

studies. Only a few cursory references are made to the work on corresponding aspects of the social organization of ants.

Flight and the foundation of colonies is discussed in Chapter 9 by Dr. W. Nutting. Emphasis is on the flight season and the diverse factors that regulate flight. The sections on postflight behavior overlap somewhat with a similar section on sexual behavior in the preceding chapter, but each enhances the other.

In Chapter 9, Dr. E. Miller reviews the physiology of caste determination in lower termites (i.e., *Hodotermitidae*, *Kalotermitidae* and *Rhinotermitidae*). He presents evidence that newly hatched larvae are equipotent, with their future castes determined by social (mainly pheromonal) and environmental factors.

Of particular interest is Chapter 11 by G. Becker on rearing termites in the laboratory. Sections on nutrition, aeration, humidity, temperature, disease and the prevention of termites' escape from laboratory nests, include illustrations of many types of apparatus.

In Chapter 12 Dr. E. McMahan discusses the feeding relationships and the use of radioisotopes in monitoring food exchange.

Biochemical studies are presented in Chapter 13. Dr. B. Moore discusses the digestion of cellulose, the chemistry of pigments, vitamin and lipid metabolism, and the chemistry of pheromonal secretions.

Water relationships are the subject of Chapter 14. Dr. M. Collins examines factors influencing survival time during experimental desiccation.

Chapter 15 describes the introduction of termite species into new countries. In a nine-page table, Dr. E. Gay lists 42 species that have been introduced into new areas, their countries of origin and introduction, and their present ecological status.

In Chapter 16 Dr. W. Sands reviews the mutualistic, saprophytic and pathogenic associations between termites and fungi.

The last chapter (17) is a discussion by Dr. D. Kistner of the biology of termitophiles. He concludes that many termite guests have speciated "within the framework of the phylogentic pattern of their hosts."

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**Review of the Mite Family Cheyletidae.** Francis M. Summers and Douglas W. Price. Sept. 17, 1970. vi, 153 pp., 59 figs. University of California Publications in Entomology, **61**. Berkeley, Los Angeles, London: University of California Press. \$5.50 paperbound.

With some 50 genera and about 186 described species, the cheyletids are an important group of prostigmatic mites common throughout most of the world in granaries, barns and stables, in leaf litter and soil, and sometimes on plants. Though some are associated with birds and mammals, and even, on occasion, with insects, most are free-living predators on other small arthropods. Since E. W. Baker's review of the family in 1949, many new species have been discovered and much systematic work has been done, particularly by Volgin in Russia. Summers, who was for some time a member of the faculty at the College of the City of New York, has now for many years been Professor of Entomology at the University of California at Davis, and Entomologist at the Davis Experiment Station, where he has done much significant work in applied entomology. "The work in mite systematics," he writes (in correspondence), "is a sort of hobby because I have spent most of my efforts . . . on how to out-manage the insects and mites on peaches and almonds." Many of Summers' publications (including one in 1961 with his present collaborator Price, then a laboratory technician at Davis) have dealt with mites of the superfamily Raphignathoidea. The work here reviewed, according to the introduction, "evolved out of difficulties encountered by



the authors in identifying cheyletid mites taken in commonplace situations." It would be a blessing to acarologists if such difficulties always yielded such useful evolutionary results!

The five-page introduction gives some taxonomic and morphological background and is followed by a key to the genera, based upon females only. Males, for reasons given on page 5, are not dealt with in this study. Each genus and species is then discussed individually, with synonymies, definitions, comments, collection and type data, and carefully constructed keys. The figures, ample and well drawn in a fine-lined but somewhat sketchy style, are printed on glossy paper forming the last 60 pages of the book. Most figures are accompanied by 100-micron scales. One new genus (*Laeliocheyletia*) and 12 new species are described. One who delights in knowing the etymological origins of scientific names will regret that this information is not given for the new taxa.

The basis for the arrangement of genera is not specified, and the introduction states that "students of this group of mites are as yet unable to assess the phylogenetic implications of external characters." The sequence chosen, however, seems to proceed from more generalized to the more modified forms. The treatment in general is conservative, and taxonomic departures from the views of previous workers (chiefly consolidation of some of Volgin's genera) are taken only after careful consideration.

There is a bibliography of 118 titles, and an index of species arranged alphabetically according to their respective genera. The book is well edited, beautifully and legibly printed by letterpress on good quality paper. Those who use the keys will appreciate the excellent binding that allows the opened book to lie flat on the table. The price, by current standards, is not excessive. Acarologists will long be grateful to Summers and Price for this fine monograph.

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**Springtime in Britain.** Edwin Way Teale. 1970. 391 pp., 38 black and white photographs. Dodd, Mead and Company, New York. \$7.50.

Gerard Manley Hopkins once wrote:

*What would the world be, once bereft  
Of wet and of wildness? Let them be left,  
O let them be left, wildness and wet;  
Long live the weeds and the wilderness yet.*

The Teales found many days that were wet in their 11,000 miles of travel, criss-crossing Britain from Land's End, on the southwestern tip of the Cornish peninsula, to northern Pentland Firth where John de Groot's ferry sailed three centuries or more ago. And there in that ancient land, the home of their fathers, they found a certain wildness, too, seeing it with fresh eyes and perceiving it with the wisdom garnered from their rich background. They are intimately acquainted with the great natural history writers of England's past: Gilbert White, Henry W. Bates, W. H. Hudson, Lord Grey of Fallodon, and others: and with many lesser ones—lesser in widespread popularity but not in the expression of their love for the English countryside. Some of these writers were aristocrats; others were peasants; others, eccentrics; but all had helped the Teales prepare for this springtime journey. The Teales visited their homes, followed the same badger trails, and stood in the shade of the same giant yew, "a century old when King Alfred was alive."

The Teales were seeing Britain for the first time. Their eyes were quick to note the infinite range in color of the thatched roofs; to catch the race of the bore in the Severn Estuary; and to glimpse the diamond-shaped stones in an old farm building, cut like the



Treat, Asher E. 1971. "Review of the Mite Family Cheyletidae by Francis M. Summers, Douglas W. Price." *Journal of the New York Entomological Society* 79, 57–58.

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