engineering.—Vice-president, Professor Geo. F. Swain, Massachusetts Institute of Technology; secretary, G. W. Bissell, Michigan Agricultural College, East Lansing, Mich.

Section E, Geology and Geography.—Vice-president, Bailey Willis, U. S. Geological Survey; secretary, F. P. Gulliver, Norwich, Conn.

Section F, Zoology.—Vice-president, Professor C. Judson Herrick, University of Chicago; secretary, Professor Morris A. Bigelow, Columbia University, New York City.

Section G, Botany.—Vice-president, Professor H. M. Richards, Columbia University; secretary, Professor H. C. Cowles, University of Chicago, Chicago, Ill.

Section H, Anthropology.—Vice-president, Professor R. S. Woodworth, Columbia University; secretary, George H. Pepper, American Museum of Natural History, New York City.

Section I, Social and Economic Science.—Vice-president, Professor W. G. Sumner, Yale University; secretary, Professor J. P. Norton, Yale University, New Haven, Conn.

Section K, Physiology and Experimental Medicine.—Vice-president, Professor Wm. H. Howell, Johns Hopkins University; secretary, Dr. Wm. J. Gies, College of Physicians and Surgeons, Columbia University, New York City.

Section L, Education.—Vice-president, Professor John Dewey, Columbia University; secretary, Professor C. R. Mann, University of Chicago, Chicago, Ill.

The American Society of Naturalists.—December 31. President, Professor D. P. Penhallow, McGill University; secretary, Dr. H. McE. Knower, The Johns Hopkins Medical School, Baltimore, Md. *Central Branch.* President, Professor R. A. Harper, University of Wisconsin; secretary, Professor Thomas G. Lee, University of Minnesota, Minneapolis, Minn.

The American Mathematical Society.—December 30, 31. President, Professor H. S. White, Vassar College; secretary, Professor F. N. Cole, 501 West 116th St., New York City.

American Federation of Teachers of the Mathematical and Natural Sciences.—December 28, 29. President, H. W. Tyler, Boston, Mass.; secretary, Professor C. R. Mann, University of Chicago, Chicago, Ill.

The American Physical Society.—President, Professor E. L. Nichols, Cornell University; secretary, Professor Ernest Merritt, Cornell University, Ithaca, N. Y.

The American Chemical Society.—December 29–January 1. President, Professor Marston T. Bogert, Columbia University; secretary, Professor Charles L. Parsons, New Hampshire College, Durham, N. H.

The Geological Society of America.—December 29, 31. President, Professor Samuel Calvin, University of Iowa; secretary, Dr. E. O. Hovey, American Museum of Natural History, New York City.

The Association of American Geographers.—January 1, 2. President, Dr. G. K. Gilbert, U. S. Geological Survey; secretary, Professor Albert P. Brigham, Colgate University, Hamilton, N. Y.

The American Society of Vertebrate Paleontologists.—December 28–30. President, Professor Richard Swan Lull, Yale University; secretary, Dr. W. D. Matthew, American Museum of Natural History, New York City.

The American Society of Biological Chemists.—December 28–30. President, Professor John J. Abel, The Johns Hopkins University; secretary, Professor William J. Gies, 437 West 59th St., New York City.

The American Physiological Society.—December 29–31. President, Professor W. H. Howell, Johns Hopkins University; secretary, Dr. Reid Hunt, Hygienic Laboratory, 25th and E Sts., N. W., Washington, D. C.

The Association of American Anatomists.—December 29–31. President, Professor J. Playfair McMurrich, University of Toronto; secretary, Professor G. Carl Huber, 1330 Hill St., Ann Arbor, Mich.

The Society of American Bacteriologists.—December 28–January 2. Vice-president, Professor H. L. Russell, University of Wisconsin; secretary, Dr. Norman MacL. Harris, University of Chicago, Chicago, Ill.

The American Society of Zoologists.—Eastern Branch, December 29–31. President, Professor William Morton Wheeler, Harvard University;

secretary, Dr. Lorande Loss Woodruff, Yale University, New Haven, Conn. *Central Branch*, December 28–30. President, Professor E. A. Birge, University of Wisconsin; acting secretary, Professor Thomas G. Lee, University of Minnesota, Minneapolis, Minn.

