Lords of the Fly: Drosophila Genetics and the Experimental Life

Robert E. Kohler
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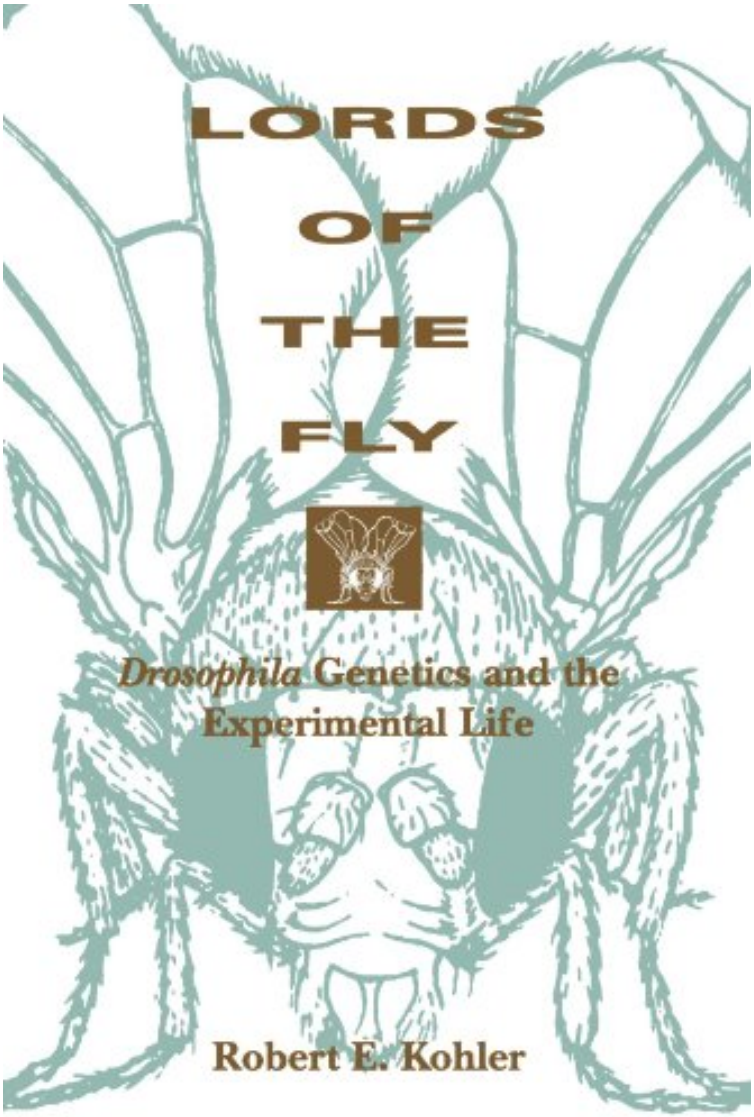

#1103527 in Books Robert E Kohler 1994-05-02Original language:EnglishPDF # 1 9.00 x .90 x 6.00l, 1.01 #File Name: 0226450635344 pagesLords of the Fly Drosophila Genetics and the Experimental Life | File size: 41.Mb

Robert E. Kohler : Lords of the Fly: Drosophila Genetics and the Experimental Life before purchasing it in order to gage whether or not it would be worth my time, and all praised Lords of the Fly: Drosophila Genetics and the Experimental Life:

25 of 25 people found the following review helpful. Wonderful! An affectionate tribute to the early flypushers.By A CustomerThis is not a scientific textbook or laboratory manual. It is a wonderful commentary on the evolution of

