BOTANY AND HUMAN AFFAIRS¹

By Dr. A. F. WOODS

UNITED STATES DEPARTMENT OF AGRICULTURE

"Botany and Human Affairs" is a rather broad subject to present in twenty-five minutes. But I am advised by Director Gager that various special phases will be discussed in detail by other speakers, so that I may confine my remarks to a more general treatment of the larger aspects of the subject, creating, if you please, a background for the real pictures to come later in this program.

All animals, including man, are dependent for food directly or indirectly on some form of green or chlorophyll-bearing plant life. The study of these organisms, that make man's life possible, is of as great fundamental importance as the study of man himself.

Botany in its broad sense is the systematized knowl-

dge we possess of the vegetable kingdom as a whole. It includes all that is known about plants, their history through the ages, as we get it in geology and paleontology, the description and classification of all known forms of living plants; the study of their origin, life relationships and development (embryology, genetics); their structure; (histology and cytology and morphology) their physiology, their composition, modification, mutation and evolution; their cultivation, propagation and breeding; their diseases, their relation to each other and to other organisms and to the factors of their environment. From the economic aspect it is evident that this includes much of agriculture, forestry, horticulture, pharmacognosy, floriculture and cognate subjects.

At the lower end of this great kingdom of plant life we find the beginning of what we know as living

¹ Address delivered at the opening program of the twenty-fifth anniversary exercises of the Brooklyn Botanic Garden, May 13, 1935.