ditions very favorable to the development of the disease. In greenhouse and field experiments of 1935 to 1938, in which nearly all plants of commercial resistant varieties were infected, Accession 160 and its F_1 hybrids with susceptible varieties of *Lycopersicum esculentum* remained free from vascular discoloration. Injection of a suspension of a virulent isolate of the fungus into the stems failed to produce the disease in Accession 160 or in the F_1 hybrids, although plants of the Bonny Best variety used as controls were killed by the fungus within 28 days. Accession 160 was not infected on autoclaved soil infested with 39 isolates of *Fusarium lycopersici* from various regions of North America and other continents; several of these isolates killed all plants of Bonny Best and Marglobe checks within 45 days.

Tests of several thousand plants in various progenies from crosses between Accession 160 and several susceptible commercial varieties proved that immunity to *Fusarium lycopersici* in tomatoes is dependent on a single, dominant genetic factor. The factor for immunity was maintained in the heterozygous condition in a series of 4 back-crosses to susceptible varieties. Its potency was not decreased in the fourth back-crosses or their progenies.

Large fruit size and various other characters of commercial value were obtained in some plants of advanced generations and many of the plants could not be distinguished from large-fruited forms of *Lycopersicum esculentum*. Although they were heterozygous for a large number of factors affecting fruit and plant characters, preliminary tests indicated that some plants in progenies from self-pollinated flowers of selections derived through outcrossing immune selections to commercial varieties for four generations were homozygous for immunity.

Various lines are being tested and subjected to selection to obtain plants homozygous for the factor for immunity, and for factors for desirable fruit and plant characters. The linkage relations of the gene for immunity are being studied. The data will be reported in detail, elsewhere, at an early date.

G. W. BOHN
C. M. TUCKER

UNIVERSITY OF MISSOURI

MAHOLI GALAGOS BREED IN CAPTIVITY

IN September, 1937, I received two Maholi galagos from South Africa. This is a well-known, dwarf variety of lemuroid with a body about six inches long and hind legs which are slightly longer than the body. Like all lemuroids, they are nocturnal, and this variety normally hops about in the tops of trees. In July, 1938, the female matured, but fertilization did not take place. On December 15, 1938, there was a second period of heat, and four months later, April 14, 1939, two galagos were born. So far as I have been able to determine, this is the first time that the Maholi galago has bred young in this country. There are many cases recorded of young having been born among the lemurs while in captivity in the various zoos abroad, and in some instances the period of gestation has been recorded. I am unable, however, to find any record of the period of gestation for the Maholi galago.

Just before the birth of the twins the expectant mother tore up quantities of paper in an effort to make a nest in a small box inside her cage. At birth the young were well covered with grayish fur and the eyes were partially open. They could cling to the perpendicular sides of the cardboard box in which they were born by means of their adhesive pads on both hands and feet. The mother, if disturbed, would clutch one of her offspring in her mouth, usually by the middle of its back or even by its ventral surface. She is able to jump as much as ten feet with her offspring dangling from her mouth.

FLORENCE DEL. LOWTHER

BARNARD COLLEGE,
COLUMBIA UNIVERSITY

ZOOLOGY FOR PRE-MEDICAL STUDENTS

A QUESTION which is raised by practically every student preparing for the study of medicine is, "How much science work, and particularly how many and what courses in zoology, should I take?" The answer, which I believe most deans of medical schools ordinarily give, is, "Take only those courses which are required for entrance to medical school."

In many liberal arts colleges, however, students who are preparing for the study of medicine are advised to take as much work in zoology as they can possibly get in. The usual assumption which is the basis of such advice is that the additional science work will better prepare the student to carry the medical curriculum. This seems logical, but, we ask, "Do these extra science courses sufficiently enhance the average student's ability to profit by the medical course to justify his taking them to the exclusion of other studies which in all probability he will never again have an opportunity to pursue?"

To throw some light upon this particular question we have compared the medical school grades in certain courses earned by students who had had similar courses in departments of zoology with the grades of other students in the same classes who had had no such courses. Specifically, the comparisons were as follows: The grades in gross human anatomy of one hundred students who had had comparative anatomy were compared with the grades of one hundred students who had not had this course; likewise the grades of one hundred students in human embryology, one

hundred in human histology and fifty in human physiology who had had corresponding courses in "arts colleges" were compared to the grades of the same numbers of students who had had no such courses.

