severe case of hay fever. The sneezing continues and finally develops into convulsive reactions. At this time the animal is very sensitive to touch, so that if even the fur is lightly touched the animal jumps and squeals. Salivation begins with the sneezing and continues so that the mouth becomes quite frothy. At about this time the animal will insert its toes within its mouth as though trying to dig out some object in its throat. In many of the cases urination and defecation result. The eyes are dull and glassy. In some animals the nose bleeds. The hind legs become paralyzed. Finally the animal falls on its side, breathes heavily and then gradually succumbs. Death seems to be due to edema of the lung.

In the children observed the reactions of the victims of *C. sculpturatus* are very similar to those shown by the white rat but extend over a greater period of time. In the case of the eight-year-old child noted above, death occurred within seven hours after the sting. *V. spinigerus* sting causes a local redness and swelling in the region of the sting. Sometimes a small white spot appears around the sting in addition to the above reactions. The writer has not observed any case of *H. hirsutus* sting in man.

Upon request, the Institute of Hygiene of the Department of Public Health, Popotla, D. F., Mexico, graciously sent gratis two ampullae of their anti-scorpion serum prepared for use on victims of *C. suffusus* and *C. noxius,* two deadly Mexican scorpions. This serum was tried on rats stung by *C. sculpturatus* and found effective, even though the animals were in advanced stages of poisoning. Since then the serum has been tried on human victims of *C. sculpturatus.* In all cases it has proved entirely effective, and no deaths have resulted from scorpion sting, even though the serum was used in quite advanced stages of poisoning.

H. L. STAHNKE

IOWA STATE COLLEGE AND
MESA UNION HIGH SCHOOL,
MESA, ARIZ.

STIMULATION OF KUDZU CUTTINGS

IN view of its desirable growth characteristics in soil conservation work, kudzu is an important plant in the South. However, successful propagation of this plant from seeds and cuttings on a large scale has been limited.

In October, 1937, the Horticultural Department of the University of Georgia and the Soil Conservation Service, in Athens, started a cooperative project for the study of kudzu propagation. In the first greenhouse trial, three commercial synthetic hormone products were used at recommended dilutions for recommended durations. The results given in Table I were obtained after fourteen days.

TABLE I

Commercial product	No. set out	No. rooted	No. unrooted	Per cent. of cuttings rooted
'A' Dilute	75	51	22	68
'A' Standard ..	75	64	11	85
'B' Dilute	75	46	24	61
'B' Standard ..	75	47	27	63
'C' Dilute	72	48	23	67
'C' Standard ..	75	39	27	52
Untreated	75	38	33	51

The results from this trial indicated that cuttings treated with hormones produced a higher percentage of strikes than untreated ones. However, the most noticeable effect was the increase in size and number of roots per cutting. This indication was considered sufficient to justify a second trial, using the material that had given the best results. In addition to this superior hormone product, it was decided to include a comparative test using potassium permanganate, one ounce to eight gallons of water for thirty minutes, which had given good results in previous tests with ornamentals. The results obtained after a thirty-day period are given in Table II.

TABLE II

	No. planted	No. rooted	No. unrooted	Per cent. rooted
Check no. treatment	302	128	174	42.4
'A' Standard	300	160	140	53.3
'A' Standard + ...	150	90	60	60
'A' Standard ++ ...	299	127	172	42.5
Potassium Permanganate ..	150	129	21	86

The second trial confirmed the indications of the first in that the treated rooted cuttings showed an increase in the number and size of roots over the untreated ones. The indications are that the potassium permanganate is superior to any hormone product yet tested for kudzu, both as to percentage of strike and size and number of roots developed. The stimulating results obtained through the use of potassium permanganate warrant further studies.

M. C. MYERS
ROY A. BOWDEN

HORTICULTURAL DEPT.,
UNIVERSITY OF GEORGIA

F. E. HARDISTY

SOIL CONSERVATION SERVICE,
ATHENS, GEORGIA

"A CROSS-SECTION OF OUR TIME"

As part of its activity in connection with the New York World's Fair of 1939 the Westinghouse Company is considering the preservation of a "Cross-section of our Time" in a large capsule of copper alloy, to be deposited deep in the earth at the site of the fair, with proper ceremony, some time late in September of this year. The capsule, which has engaged considerable engineering and metallurgical attention, is to be so constructed as to last 5,000 years. The articles

in the interior, which are being selected with the advice of archeologists, historians, technical societies and others, are to be preserved in an inner glass crypt, filled with nitrogen or other inert gas.