Drosophila, from a minor curiosity to entomologists and naturalists into a monolithic model organism in the biological sciences. It chronicles the history of the early Drosophila geneticists, and how they brought the little fruitfly to the forefront of genetic research. It begins with T.H. Morgan (the father of modern Drosophila genetics) and follows the adventures of his many disciples (Alfred Sturtevant, Calvin Bridges etc.). How they came to be associated with Morgan, where they went and what they did after leaving the Morgan lab, how many papers they published and on which subjects, and so on. It also describes the early work done by these people in a fascinating and personal way. The book describes how the fruitfly, through `founder effects,' came to dominate the world of genetics. The fly was easy to maintain, inexpensive to work with, and compliant with the university calendar (willing to take the summer off from research if the students and professors insisted). The organism was not particularly complicated physiologically, and it had a relatively short life span. Meaning that many generations of mutant flies could be analyzed in a single university semester. For almost a century the Drosophilists have formed a tiny, close, and cooperative family within the larger scientific community, and this family is discussed with affection in this book. Speaking from personal experience I can say that Drosophilists are unlike any other group in the greater scientific community. They truly are a family. They all know each other personally (more or less), are willing to exchange ideas and materials readily and without non-disclosure agreements signed in triplicate by lawyers (a concept totally alien to the cut-throat fields of medicine, pharmacology, immunology, physiology etc.), and are willing to give credit where credit is due without petty jealousy or bruised egos (again, an alien concept to most other branches of science). After all, just how seriously CAN you take yourself when you are working with FRUITFLIES for a living? It has also been my experience that Drosophilists have the smallest egos, and the largest funnybones in the entire scientific community. This is evidenced by names they frequently give to the genetic mutations they uncover. ("bus driver" for a mutation that causes fly larvae to move slowly and meander. "cheap date" for a mutation that makes flies more susceptible to the effects of alcohol. A far cry from medical researchers, commanding million dollar research budgets, shamelessly naming genetic syndromes after themselves!) The unique and generous nature of this family is discussed in the book. Now that Drosophila has become a model organism, being used and patented by multinational pharmaceutical companies, I fear that the days of the Drosophila family as we have come to know it are numbered. But I am glad that somebody has documented how things used to be, and how wonderful they were. For most of us who learned about Drosophila genetics from cold, sterile and boring texts this book is a refreshing change! It brings the early days of Drosophila genetics to a personal level. The book is very entertaining, provocative, and chocked full of photographs and diagrams. It is good light reading, and I highly recommend it for all Drosophilists (and other biologists and scientists) who are interested in the history and origins of their profession.1 of 1 people found the following review helpful. The Fly ComethBy George A. KsanderThis is an excellent history of the beginnings of fruit fly genetics and biology in the first half of the 20th century told from the point of view how science works in terms of everyday practices of lab behavior, note taking, conversations among practitioners, the nature of the subject matter and its relation to other knowledge areas. My only disappointment is that it did not extend the story to later developments that post-date the founding generation of practitioners.0 of 0 people found the following review helpful. Like it or notBy Murray EilandLike it or not, the study of fruit flies has contributed greatly to the study of genetics. There is simply no way to understand the history of genetics without knowing something about little flies. The book would seem to be a dense scientific tome. It contains solid packed information, but it is so well written that even a non-specialist can find it a page turner. A great book!

The common fruit fly, Drosophila, has long been one of the most productive of all laboratory animals. From 1910 to 1940, the center of Drosophila culture in America was the school of Thomas Hunt Morgan and his students Alfred Sturtevant and Calvin Bridges. They first created "standard" flies through inbreeding and by organizing a network for exchanging stocks of flies that spread their practices around the world.In Lords of the Fly, Robert E. Kohler argues that fly laboratories are a special kind of ecological niche in which the wild fruit fly is transformed into an artificial animal with a distinctive natural history. He shows that the fly was essentially a laboratory tool whose startling productivity opened many new lines of genetic research. Kohler also explores the moral economy of the "Drosophilists": the rules for regulating access to research tools, allocating credit for achievements, and transferring authority from one generation of scientists to the next.By closely examining the Drosophilists' culture and customs, Kohler reveals essential features of how experimental scientists do their work.

"Kohler's study is a pioneering and provocative one, as he reveals just how important experimental skills and practices have been to the development of twentieth-century genetics. His contribution is a welcome alternative to static accounts of theory overpowering all aspects of experimental life. . . . Kohler's text will surely find its place among the most important books in the history of biology."Myles W. Jackson,Journal of Modern History