

Summary.

Nitrites in plants in the cases observed were due to the reducing power of the internal bacterial flora. This reduction is the cause of nitrogen starvation of plants affected with some peculiar diseases. This nitrogen starvation may occur even when plants are growing on a soil where nitrates are abundant. The internal bacterial flora of plants with its nitrogen-reducing power may be a direct factor in soil depletion where crop rotation is not practiced, owing to the increased virulence and invading power of reducing bacteria. It is believed that lack of crop rotation provides soil organisms a better opportunity to establish themselves in the veins and tissues of plants by means of adaptation.

SPRECKELS, CAL.

NEW BOOK.

Annual Reports of the Progress of Chemistry for 1915. Issued by the Chemical Society. Vol. XII. London, 1916. Pp. viii + 268. Sold by D. Van Nostrand Company. \$2.00 net.

In 1905 the Chemical Society of London inaugurated the publication of this series of annual reports of the progress of chemistry. Issued usually in the late spring, they aim at giving an epitome of the most important work of the preceding year. For the busy chemist who would know what is taking place in other branches of chemistry than his own special field, they are invaluable; within his field he will find them at least interesting and suggestive. Prepared so soon after the close of the year, they naturally lack perspective, and they may often give undue prominence to topics for which the reviewer has a particular bias, but this detracts little from their value. The reviewers of the different fields are for the most part specialists and investigators, which lends interest and value to their work. The contents of the present volume are: General and Physical Chemistry, H. M. Dawson. Inorganic Chemistry, E. C. C. Baly. Organic Chemistry: Part I, Aliphatic Division, J. C. Irvine; Part II, Homocyclic Division, F. L. Pyman; Part III, Heterocyclic Division, A. W. Stewart. Analytical Chemistry, G. Cecil Jones. Physiological Chemistry, F. G. Hopkins. Agricultural Chemistry and Vegetable Physiology, N. H. J. Miller. Mineralogical Chemistry, T. V. Barker. In time past the American Chemical Society has published occasional similar reviews in *THIS JOURNAL*. Such duplication of preparation is unwise to say the least, but it is a pity that some arrangement cannot be made whereby such reviews in the English language may be put in the hands of every member of both societies, and we should add that the Society of Chemical Industry ought also to cooperate in the work.

JAS. LEWIS HOWE.