Health," Dr. George E. Vincent, Rockefeller Foundation.

FREE lectures and demonstrations will be given during the month of February in the Central Display Greenhouse, New York Botanical Garden, on Saturdays at 3 P. M. as follows: February 6, "Notes on the Birds in the Botanical Garden," R. S. Williams; February 13, "Trees and Shrubs in Winter," Percy Wilson; February 20, "Methods of breeding Plants," Dr. A. B. Stout; February 27, "The Planting of Flower Seeds," George Friedhof.

ACCORDING to press dispatches, the Italian cabinet has approved a bill creating an Italian Academy, the objects of which will be the "coordination and direction of Italian intellectual movements in the field of science, letters and arts, the preservation in these activities of the national character according to the traditions of the race, and the encouragement of its expansion and influence abroad." The academy will receive an annual subsidy from the state, and grants and pensions will be assigned to authors, artists and scientific workers, inventions examined and schemes for intellectual advance instituted. Membership will be limited to sixty, the first thirty being nominated by royal decree, on the advice of the president of the council, and the remainder during the next ten years from a list of names preferred by the existing academicians. Academicians will have the privileges of high state officials and will wear a special uniform.

BEGINNING with the January issue, the *American Journal of Psychology* will be conducted by the following board of editors: Professor Margaret F. Washburn, Vassar College; Professor Karl M. Dallenbach, Cornell University; Professor Madison Bentley, University of Illinois, and Professor Edwin G. Boring, Harvard University. Manuscripts offered to the journal may be sent to any member of the board.

UNIVERSITY AND EDUCATIONAL NOTES

THE Tokyo Imperial University has completed plans for the new library donated by the Rockefeller Foundation, and construction work will start in the spring. The structure will be Gothic, three stories high and a basement, with thirty-three acres of floor space and five reading rooms, which will accommodate 2,000.

CONSTRUCTION of a new building for chemistry at the Michigan Agricultural Experiment Station will begin early in the spring, funds for which were granted by the 1924 state legislature.

DR. R. A. PEARSON, president of Iowa State College of Agricultural and Mechanical Arts, has submitted his resignation to take effect next September.

DR. ANDREW GROVER DUMEZ, pharmacologist in the U. S. Hygienic Laboratory, Washington, has been appointed dean of the College of Pharmacy in the University of Maryland.

DR. CHESTER K. WENTWORTH, of the University of Iowa, has been appointed acting associate professor of geology of the University of Virginia to take the place of Albert W. Giles, who recently resigned his position as professor of geology to become head of the department of geology of the University of Arkansas.

DR. LEIGH HOADLEY, Ph. D., '23 (Chicago), has been appointed assistant professor of biology at Brown University and will take up his duties next September. Dr. Hoadley is now studying in Europe.

DR. SEWALL WRIGHT, who for more than ten years has been in charge of animal genetics investigations of the U. S. Bureau of Animal Industry, has been appointed associate professor of zoology at the University of Chicago.

ASSOCIATE PROFESSOR J. W. CAMPBELL, of the University of Alberta, has been promoted to a full professorship of mathematics.

AT the Harvard University School of Public Health, Dr. Joseph Bequaert has been promoted to assistant professor of entomology and Dr. Donald L. Augustine has been promoted to assistant professor of helminthology.

PROFESSOR M. LECHATELIER has resigned the chair of general chemistry at the Sorbonne, Paris, which he has held since 1907. He will be succeeded by M. Job, professor at the National Conservatory of Arts and Metiers.

DISCUSSION AND CORRESPONDENCE

THE PRESENT CONTINUED DEVELOPMENT OF BASAL SHOOTS FROM BLIGHTED CHESTNUT TREES

WITHIN the blight-devastated portion of the range of the American chestnut the frequent appearance of healthy chestnut sprouts from the bases of trees apparently killed by the blight has led to a popular belief that the chestnut is "coming back."

Inoculations by the writer of the roots of some of these sprouts have resulted after one year's time in a very slight growth of the fungus; while the shoots, inoculated at the same time, and from the same pure culture of *Endothia parasitica*, have rapidly been girdled. A full account of this work will be published in a forthcoming number of *Phytopathology*.

Evidently the basal part of the trunk known as the root collar, where root and trunk unite, as well as the tissues of the roots themselves, are partially

resistant to the invasion of Endothia. This is obviously due to some substance or substances present in these regions, which either are not present in the stem tissues or are present in lesser amount. It is possible that these are tannin compounds or perhaps substances closely associated with the occurrence of tannin.

