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PROCEEDINGS

ANOPHELES CLAVIGER MEIGEN AS A MALARIA VECTOR IN SYRIA

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by
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Although over most of its wide range Anopheles claviger s.l. is typically an exophilic and rural species, the situation is somewhat different in the countries bordering the eastern littoral of the Mediterranean. Here, especially in limestone areas where water is stored underground in cool cisterns, and wells are cut in the rock, A. claviger has taken advantage of these man-made larval sites and has become a highly domestic species living in close contact with man.

It is interesting to note that, according to Coluzzi (1960,1963), A. claviger Meigen is really a species complex and that at least two reproductively isolated forms exist in the Mediterranean area.

The species has long been regarded as a vector of urban and village malaria in Syria, Lebanon, Jordan and Palestine (Kligler, 1930; Boyd, 1949; Leeson et al., 1950; Gramiccia, 1956). Despite this there appears to be no record in the literature of definite incrimination of A. claviger by the finding of malaria parasites through dissection in any of the above countries.

Boyd (loc. cit.) mentions a record of one positive A. claviger among a small number dissected from Mesopotamia. This seems to be a misquotation since the original paper of Christophers & Shortt, 1921 does not show such a record.

During a malaria outbreak in Al-Bellora village on the outskirts of Aleppo in October 1970, in the course of which 58 indigenous cases of Plasmodium vivax occurred in a population of 113, A. claviger was the only anopheline found in the area and its habitat was associated with wells and cisterns cut in the limestone bedrock. Dissection of 20 specimens of A. claviger yielded two positive glands. One sporozoite preparation was sent to Professor P. C.C. Garnham, Director, WHO Regional Malaria Reference Centre, Epsom, England, who kindly confirmed the findings.

This would therefore appear to be the first definite incrimination of A. claviger as a malaria vector in the mainland area of Western Asia.



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RESUME

Alors qu'il a ailleurs un comportement exophile, Anopheles claviger est devenu une espèce hautement domestique sur le littoral oriental de la Méditerranée là où il établit ses gîtes larvaires dans des citernes et des puits créés par l'homme. Ce moustique a longtemps été soupçonné d'être un vecteur, mais aucun spécimen infecté de cette espèce n'avait été signalé, si ce n'est dans une communication où il s'agissait d'une citation erronée. A la suite de l'apparition d'une épidémie de paludisme à P. vivax dans un village de la région d'Alep, en Syrie, où A. claviger était l'unique anophéliné rencontré, les glandes salivaires de 20 spécimens ont été disséquées et il est apparu que deux contenaient des sporozoïtes, qui ont ensuite été identifiés comme appartenant au paludisme humain.

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