artificial light for a continued period, immediate fruiting resulted. On examining the fruiting bodies, it was possible to classify the species as *Hemitrichia vesparium*.

A survey of the taxonomic history of *Hemitrichia vesparium* discloses that the color assigned to the plasmodium has been purple-red with no reference to the conspicuous yellow color observed in this study. It is of interest to record this color observation, since the recent monographs of Lister (1925) and Martin and Macbride (1934) assign a shade of red or purple to the plasmodium, evidently in accordance with the descriptions of the earlier workers. Whether the early descriptions of the form are inadequate as to the color status of the plasmodium or whether the plasmodium under certain physiological conditions assumes a purple-red, while under others a bright yellow color, are interesting questions. However, it appears from previous observations that plasmodia in relation to species are distinctly constant in color aspect.

LLOYD G. CARR

UNIVERSITY OF VIRGINIA

LITERATURE SERVICE FOR CHEMISTS

BEGINNING on October 1 the Hooker Scientific Library, Fayette, Missouri, inaugurated a new literature service for chemists. Dr. Julian F. Smith is leaving the du Pont Company, where he has been doing chemical literature work, to become associate director of the "Friends of the Hooker Scientific Library," of which Dr. Neil E. Gordon is director.

Through Dr. Smith the library will offer translations and literature searches, backed by facilities for providing filmstat or photostat copies of any matter in the more than twenty thousand volumes comprising the collection. To his chemical education (B.S., Illinois 1916; M.S., California 1920; Ph.D., Chicago 1922) and his long experience in chemical literature work Dr. Smith adds linguistic skill acquired by years of practice in translating from German, French, Spanish, Italian, Portuguese, Dutch, Scandinavian, Polish and Russian.

The combination of a specialist in technical literature and one of the most comprehensive chemical libraries ever assembled is unique in chemical reference service. It offers an unprecedented opportunity to all chemists to have technical literature or patents clearly and accurately translated by a chemist, and to have the literature on any problem skilfully combed by an experienced searcher who is not hampered by language barriers.

The Hooker Scientific Library will render these services at cost (on a self-supporting but not a profit basis) to members of the "Friends of the Hooker Scientific Library." The minimum fee for an individual life membership is $10; for a permanent corporation or institutional membership, $100. All who are interested are invited to write to Dr. Neil E. Gordon, Central College, Fayette, Missouri.

NEIL E. GORDON

CENTRAL COLLEGE,
FAYETTE, MO.

SCIENTIFIC BOOKS

RECENT BOTANICAL BOOKS

Protein Metabolism in the Plant. By ALBERT C. CHIBNALL. xv + 306 pp. 21 figs. 9 plates. Yale University Press, New Haven. 1939. $4.00.

THE Silliman Memorial Lectures in Yale University for 1938 are here presented in an expanded form. It is fortunate that our knowledge of the physiological chemistry of the proteins in plants should be summarized for the benefit of plant physiologists and biochemists by one whose researches have led him far into the field. Drawing from his own extensive experience and from a wealth of historical and present-day literature, Professor Chibnall has succeeded in presenting a thought-provoking account of the problems and the progress of this field of plant science. The first three chapters are devoted almost entirely to a historical survey of many of the earlier contributions to the protein metabolism in seedlings from the point of view of their relationships to contemporary protein chemistry. Since they include commentaries upon the works of many of the original investigators of the natural amino acids, these chapters should be of additional interest to all present-day students of biochemistry. The classical studies of Pfeffer, Schulze and Prianischnikow receive special consideration and are interpreted in the light of more recent knowledge. One chapter discusses the formation of asparagine and glutamine in seedlings, with emphasis upon the origin of the ammonia and of the carbon precursors. Another deals with the mechanism of amino acid and protein synthesis in plants, and stresses the rôle of the α-keto acids. The preparation of proteins from leaf tissues and the application of the author's own methods to extensive studies of the composition and nutritive value of the proteins of forage plants are described at some length. Three chapters explore the protein metabolism of leaves and the rôle of proteins in the respiration of detached leaves. Evidence for the existence of a protein cycle in leaves is critically discussed, and the interrelationships between organic acids, carbohydrates and fats and proteins in leaf respiration are considered.