Though the interest and cooperation of many scientific men has already been obtained through personal interview and by letter, we feel that the project needs and merits the suggestions and advice of as large a cross-section of the scientific community as possible. Many questions present themselves, such as: What method should be used for the preservation of the items in the "Time Capsule"? Should books be reduced to microfilm, and will this last? What books, what small physical objects, what pictures, etc., will best present a picture of ourselves and our times to the people of *circa* 6939? What key to our language may we leave which will enable them to translate and understand what is in the capsule? How best may we leave word of the location of this capsule for the archeologists of such a distant future?

We welcome suggestions on these and other questions. As time is short, we urge scientific men to let us have at once their thoughts on this project.

D. S. YOUNGHOLM,
Vice-president, Westinghouse Electric and Manufacturing Company

SOCIETIES AND MEETINGS

THE KANSAS ACADEMY OF SCIENCE

THE seventieth annual meeting of the Kansas Academy of Science was held at the Kansas State Teachers College, Pittsburg, March 31, April 1 and 2, 1938. Cooperating with the academy and meeting at the same time was held the thirty-fourth annual meeting of the Kansas Association of Teachers of Mathematics under the chairmanship of Miss Anna Marm, of Lindsborg; The Kansas Section of the Mathematical Association of America under the leadership of Vice-president C. B. Tucker, of Emporia; the Kansas and Nebraska chapters of the American Association of University Professors, with Professor D. A. Worcester, Lincoln, Nebraska, regional chairman; and the Kansas Entomological Society, which is affiliated with the academy as the section on entomology under the leadership of Vice-president L. C. Woodruff, Lawrence.

Dr. Leo Christiansen addressed the first meeting on Thursday evening under the joint auspices of the South East Kansas Section of the American Chemical Society and the academy on "The Farm Chemurgic." Academy business sessions of an hour each were held on Friday and Saturday mornings on April 1 and 2. The remainder of the time during the two days was devoted to section meetings. A section on geology and one for science teachers were organized during the year and met as sections for the first time. Table I presents a report of the sessions.

The senior and junior banquets were held on Friday evening at the college cafeteria with an attendance of 180 at the senior banquet and 125 at the junior academy banquet. Dr. W. H. Schoewe, president-elect, served as toastmaster. President W. A. Brandenburg, of the college, responded with an address of welcome to the two groups. Professor George A. Dean gave the president's address on the subject, "The Contributions from Kansas to the Science of Entomology." The group then adjourned to the college auditorium to hear the annual invitation address, given this year by Dr. Lawrence H. Snyder, professor of zoology, Ohio State University, on the subject, "Heredity and Human Affairs," before an audience of approximately five hundred.

TABLE 1

Section	Chairman	No. of papers	Total attendance	Chairman for 1938–1939
Botany	Miss Margaret Newcomb	28	40	C. C. McDonald, Wichita
Geology	J. M. Jewett	16	47	D. C. Schaffner, Emporia
Psychology	O. W. Alm	17	75	Joseph W. Nagge, Emporia
Zoology	C. E. Burt	29	75	Earl H. Herrick, Manhattan
Physics	C. V. Kent	11	35	Penrose Albright, Winfield
Chemistry	Lloyd McKinley	10	60	Fayette T. Owen, Emporia
Junior Academy	Oscar Klingman		300	Bill Akey, Pittsburg
Kansas Entomological Society	L. C. Woodruff	16	35	L. C. Woodruff, Lawrence
Science Teachers	W. J. Baumgartner	9	125	Lorene Bailey, Parsons, Biology Lawrence Oncley, Winfield, Phy. Sciences
Mathematical Association of America	Chas. B. Tucker	4	50	Chas. B. Tucker, Emporia
Kansas Association of Teachers of Mathematics	Miss Anna Marm	2	75	Miss Minnie Stewart, Topeka
University Professors	D. A. Worcester	7	50	D. A. Worcester, Lincoln, Nebr.