

East African Culicidae (Dipt.)

(Ergebnisse der Deutschen Zoologischen Ostafrika-Expedition 1951/52,
Gruppe Lindner - Stuttgart, Nr. 8)

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Much less is known about the culicid fauna of Tanganyika than about those of the other British East African territories. I am therefore particularly grateful to Dr. LINDNER for the opportunity to examine his small but interesting collection.

Subfamily Dixinae

1. *Dixa lunata* EDWARDS

EDWARDS, 1929, Entomologist **62**, p. 160.

1 specimen. Kware, 27. xii. 1951 — 13. i. 1952.

Previously known only from the type locality in northern Nyasaland. The abdomen is missing.

2. *Anopheles (Myzomyia) funestus* GILES

GILES, 1900, Mem. Lpool. Sch. trop. Med. **2**, App. ii, p. 50.

4 ♀. Dar-es-Salaam, 11—20. xii. 1951; 1 ♀. Kware, 27. xii. 1951 — 13. i. 1952.

Widely distributed throughout tropical Africa, occurring also in Madagascar and the Mascarenes. One of the two most important vectors of human malaria in Africa.

3. *Anopheles (Myzomyia) gambiae* GILES

GILES, 1902, Handb. Gnats, ed. **2**, p. 511.

1 ♂, 1 ♀. Kware, 27. xii. 1951 — 13. i. 1952; 1 ♂, 1 ♀. Torina, 4—18. iii. 1952.

Widely distributed throughout tropical Africa and South-west Arabia, occurring also in Madagascar and the Mascarenes and on Aldabra. The second of the two most important vectors of human malaria in Africa and also regarded as a vector of wuchereriasis.

4. *Anopheles (Myzomyia) pharoensis* THEOBALD

THEOBALD, 1901, Mon. Cul. 1, p. 169.

1 ♀. Ngaserei, 15. iv. 1952.

Widespread throughout tropical Africa, except, perhaps, for the Guinean Forest districts, occurring also in Madagascar and abundantly in Egypt. Of local importance as a vector of human malaria.

5. *Taeniorhynchus (Coquillettidia) fuscopennatus* THEOBALD

THEOBALD, 1903, Mon. Cul. 3, p. 265.

1 ♀. Kware, 27. xii. 1951 — 13. i. 1952.

A fairly common mosquito from Abyssinia southwards through the eastern highlands to northern Tanganyika and through Uganda, the Kivu region and the Katanga westwards into Angola. Records from the Transvaal and Natal require confirmation.

6. *Taeniorhynchus (Mansonioides) uniformis* THEOBALD

THEOBALD, 1901, Mon. Cul. 2, p. 180.

1 ♀. Kware, 27. xii. 1951 — 13. i. 1952.

A very common and widespread man-biting mosquito throughout tropical Africa. It also occurs from India eastwards to northern Australia and the Solomon Islands and in Formosa and Japan.

7. *Aedes (Stegomyia) simpsoni* THEOBALD

THEOBALD, 1905, Entomologist 38, p. 224.

2 ♀. Kware, 27. xii. 1951 — 13. i. 1952; 1 ♀. Ngaruka, 29. i. — 14. ii. 1952.

A plant-axil breeder which is widely distributed in the African savannas but does not enter closed canopy forest. Its occurrence in shambas and plantations in the Guinean Forest districts is probably due to introduction in the larval stage in the axils of banana and pineapple plants employed as articles of commerce. The fourth hind tarsal segment is normally entirely dark but the specimen from Ngaruka has some pale scales at the base on the under surface, an unusual aberration which I have also observed in a specimen from Taveta.

8. *Aedes (Aedimorphus) durbanensis* THEOBALD

THEOBALD, 1903, Mon. Cul. 3, p. 246.

2 ♀. Kware, 27. xii. 1951 — 13. i. 1952.

