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Sense Organs in the Antennae of *Anopheles Maculipennis Atroparvus* (V. THIEL), and their Possible Function in Relation to the Attraction of Female Mosquito to Man.

By I. A. H. ISMAIL.

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I. Introduction.

Mosquitoes are responsible for the transmission of several human diseases. Intensive investigations have been undertaken in many countries on mosquito repellents capable of protecting mankind against these vectors. The repellent substance must not only possess intrinsic repellency; it must be able to offset the attractive stimuli of man. This explains the revival of interest in the nature of the stimuli that attract mosquitoes to their hosts. Research workers in this field have shown that body odour, moisture, temperature and carbon dioxide emanating from the host are the main responsible factors.

For several years the Swiss Tropical Institute has been working on this problem. RAHM (1956-1958) conducted experiments which determined the effect of these factors on the attraction of the female mosquito *Aedes aegypti*.

Once it had been established that these factors did actually have the power of attracting the mosquito, other types of experiments were made with the aim of discovering the sense organs in the insect which receive these stimuli from a considerable distance and guide the mosquito to its host. ROTH (1951), ROTH and