

these officers were unanimously re-elected by the association for the year 1904-05.

*PORTO RICO EXPERIMENT STATION.**

THE work of the Porto Rico experiment station has been considerably enlarged during the past year, partly with the aid of an appropriation of \$2,700 made by the insular legislature and nearly \$1,200 received from the sale of farm products.

Many permanent improvements have been made on the station farm. A small tile machine was purchased and drain pipes were manufactured on the farm. Practically all the river bottom or alluvial land on the station farm has been drained. This is the first under-drainage ever undertaken in Porto Rico, and it is believed that it will not only greatly enhance the producing power of the station property, but will also serve as a valuable object lesson to the planters of the island. An experimental irrigation system has also been installed on this farm.

A preliminary survey of the principal tobacco districts of the island has been made by a tobacco specialist in the employ of the station, and a report on these investigations is being prepared.

The investigations on different methods of pruning, shading and fertilizing coffee plants have been continued. In an attempt to exterminate the coffee-leaf miner by hand picking the leaves proved the impracticability of this method of repressing this pest. The entomologist of the station has also been investigating the possibility of combating this insect by means of parasites, and reports the discovery of an effective parasite which, it is believed, by careful propagation and distribution, will aid very materially in keeping in check this insect, which is by far the most serious enemy to coffee cultivation now upon the island.

A special study of the diseases of coffee and other plants was made by the botanist of the Connecticut State experiment station, who was temporarily in the employ of the Porto Rico station.

* From the Report of the Secretary of Agriculture.

Much attention is being given to the propagation of citrous fruits, especially with a view of obtaining better stock for growing in the orchards of Porto Rico. A bulletin on the methods of production and marketing of oranges, with special reference to Porto Rico conditions, has recently been issued. A large number of tropical fruits, including mango, alligator pear, soursop, nispero, guava and many others, have been brought together in a tropical fruit orchard.

The tea, rubber and cacao plantations mentioned in my last report are flourishing and are being extended. Among the tropical vegetables which enter into the variety tests are the yautia, taro, edible canna, arrowroot, cassava, yams and sweet potatoes, all of which have thus far done well.

Experiments are being carried on with a number of fiber plants. Among these maguey and sisal have thus far given very promising results. The station has thus far conducted no careful experiments with cotton, but the industry has been extended throughout the island to a considerable extent during the past year, and the station officers report that the results seem to indicate that it is possible to profitably produce a medium grade of Sea Island cotton in Porto Rico.

The report of the Bureau of Soils on the soil survey from Arecibo to Ponce, made by that bureau in cooperation with the Porto Rico station, has been reprinted in both English and Spanish for distribution on the island. Several other bulletins and circulars in both languages have been issued during the year.

EIGHTEENTH SESSION OF THE MARINE BIOLOGICAL LABORATORY, 1905.

THE eighteenth season of the Marine Biological Laboratory opens under favorable auspices. For the first time the laboratory is in a position to welcome investigators at any season of the year; a large stone building has been purchased and equipped with heating apparatus, running fresh and salt water, and the usual laboratory supplies. Two private rooms for investigators have been furnished in this building and are ready for occupancy. Mr. Gray, curator of the supply department,

and two assistants are in residence throughout the year and are prepared to furnish material and supplies to investigators. Naturalists who wish to carry on research in the winter and spring at Woods Hole should apply for accommodations to the director of the Marine Biological Laboratory, Professor C. O. Whitman, or to the assistant director, Professor Frank R. Lillie, University of Chicago, Ill. The regular season for investigators opens in June when the summer laboratories will be ready for occupancy.

The Carnegie Institution has subscribed for twenty rooms for the season of 1905. Applicants for the use of these rooms should address the president of the Carnegie Institution, Washington, D. C., stating the general character of the work they propose to do, and the period for which the room is desired. Applications should be made as early as possible, as the rooms are generally all in use during July and August. Thirty-five other private rooms are reserved for investigators. Applications for these rooms should state the time of desired occupancy and any special needs, and should be sent to the director before May 1. All private rooms are supplied with reagents, glassware, etc., and carry with them the usual privileges in regard to supplies and aquaria and assistance in collecting material.

The regular session for students will begin on Wednesday, June 28, and will continue for six weeks. Courses in invertebrate zoology, in the life histories of marine animals, in physiology and in botany are offered. The annual announcement for 1905 will be ready on or before March 1, and may be procured from Professor Frank R. Lillie, the University of Chicago, Ill.

SCIENTIFIC NOTES AND NEWS.

PROFESSOR RAPHAEL PUMPELLE was elected president of the Geological Society of America at the recent Philadelphia meeting.

THE officers of the American Anthropological Association for the ensuing year are: *President*, Professor Frederic W. Putnam, of Harvard University; *Secretary*, Mr. George Grant MacCurdy, of Yale University; *Treas-*

urer, Mr. B. T. B. Hyde, of New York; *Editor*, Mr. F. W. Hodge, of the Smithsonian Institution.

THE annual meeting of the National Geographic Society was held at Washington on January 13. Eight members of the board of managers were elected to serve for three years as follows: Alexander Graham Bell, Alfred H. Brooks, Henry Gannett, General A. W. Greely, Gilbert H. Grosvenor, Angelo Heilprin, O. H. Tittmann and General John M. Wilson. The report of the secretary, Hon. O. P. Austin, showed that the present membership of the society is 3,400, of whom 1,125 are residents of Washington and 2,275 distributed throughout the United States, Alaska, Philippines, Europe, Asia and Africa. The net gain in membership for 1904 was 789. During 1904 the society held twelve scientific meetings, sixteen special meetings, and four field meetings.

PROFESSOR E. WARBURG, director of the physical laboratory of the University of Berlin, has been appointed president of the Reichsanstalt.

DR. LIVINGSTON FARRAND, professor of anthropology at Columbia University, has been placed in charge of the work of the National Association for the Study and Prevention of Tuberculosis.

DR. MILTON J. GREENMAN, assistant director of the Wistar Institute of Anatomy and Biology of the University of Pennsylvania, has been elected director to succeed Dr. Horace Jayne.

THE Russian Geographical Society has conferred its Count Lütke medal on Sir John Murray.

PROFESSOR WILLIAM H. BURR and Mr. William Barclay Parsons, members of the Isthmian Canal Commission, have sailed for Panama on the steamer *Orizaba*.

DR. CHARLES M. CHILD, of the department of zoology of the University of Chicago, is spending the winter quarter in research at Hopkins Seaside Laboratory of Stanford University, Pacific Grove, Cal., and at the San Diego Laboratory of the University of California.