This species has been recorded from coastal areas of Natal, Mozambique and Tanganyika and, surprisingly, the Belgian Congo (Banana). From the structure of the anal papillae of the larva it appears to be

adapted to breeding in saline waters. It is not, however, entirely coastal in distribution but has been recorded from the Transvaal (Pretoria) and from Morogoro and Turiani in Tanganyika. The problem of the occurrence of this and other coastal mosquitoes in inland areas is an interesting one. It is discussed in more detail elsewhere (MATTINGLY, in press). A record given by EDWARDS (1941) from the foot of Mt. Fantali in Abyssinia is based on a single much damaged specimen which may well be *Aedes natronius* EDWARDS. The latter has very recently been found in South-west Arabia (KNIGHT, in press).

9. *Aedes (Banksinella) lineatopennis* group

Aedes (Banksinella) lineatopennis LUDLOW

Aedes (Banksinella) circumluteolus THEOBALD

LUDLOW, 1905, Can. Ent. 37, p. 133.

THEOBALD, 1908, Entomologist 41, p. 107.

2 ♀. Usangi, Pare Mountains, 25. v. — 8. vi. 1952.

The mosquito fauna of the Pare and Usambara Mountains is relatively little known and this record is therefore a particularly interesting one. *Aedes circumluteolus* has not previously been recorded from Tanganyika although its very close relative, *Aedes lineatopennis*, is said to occur widely from the coast to Bukoba in the North and Njombe in the southern highlands. The present specimens are intermediate between the two species. They combine the dark tori characteristic of *lineatopennis* with the pleural and wing scaling of *circumluteolus*. The hind femur is more nearly of *circumluteolus* type, being clear yellow on rather more than the basal half of the anterior surface. One specimen has the venter entirely dark scaled and the other has it almost entirely pale scaled. It is possible that these two specimens should be assigned to *lineatopennis* and *circumluteolus* respectively. It is possible that a definite assignment might be made by means of male terminalia but it is by no means improbable that these also would prove to be intermediate in type since they are closely similar even in extreme forms of the two "species". The larvae are virtually identical. *Aedes lineatopennis* is known from India, Malaya, the Philippines and northern Australia and occurs very widely in the African savannas from northern Nigeria and the Sudan in the north to the Orange Free State in the south. *Aedes circumluteolus* occurs in the wetter parts of Africa from the southern Sudan southwards to Natal. It appears to me that the two forms are probably subspecies but it is preferred to discuss this point in more detail elsewhere.

10. *Culex (Lutzia) tigripes* DE GRANDPRÉ & DE CHARMOY

DE GRANDPRÉ & DE CHARMOY, 1900, Les Moustiques, p. 6.

1 ♂. Ngaruka, 29. i. — 14. ii. 1952.

Widely distributed throughout tropical Africa, occurring also in South-west Arabia, Mauritius and Madagascar and on Fernando Póo. EDWARDS (1941) distinguishes five colour varieties. The present specimen corresponds to his form 1., the common East and South African form. The larvae are predaceous, feeding on those of other mosquitoes.

11. *Culex (Culex) zombaensis* THEOBALD

THEOBALD, 1901, Mon. Cul. 2, p. 143.

1 ♀. Msingi, 1—19. v. 1952.

This is a very interesting species. Its nearest relative, *Culex brumpti* GALLIARD, is confined, so far as is known, to Corsica. The phallosomes of the two species are almost identical but are otherwise quite unique. *Culex zombaensis* is widely distributed in the eastern highlands from Abyssinia to southern Nyasaland. It has also been recorded from Barotseland (Balovale). Msingi is probably very near its lower altitudinal limit and the failure to take it at Kware may be significant in this connection.

References

- EDWARDS, F. W., 1941: Mosquitoes of the Ethiopian Region III. Culicine adults and pupae. London, Brit. Mus. (Nat. Hist.).
MATTINGLY, P. F. (in press): Distribution of African mosquitoes. — Proc. Linn. Soc. Lond.

Anschrift des Verfassers:

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