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