Work recently carried on by the Leather and Paper Laboratory of the Bureau of Chemistry, U. S. Department of Agriculture, shows more than twice as much tannin present in the bark of chestnut roots as in the bark of the trunk. It has been known for some years[1, 2, 3] that tannin or substances closely associated with it, although to some extent utilized by the fungus as food, yet when present in considerable amount, exert an inhibitory effect on its growth.

Whatever the nature of the resistant substance, it is clear that it exists. Ordinarily the fungus does invade the root tissue slowly and the basal shoots die, to be replaced by others as long as any living root collar tissue with adventitious buds remains. Cases are known to the writer where this succession of basal shoots has been going on for more than fifteen years. In the ordinary course of events all signs of life eventually disappear and the tree becomes entirely dead.

However, as sometimes happens in the case of a popular "hunch," the layman may have struck it right. There is surely a possibility that the chestnut may be able to "come back" *via* this route. For if the resistant substances, whatever they may be, should develop somewhat greater concentration, the invasion of the fungus might be successfully checked. In addition, there is always the alternative that the parasite may, in time, lose some of its virulence. Some years ago J. Franklin Collins[4] found a group of chestnut sprouts which, although in 1912 showing attack by the fungus, had apparently succeeded in throwing off the early invasion by 1919. We should be constantly on the lookout for similar cases, for stock of this sort is most valuable in view of the threatened extinction of the species.

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[1] Clinton, G. P., "Chestnut Bark Disease," Conn. Agr. Exp. Sta. Rept. for *1912*, 359–453, 1913.

[2] Cook, M. T., and J. J. Taubenhaus, "The Relation of Parasitic Fungi to the Contents of the Cells of the Host Plants. I. The Toxicity of Tannin." Del. Coll. Agr. Exp. Sta. Bull., 91, 1911.

[3] Cook, M. T., and G. W. Wilson, "The Influence of the Tannin Content of the Host Plant on Endothia parasitica and Related Species," *Bot. Gaz.*, 60, 346–361, 1915.

[4] Collins, J. F., "Note on Resistance of Chestnut to the Blight," *Phytopath.*, 10, 368–371, 1920.

BACTERIAL LEAFSPOT ON HUBBARD SQUASH

IN August, 1925, leaves of Hubbard squash were received from New York which were thickly covered with angular spots, strongly suggesting the angular leafspot of cucumbers. Bacteria were found in abundance in the spots. Poured plates, however, did not yield anything at all resembling *Bact. lachrymans*. Instead, small yellow colonies predominated on all sets of plates.

Spray inoculations with single colony transfers of this yellow organism have given good infections on Hubbard squash leaves, reisolations have been made from these infections and single colony transfers again proved infectious on squash.

The organism is a gram-negative, polar flagellate rod, commonly with one flagellum. Colonies on thin-sown peptone beef agar, pH 7.0, are visible in three days and after seven days are four mm wide, convex, wax-yellow with internal concentric markings by oblique light. Gelatin is slowly liquefied, nitrates are not reduced; growth is absent or feeble in Cohn's solution and very moderate in Uschinsky's solution. In beef broth a heavy bright yellow rim is formed and often in undisturbed cultures a pellicle, both composed of coarse pseudozoogloeal masses. Litmus milk is peptonized, and a soft curd is formed, but there is no reddening or bluing of the litmus. Later the litmus is completely reduced. Growth on potato cylinders is very abundant, destroying the starch and filling the water with dense yellow slime.

The name *Bacterium cucurbitae* n. sp. is suggested for this organism. Further work is in progress.

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IODINE IN THYROID DEFICIENCY

THE value of iodine as a therapeutic agent for goitrous persons was shown by Dr. David Marine in his extensive experiments on the school children of Akron, Ohio. However, this was not the first use of iodine in this disease in America. J. Young ("Chloroform") Simpson in his treatise on homeopathy (1853) notes the universal employment of seaweed as a remedy for goiter, saying:

Those suffering from it in South America seem, from medical experience, to have discovered also the uses of matters containing Iodine in the same affection. The stems of a seaweed, and without doubt containing Iodine, have been long chewed by inhabitants of South America under the name of Palo-coto, or Goitre-stick, wherever goitre is prevalent. I am informed by Dr. Greville that Dr. Gillies found this drug carried over the Pampas of South America, many hundred miles inland, for this