Confirmation that Anopheles longipalpis (Theobald) and Anopheles confusus Evans and Leeson occur in Ethiopia

G. B. White
Wellcome Parasitology Unit No. 2
Institute of Pathobiology
Haile Selassie I University
P. O. Box 1176, Addis Ababa, Ethiopia

In their meticulous review of the african anopheline fauna, Gillies and DeMeillon (1968) express reservations concerning the veracity of records of A. longipalpis and A. confusus from the empire of Ethiopia. Having collected these mosquitoes in Ethiopia myself during 1972, I wish to confirm the presence of both species. Also, through the helpfulness of Mr. P. Neri (of US - NAMRU 3) it is possible to clarify some of the uncertainty regarding the earlier record of A. confusus.

Gillies and DeMeillon (loc. cit.) quote no actual references for A. longipalpis, merely stating that it has been "recorded from Sudan, Ethiopia and Uganda....(but)..is known for certain only from Kenya....to.....Natal". Published reports of longipalpis in Ethiopia are from Lake Tana by Corradetti (1939), from Wollo Province by Giaquinto-Mira (1950) and by Lindrec (1962) and from unspecified localities in Illubabor Province and near Harrar by O'Connor (1967). On 1st July 1972 I also encountered A. longipalpis near Harrar, when male and female specimens were found under rocks in crevices inhabited by Rock Hyraxes (Mammalia, Hyracoidea) at an altitude of about 1,400 m. in the Dacata valley ("Valley of Marvels"; 9°15'N, 42°25'E) 19km. south-east of Harrar. My colleague Dr. R. W. Ashford has brought me a further male and female of longipalpis collected on 1st August 1972 from inside the hollow boles of fig trees (Ficus vasta) at between 1,750m. and 1,950m. altitude near Aleku village (8°35'N, 34°45'E; vide Lemma et al, 1969) north-west of Dembidollo in Wollega Province. These hollow trees were also inhabited by Rock Hyraxes (Ashford et al, 1973). The adult mosquito specimens all exhibit the standard longipalpis feature of a single pale spot on wing vein Vi, and the females have narrow pale bands on the palps. Thus they cannot be confused with the appearance of A. domicolus, a closely related species occurring in savanna. It is therefore confirmed that A. longipalpis is present in at least two parts of Ethiopia. Furthermore, it should be noted that there may be some association between longipalpis and Hyraxes in such highland situations.

Previous evidence for the presence of A. confusus in Ethiopia comes from the vague mention by Giaquinto-Mira (1950) that "some larvae...were found by Giaquinto and Neri in October 1943". No locality is stated. Mr. Neri kindly informs me from his diary that the collection site was the "Gazelle plain" (7°20'N, 36°20'E) at about 1,500m. altitude in the Gogeb River valley of Kaffa Province. Without being aware of their previous finding of this species, I also discovered A. confusus larvae in that vicinity on 18th October 1972. My collection was of two larvae possessing exactly the diagnostic features cited by Gillies and DeMeillon (loc. cit.), found in hippopotamus footprints in exposed seepage pools on the Gogeb River bank near its intersection with the Jimma-Bonga road (altitude c. 1,400m.) in company with larvae of A. cydippis, A. funestus sub-group, A. gambiae complex, A. rufipes, C. ingrami and C. univitatus group. This extension of the range of A. confusus, about 850km. to the north of its nearest other known locality in southern Kenya, therefore seems to be confirmed.

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