foundations at the ground level and on or under vegetation where the air is damp. One spring day, Miss Burger and the writer took 50 individuals of varying stages from the stones of a rock-banded curbing 35 × 2 feet in area. Six months later, the identical site yielded five mature females, one mature male and two immature females. A pile of scattered fenceposts left lying in a field in April had from one to six mature females under each post in October.

In the fall of 1935, an undergraduate in one of the writer's classes was bitten on the hand upon retrieving a tennis ball. Apparently in the very short interval of time the ball lay in the grass outside of the court, a female black widow clung to it and then inflicted the bite as it was picked up. This student's symptoms were typical: The sensation of a pin prick, pain increasing in intensity and localizing in the lower torso, a marked rigidity of the abdominal muscles and prostration. In spite of opiates and other measures, pain, so intense that a wooden gag was necessary, was experienced for about two days. Apparently this case is the first time a student has been bitten while in residence, though the spiders are seen on nearly every collecting trip. In the Elementary Biology Laboratory, one or more *Latrodectus* cultures are kept going most of the year and all students in field courses are warned to respect this dangerous arachnid.

From his personal experience, the writer has concluded that (1) the black widow is abundant in Tidewater Virginia, (2) it is unlikely to inflict its poisonous bite unless handled, and far from invariably then, and (3) its bite is so serious, especially to children, that reasonable caution should be observed when poking into situations where it is likely to be.

It may be relevant to conclude this account with a true and rather amusing anecdote. Some Williamsburg children, sons and daughters of professors as well as colored children, are in the habit of collecting insects and spiders and selling them to biology students for one cent each. One little colored boy discovered purveying black widows at this price was told of the dangerous character of such merchandise. A few days later he was found still selling black widows—but his price had jumped to a nickel each.

RAYMOND L. TAYLOR
DEPARTMENT OF BIOLOGY
COLLEGE OF WILLIAM AND MARY

THE ADSORPTION-ABSORPTION AND TRANSLOCATION OF DERRIS CONSTITUENTS IN BEAN PLANTS

OBSERVATIONS in field work in which derris and cube were used as insecticides showed possibility of the constituents of these roots being adsorbed-absorbed and translocated to new growth of the treated plants.

Two varieties of beans (Pinto and Burpee Stringless Green-pod), grown in pots under greenhouse conditions, were treated before the first trifoliate leaves appeared with suspensions of derris in water, containing 0.025, 0.05 and 0.25 per cent. rotenone. Some of the plants were treated by spraying the entire plant with a compressed-air hand sprayer, some by painting only the first pair of true leaves and some by painting only the stems.

As soon after treatment as the first trifoliate leaves had attained a fair size or about the time the second trifoliate leaves were opening, the first trifoliate leaves were removed from the plants and used for tests. Larvae of the Mexican bean beetle (*Epilachna varivestis* Muls.), confined in open glass cells, were allowed to feed on these leaves and the leaf areas consumed were measured. There was very low mortality among the larvae feeding on the new growth from either the treated or the untreated plants. There was, however, a definite reduction in feeding area of new growth on treated plants over that on untreated plants. This reduction in feeding area was observed on the first, second and third trifoliate leaves.

Chloroform extracts were prepared from the same plants as those used for the feeding tests. These extracts were prepared for biological and chemical tests by evaporating to dryness and removing the residue with acetone. An aliquot of the acetone solutions was tested against goldfish (*Carassius auratus*) in water suspension, and 100 per cent. mortality was observed in every case. No mortality was observed in extracts prepared from untreated plants. Where sufficient leaf material was available, an aliquot was used for the colorimetric analysis.

The data accumulated thus far indicate that derris constituents are being adsorbed-absorbed and translocated to new growth of bean plants treated with a suspension of derris powder in water.

A more detailed paper will be presented elsewhere.

ROBERT A. FULTON
HORATIO C. MASON
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE, U. S. DEPARTMENT OF AGRICULTURE

THE SIXTH EDITION OF THE BIOGRAPHICAL DIRECTORY OF AMERICAN MEN OF SCIENCE

A NEW edition of "American Men of Science" is now in preparation. It should be ready in about a year, the present plan being to issue the work once in five years. The fifth edition was published in March, 1933; the dates of publication of the earlier editions were 1906, 1910, 1921 and 1927, one edition having been omitted owing to war conditions. The number of