There were no significant differences between the abilities, as judged by average college grades and by average scores on Medical Aptitude tests, of the groups of students who had had and those who had not had the various zoology courses.

Analysis of these data shows that the students who had had comparative anatomy did approximately 10 per cent. better in gross human anatomy than the students who had not had such a course. The calculation of statistical probabilities indicates that there are 36 possibilities in 100 that this average difference in grades is due to the operation of chance in sampling. Whether one considers this probability as statistically significant is a matter for individual judgment, but, except for other possible values which the students might get from comparative anatomy, it is questionable whether the time and the effort expended are justified by the 10 per cent. better average work which the students who have taken comparative anatomy do in gross human anatomy.

In human embryology and in human histology there are no significant differences between the grades of the students who had had and those who had not had similar courses in the "arts college." Those students who had had a physiology course in a zoology department did not do as well in human physiology as those who had had no such course. This difference is sufficiently great to be considered statistically significant; although it is probably without much importance.

While this study may not answer the question as to how much work in zoology a prospective medical student might profitably take, it does present evidence that the argument that a student should take a multiplicity of zoology courses because they will specifically help him in his medical school work is fallacious. There may be a slight justification on this basis for recommending comparative anatomy, but there is none whatsoever for embryology, histology or physiology.

HAROLD S. DIEHL

DIVISION OF MEDICAL SCIENCES,
UNIVERSITY OF MINNESOTA

KILLING THE TERM, PREDATEE

IN reply to Professor L. D. Wooster's "Proposing the Term, Predatee" (SCIENCE, 89: 436, 1939), may I point out that the word *prey* denotes "any animal that is or may be seized by another to be devoured" (second definition in Webster's New International Dictionary, second edition). Therefore, *predatee* is unnecessary and, we hope, abortive. This protest is not offered in the spirit of conservatism, for I have persisted, with others, in using such naturally formed and needed words as predator, predation and speciation, until they have become recognized by the lexicographers, and am continuing to take part in the process of word-speciation by using, for example, a new verb, *to speciate.*

CARL L. HUBBS

UNIVERSITY OF MICHIGAN

SOCIETIES AND MEETINGS

THE ILLINOIS STATE ACADEMY OF SCIENCE

THE thirty-second annual meeting of the Illinois State Academy of Science met in Springfield on May 5 and 6. The meeting opened with a general session held in the Centennial Building of the State Capitol group. The governor of Illinois, though unable to attend, sent a letter of welcome, and the superintendent of schools, R. E. Fildes, gave a short address of welcome. Dr. George D. Fuller, of the University of Chicago, the retiring president, presented an interesting paper on the interglacial and postglacial vegetation in Illinois. Dr. Charles A. Shull, of the University of Chicago, also gave a paper at the general session on plant growth and growth hormones. This session closed after short talks by Anton Tomasek, state forester, on state forests in Illinois and by Dr. Thorne Deuel, chief of the State Museum, on some interesting exhibits prepared by the museum staff especially for those attending the annual meeting.

The section meetings in the afternoon were unusually well attended, some 140 papers being presented in the nine sections offering programs. Several sections were obliged to divide their programs. One section in geology was virtually a symposium on geological features of Illinois. Chemistry, botany and zoology also were able to arrange separate programs around topics of specialized interest. The physics section met separately in the morning discussing with the representatives of medical schools in the state the problem of physics in premedical education.

Immediately after the section meetings a general business meeting and election was held. The officers of the academy for 1939–1940 are: *President,* Evelyn I. Fernald, botany, Rockford College; *First Vice-President,* Theodore H. Frison, Natural History Survey, Urbana; *Secretary,* Robert F. Paton, physics, University of Illinois; *Treasurer,* John Voss, Manual Training High School, Peoria.

Two resolutions of general interest were also passed unanimously:

Resolved, that the Illinois State Academy of Science hereby reaffirms its general approval of the efforts of the