

seem logical to consider this New Guinea lot all as one species, having been collected at one locality and at the same time.

In "Insects of Samoa", II, fasc. 3, p. 115, 1930, Mr. W. E. China records three specimens of *Graptostethus nigriceps* Stal. However, in his discussion, he states that "the Samoan specimens have all been referred to *Graptostethus servus* var. *nigriceps* Stal. The chief distinctive character of this variety is the entirely black head." However, one of the specimens at the Bishop Museum, labelled by Mr. China, has a red head and is labelled "var." Our Kunia specimen has the red head similar to the latter, hence could hardly be called "*nigriceps*." Amongst the confusion of synonymy it is difficult to determine just what combination of name to use. It is hoped that more specimens may be secured, and a chance to observe whether any variations are present here. It is to be hoped that this new immigrant insect will not prove to be a pest. *Nigriceps* was originally recorded from Guam, Ascension and Fiji, and later from New Hebrides and New Caledonia, and Samoa as the latest record. From such a wide distribution and the fact that it has so much variation in coloration, it seems that we are justified in using *nigriceps* for the Hawaiian specimen until further material and study demonstrate that this is incorrect.

COLLEGE ENTOMOLOGY

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"College Entomology", by Professor E. O. Essig, is a volume of 900 pages from The Macmillan Company press, 1942. It is a comprehensive treatise, especially dealing with the classification of insects, in which the arrangement is according to the present trends in classification. It will find its place not only on the shelves of College Entomological Libraries and use as a College Text on Entomology, but also in the libraries of institutions devoted more particularly to Economic Entomology; in fact, anyone keenly interested in the study of insects will want a copy conveniently at hand for ready reference.

The text is arranged in 36 chapters. The first chapter deals with Metamorphosis of Insects, in which the different types of metamorphosis are fully discussed, and the stages, or instars in the life cycle of an insect explained and illustrated with cuts. The second chapter, on the Anatomy of Insects, deals with the structure of insects, both as to external parts and the internal organs, with sufficient

cuts of examples of several Orders showing anatomy in detail, the explanations being arranged according to physiological functions. The third chapter is Classification of Insects, in which is given a list of the 33 Orders together with common names of examples of each. The greater part of this chapter is composed of a Key giving distinctions for separating adults of the various Orders.

Each of the other 33 chapters is devoted to a single Order, beginning with the lower, or simpler ones of the series. For each Order, the Greek derivation is given, the date, and by whom first used. Anatomical characters are given for the insects included in the Order; and keys for separation into Families. In the treatment of the Family, the Greek derivation is given of the Family name, date, and by whom first used; then there are helpful keys to important Families. Personally, I would wish that in the Lepidoptera keys the system by numerals had been used to designate the wing veins instead of the Comstock-Needham notation.

All through the book, many examples are cited in the different families of species that are of economic importance, or are of common occurrence, or well known for one reason or another. These examples are taken largely from the American insect fauna, but there are many others from other parts of the world, even from Hawaii, for mention is made of a number of the species which have been prominent in the history of economic entomology in Hawaii, as: the sugar cane leafhopper, Chinese rose beetle, *Paranagrus optabilis*, *Ootetrastichus beatus*, *Cyrtorhinus mundulus*, melonfly, Mediterranean fruitfly, *Diachasma tryoni*, sugar cane mealybug, pineapple mealybug, *Thrips tabaci*, *Anomala orientalis*, *Rodolia cardinalis*, *Cryptolaemus montrouzieri*, *Listroderes obliquus*, *Plusia chalcites*, rice borer, *Teleonemia lantanae*, rat flea.