cultivation and cooking of fungi—with appropriate recipes. Thereafter begins the descriptive part of the work which deals in the first volume with the *Ascomycetes* and continues in the second with the toadstools proper. Professor Heim departs from the usual form of a flora in dispensing with keys and formal descriptions—holding, as he does, that keys are often traps for the unwary. Instead he provides keys to genera and, in larger genera, conspectus keys to sections. The author's rather discursive text which brings out only the distinctive "spot" characters of species will appeal strongly to the amateur or beginner in agaricology, but may surely lead to as incorrect use of names as any keys. For the beginner the good text illustrations will prove helpful. Most of the fifty-six colour plates are adequate but the "realistic" backgrounds would surely have been well sacrificed to allow for the inclusion of more species.

Throughout the work the author has discarded the use of authorities for Latin names. How then is the amateur to equate Professor Heim's account with the many interpretations of agaric species already current? Surely this difficulty could have been overcome by equating the names with Kühner & Romagnesi's flora except where otherwise stated. Similarly, Professor Heim, having pleaded for simplification, should surely not have included in this flora proposals of new taxa—subgenus *Constricta* of Tricholoma and the genera *Hodophilus* and *Hygrophana*—all without latin diagnoses.

The volumes are well but not extravagantly produced so that the price is prohibitive for any but the wealthy amateur or exceptionally well financed library.

D. M. HENDERSON

Smut Fungi (review)*—In fields of interest common to agriculturalists, plant pathologists, university teachers and students, it is becoming increasingly necessary to have authoritative compilations for the non-specialist to obtain anything approaching a balanced introduction to the subject.

This work reviews in detail the vast literature on the biology and control of the smut fungi. Perhaps the most welcome feature is the very happy balance struck between accounts of classical morphological research and taxonomy, and the most recent work on experimental genetics and cytology of these organisms. The breeding of resistent varieties and other control measures are fully reviewed. The need for further research in the group is emphasized in the text and the techniques required are outlined in a useful chapter on cultural and cytological methods. The very comprehensive bibliography, while emphasizing the wide sphere from which the authors have culled their information, by its admirably clear arrangement, exemplifies the very high standard of production of the volume, which must surely add to the authors' already well deserved fame in the field of research on the smut fungi.

D. M. HENDERSON

* Biology and Control of the Smut Fungi, by G. W. Fischer and C. S. Holton. New York, Ronald Press Company. 1957. Pp. x + 622, illus. Price 10 dollars.