

SCIENCE

VOL. LX

AUGUST 1, 1924

No. 1544

THE RELATION OF BOTANY TO AGRICULTURE¹

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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKeen Cattell and published every Friday by

THE SCIENCE PRESS

Lancaster, Pa.

Garrison, N. Y.

New York City: Grand Central Terminal.

Annual Subscription, \$6.00. Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879.

THE relation of botany to agriculture is an interesting subject to discuss, whether stated in this form or as the relation of agriculture to botany. It is capable of being stated in a dozen other forms, equally suggestive. In every one of its aspects it has been discussed and rediscussed until little remains except to piece together selected fragments of excellent thought into the skeleton of a new picture, somewhat as a composite is made of the photographs of hundreds of men and women in a picture that sometimes is thought to present the character of the whole though no one of its components may be recognizable in it,—or one may dominate all the rest.

Without agriculture, there would be no botany. Without botany, agriculture would be little more than empiricism; but this empiricism would contain in itself the seeds of evolutionary improvement, out of which botany must inevitably grow. The interrelation is a little like that of nutrition and sensation in an animal, and you can trace a large number of parallels between the two cases if you wish.

If, when and as (to quote the stock promoters) the human world becomes stabilized in its mastery of itself and its environment, it may standardize and codify all that it knows and does into a uniformity of action and corresponding expression that will make the choice of words easier than it is now. An imaginative Chinese student of agriculture a few years ago pictured an approach to this condition—in one direction—by considering the waste areas of the earth's waters to be covered by floating gardens from continent to continent between favorable isotherms; much as an imaginative engineer might picture the roofs of our houses converted into a continuous highway for terrestrial use marked here and there by landing stages for aerial birds of passage.

At present we not only use different words to convey essentially identical ideas and the same word to convey ideas that are not the same, but we have a confusing habit of defining our expressions differently or, through mental reservations, of talking about something else when we have accepted a nominal definition of a word.

To some people, the word botany is broad enough to comprise anything whatever directly concerning plants: their structure, their function, their interrelations with one another and with environing nature, their structures or stores that we appropriate to our

¹ Sigma Xi address at Iowa State College, May 3, 1924.

Science

60 (1544)

Science **60** (1544), viii-108.

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