The Entomological Society of America.—December 29, 30. President, Professor W. M. Wheeler, Harvard University; secretary, J. Chester Bradley, Cornell University, Ithaca, N. Y.

The Association of Economic Entomologists.—December 28, 29. President, Professor S. A. Forbes, University of Illinois; secretary, A. F. Burgess, Washington, D. C.

The Botanical Society of America.—December 29–31. President, Professor W. F. Ganong, Smith College, Northampton, Mass.; secretary, Professor D. S. Johnson, Johns Hopkins University, Baltimore, Md.

American Nature Study Society.—December 30, 31. President, Professor L. H. Bailey, Cornell University; secretary, Professor M. A. Bigelow, Teachers College, Columbia University, New York City.

Sullivant Moss Chapter.—President, Dr. T. C. Frye, Seattle, Wash.; secretary, Mr. N. L. T. Nelson, St. Louis, Mo. Address: Mrs. Annie Morrill Smith, 78 Orange St., Brooklyn, N. Y.

Wild Flower Preservation Society.—President, Professor Chas. E. Bessey; secretary, Dr. Charles Louis Pollard, New Brighton, N. Y.

The American Psychological Association.—December 29–31. President, Professor G. M. Stratton, University of California; secretary, Professor A. H. Pierce, Smith College, Northampton, Mass.

The American Philosophical Association.—December 29–31. President, Professor Hugo Münsterberg, Harvard University; secretary, Professor Frank Thilly, Cornell University, Ithaca, N. Y.

Southern Society for Philosophy and Psychology.—Convocation week. President, Professor J. MacBride Sterrett, The George Washington University; secretary, Professor Edward Franklin Buchner, The Johns Hopkins University, Baltimore, Md.

The American Anthropological Association.—December 28–January 2. President, Professor Franz Boas, Columbia University; secretary, Dr. Geo. Grant MacCurdy, Yale University, New Haven, Conn.

The American Folk-lore Society.—Week of December 28. President, Professor Roland B. Dixon, Harvard University; secretary, Dr. Alfred M. Tozzer, Harvard University, Cambridge, Mass.

SOCIETIES AND ACADEMIES

THE BIOLOGICAL SOCIETY OF WASHINGTON

The 446th meeting was held October 17, 1908, with President Stejneger in the chair. A paper on "The Pear Thrips Problem in California" was read by Mr. A. L. Quaintance. The so-called pear thrips (*Euthrips pyri* Daniel) first came to notice in the spring of 1904 in the Santa Clara Valley in California. Since its first appearance, its injuries have constantly increased, and it has now spread to the principal deciduous-fruit growing regions in the San Francisco Bay region. The losses brought about by the pear thrips the past year have been perhaps not less than half a million dollars.

The insect was first investigated by Mr. Dudley Moulton, beginning in 1904, at that time Santa Clara County entomologist, and a fairly complete account of it was published in a bulletin from the office of the state commissioner of horticulture. The increased destructiveness of the thrips led to provision by congress for an investigation of the insect by the Bureau of Entomology, and Mr. Moulton, who in the meantime had been employed by the bureau, was assigned to the work beginning July 1, 1907, with headquarters at San José, Cal.

The pear thrips attacks various deciduous fruits, as almond, apricot, peach, prune, cherry, pear, apple, etc. The life history is briefly as follows: Early in the spring, as in late February or early March, the adult thrips begin to make their appearance from the soil, at once attacking the opening buds or blossoms, and by their feeding soon cause these to blight, literally nipping the fruit crop in the bud. Oviposition occurs soon after emergence, the eggs being placed in soft tissues, especially fruit and leaf stems or in the midribs of leaves. The young larvæ feed upon the tender tissues of the leaf or flower, requiring some three or four weeks to reach their full size. They then leave the plants and work their way below the soil from three to four or even ten to twelve inches, depending upon whether this is hard or soft, as resulting from frequent cultivations. In the soil, the thrips larvæ construct small oblong cells where they remain the balance of the season. In late fall and early winter, transformation to the pupa stage occurs, from which the adults develop, to appear above ground about the time fruit trees are beginning to bloom in the spring. There is thus but one generation each year, and the insect spends practically ten months in the ground.

The pear thrips has proved to be a very difficult insect to combat, and its practical control has not