Priority of the name $\underline{\text{Anopheles}}$ pseudojamesi for the species previously called $\underline{\text{An.}}$ ramsayi (Diptera: Culicidae). 1

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Abstract. The name Anopheles <u>pseudojamesi</u> is shown to have priority over <u>Anopheles ramsayi</u>, and is elevated to species status. Anopheles ramsayi is sunk to junior synonym status.

In 1927, Strickland and Chowdhury described Anopheles pseudojamesi from specimens obtained from the state of Bengal, India, while Covell (1927) described Anopheles ramsayi from specimens collected in the neighboring state of Assam, India. During the same year Puri (1927) compared the descriptions for the male genitalia of these two species, and compared the descriptions of larvae of pseudojamesi and ramsayi and decided that they were synonyms, with ramsayi having priority because it was published in April 1927, while pseudojamesi was published in May 1927. Subsequently, Edwards (1932), Christophers (1933), Stone, Knight and Starcke(1959) and Knight and Stone (1977) in the Second edition of the Catalog of Mosquitoes of the World have adopted this synonymy and the priority of ramsayi. However, in a paper by Ramsay and Macdonald (1936), the editor of the Indian Medical Gazette entered an interesting footnote (Vol.71: 700) regarding the exact dates of publication (release) for the two names:

"Fauna of British India, Diptera, Vol. IV. Christophers (1933) gives Anopheles ramsayi Covell, 1927, as a species, and An. pseudojamesi Strickland and Chowdhury, 1927 as a synonym. The reason for this is that Covell's description was published in the Indian Journal of Medical Research in the April number, whereas Strickland and Chowdhury's description appeared in the May 1927 number of the Indian Medical Gazette. There is therefore a prima

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facie case for the former name. However, some years ago a letter was issued by the publishers of both journals, Messrs. Thacker's Press and Directories, Ltd., stating that the actual day of publication of the April 1927 number of the Indian Journal of Medical Research was the 15th May, whereas the May number of the Indian Medical Gazette was issued on 10th May. These are the facts of the case, but discussions regarding the nomenclature priority are beyond the scope of this journal."

To further substantiate the above footnote, one of us (BAH) found nearly the same information penned as a note in Dr. P.F. Mattingly's copy of Christophers (1933) during a visit to the British Museum (Natural History) in 1972. On page 294 of Christophers, An. ramsayi is listed as published by Covell in the Indian Journal of Medical Research in April 1927, while An. pseudojamesi is shown as a synonym and listed as published by Strickland and Chowdhury in the Indian Medical Gazette in May 1927. Out on the margin of the page by this section in Dr.Mattingly's copy was a penned note beside the Covell reference, "17th May" and "April" was struck out. Immediately below this was a note, "date printed in I.M.G. 10th May." Below this was "(Lists Iyengar VII.35)" and "confirmed by letter from publishers to Iyengar sent for inspection 1.1936." Apparently, Dr. Iyengar was aware of the priority of pseudojamesi. Why he did not restore this name to its proper status is unknown.

The above information clearly shows that the name pseudojamesi has priority over ramsayi. Therefore, An. pseudojamesi Strickland and Chowdhury, is elevated here to species rank, and An. ramsayi Covell, is regarded as its junior Normally the type-specimens would be checked to confirm this; however, only the type of ramsayi is available (BMNH) for study. Knight and Stone (1977) listed the location of the type for pseudojamesi as unknown, and this was substantiated by a lack of information regarding the type of pseudojamesi in the most recent publication on the anophelines of India (Ramachandra Rao 1984). Although the types cannot be compared, after studying the original descriptions and Puri's (1927) analysis of the larvae. we concur with his synonomy of pseudojamesi and ramsayi. both very familiar with this species as well as the other species of the Neocellia Series in the Indian Subregion, and pseudojamesi (=ramsayi) has very distinct adult and larval characters.

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LITERATURE CITED

- Christophers, S.R. 1933. The fauna of British India, including Ceylon and Burma. Diptera. Vol. IV. Family Culicidae. Tribe Anophelini. Taylor and Francis, London. 371 p.,3 pl.
- Covell, G. 1927. A new species of Anopheles from eastern India, A. (Myzomyia) ramsayi; with a new description of A. (Myzomyia) jamesii Theobald. Indian J. Med. Res. $\overline{14}$: 1019-1025.
- Edwards, F.W. 1932. Diptera, Fam. Culicidae. <u>In P. Wytsman</u>, Genera Insectorum. Desmet-Verteneuil, Brussels. Fasc. 194, 258 p., 5 pl.
- Knight, K.L. and A.Stone. 1977. A catalog of the mosquitoes of the world (Diptera: Culicidae). 2nd Edition. Thomas Say Found., Entomol. Soc. Am. 6: 1-611.
- Puri, I.M. 1927. A note on the full grown larvae of Anopheles jamesii Theobald, A. fulignosus Giles, A. pallidus Theobald and A. ramsayi Covell (Culicidae, Diptera). Indian J. Med. Res. 15: 511-517.
- Ramachandra Rao, T. 1984. The anophelines of India. (Revised edition) Malaria Research Centre (ICMR), Delhi Press, New Delhi. 518 p.
- Ramsay, G.C. and G. Macdonald. 1936. The species control of anophelines in India. Indian Med. Gaz. 71: 699-709.
- Stone, A., K.L.Knight and H. Starcke. 1959. A synoptic catalog of the mosquitoes of the world (Diptera, Culicidae). Thomas Say Found., Entomol. Soc. Am. 6: 1-358.
- Strickland, C. and K.L.Chowdhury. 1927. A new species of anopheline, A. pseudojamesi common in Bengal. Indian Med. Gaz. 62: 240-243.