

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.

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#### 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.

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#### 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