RESEARCH FUNDAMENTAL TO THE SOLVING OF CROP-PLANT PROBLEMS

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The purpose of the present symposium is to focus attention on some much needed lines of fundamental research in the field of botany and allied sciences. Progress in the production of crop plants now is greatly hampered by lack of more exact and intimate knowledge of the relationships, structure and functioning of the plants themselves. The topics suggested for this symposium reflect the lines along which this knowledge of the more important crop plants is needed, namely, taxonomy and mycology, morphology, physiology, cytology, genetics, biochemistry, and edaphics, or soil science.

The writer previously has pointed out (1), that the beginnings of recent and modern botany are found in the writings of the herbalists dating from about 1537. These men were concerned primarily with useful plants, chiefly cultivated. They amassed a great volume of information, interesting and fairly accurate, with regard to these plants.

Modern descriptive botany dates from about the beginning of the 18th century, or about 150 years after the herbalists had begun to produce their monumental works. The early descriptive or systematic botanists, the precursors of modern taxonomists, treated of all plants which came within their ken. There was no distinction made between wild and cultivated species in the matter of botanic atten-

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1Introduction to the symposium held under the joint auspices of Section O, Agriculture, of the American Association for the Advancement of Science, and the American Society of Agronomy, at Cincinnati, Ohio, on December 28, 1923.
3Reference by number is to "Literature Cited," p. 556.