

## LITERATURE

Review

Berlin, O. G. W. 1969. Mosquito studies (Diptera, Culicidae). XII. A revision of the Neotropical subgenus Howardina of Aedes. Contr. American Entomol. Institute. Vol. 4(2), 190 pp., 58 figs. \$6.00.

Due to the accumulation in recent years of considerable associated reared material by personnel of the project "Mosquitoes of Middle America" and by personnel of other agencies, the author has found it possible to accomplish an extremely comprehensive and important revision of the aedine subgenus Howardina. From a total of 16 species recognized in the world catalog of mosquitoes (Stone, Knight and Starcke 1959. Synoptic Catalog Mosq. of World, pp. 175-176.), this publication has raised the total to 35 species in three primary divisions of Howardina. Additionally, the subgenus Soperia has been synonymized. A feature of special interest in this publication is the proposal of a terminology for the longitudinal pale markings of the scutum. This terminology will be of value in numerous other groups of culicid taxa.

Distributionwise, Howardina is strictly a Neotropical taxon, centered in the American Mediterranean region in the sense of Belkin (1968. Mosq. South Pacific, v. 1 p. 562). Its present known northern limit is Grand Bahama Island in the east and the Sierra Madre del Sur and the southern end of the Sierra Madre Oriental in Mexico in the west. The southern limit appears to be in northern Argentina along the Andes.

This is a valuable and excellently prepared publication.

References

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Baker, R. H. and M. Aslamkhan, 1969. Karyotypes of some Asian Mosquitoes of the Subfamily Culicinae (Diptera: Culicidae). J. Med. Ent. 6(1): 44-52.

Smith, M. E. 1969. The Aedes Mosquitoes of New England (Diptera: Culicidae). II. Larvae: Keys to Instars, and to Species Exclusive of First Instar. Canadian Entomol. 101(1): 41-51.