Tsetse Biology and Ecology: Their Role in the Epidemiology and Control of Trypanosomosis

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Abstract
Tsetse flies (Glossina spp) are classified in a mono generic taxon of 32 species and subspecies, the Glossinidae. Most unusual and interesting insects, tsetse are confined to sub-Saharan Africa, but fossils from the Oligocene have been found in North America. Tsetse flies have an extremely low rate of reproduction. Females require two weeks to develop, and deposit their first mature larva, which almost immediately burrows into the soil and pupates. Additional larvae are produced maximally at ten-day intervals in well-fed flies. Thus tsetse are K-selected insects, and mortality rates must remain low if tsetse populations are to continue.

Disciplines
Entomology | Other Ecology and Evolutionary Biology | Population Biology

Comments
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Tsetse Biology and Ecology: Their Role in the Epidemiology and Control of Trypanosomosis.
By S G A Leak. Published by CABI Publishing, Wallingford (UK) and New York, in association with the International Livestock Research Institute; distributed by Oxford University Press, New York. $120.00. xxiii 1 568 p; ill.; index. ISBN: 0-85199-300-1. 1999.

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Tsetse flies are exclusively blood feeders. They are important because they are the vectors of trypanosomes that cause nagana in domestic animals and "sleeping sickness" in man. Trypanosomiasis greatly inhibits or altogether prevents animal husbandry in about 10 million km² of territory, thereby denying society milk, meat, and draft animals. About 50 million people are at risk for trypanosomiasis.

Tsetse Biology and Ecology is comprehensive, covering all aspects of tsetse fly biology and trypanosomiasis. Its chief strength is that it reviews ecology and trypanosomiasis epidemiology in breadth and depth. Some tsetse species are among the best understood animals ecologically. Indeed, tsetse flies are among the best understood insects from virtually any point of view. Readers are bound to be impressed by the sheer quality and scope of investigations carried out on tsetse flies.

The book contains a detailed table of contents, list of figures and tables, and is unusually well indexed. It affords a thorough guide to the literature, with 115 pages of citations. A glossary of uneven quality is provided.