

**RECORD OF CULICINE MOSQUITOES FROM BASTAR DISTRICT  
(MADHYA PRADESH), INDIA. (DIPTERA : CULICIDAE.)  
PART III. GENUS AEADES.**

K.B. RAJPUT\* and S.M. KULKARNI

*National Institute of Communicable Diseases/I.C.M.R.  
Scheme for Malaria, Jagdalpur-494001; M.P.*

**INTRODUCTION**

Genus *Aedes* is medically very important since it includes vectors of some fatal viruses like dengue & Chickungunya in India. Some of the aedine species are also known to transmit Zika, Reo, and Tembusu viruses in Malaysia and *Dirofilaria* in Japan & Thailand.

The Bastar district of Madhya Pradesh remained poorly known for his aedine mosquito fauna. The only mosquito record presented by Hussainy (1981) includes four species viz., *Aedes albopictus*, *A. scatophagoides*, *A. w-albus* and *A. vittatus*, from this area.

The present communication deals with the distribution records of some 24 species collected from Bastar district (Madhya Pradesh). This study was made during the period from year 1980 to 1982. The description of study area, climate, topography, and materials & methods used, have already been presented in Part I (Rajput and Kulkarni, 1984).

For identification mainly the adult characters were used. Genital characters of males and the characters of immatures were also taken into consideration whenever those forms were available. The identification was done with the help of Barraud (1934), Huang (1977 ; 1979) and Reinert (1973). Besides, some other papers were also consulted. The classification and nomenclature used here is mainly based on synoptic catalogue of the mosquitoes of the World (Knight & Stone, 1977 ; Knight, 1978).

**SYSTEMATIC ACCOUNT**

**Genus *Aedes* Meigen**

**Subgenus *Aedimorphus* Theobald**

\* Present Address : Central Tasar Research & Training Institute, Basic Seed Multiplication & Training Centre, Kumarganj, Faizabad, Uttar Pradesh—224 229, INDIA.

\*\* Present Address : National Institute of Virology, Pune-411001 (Maharashtra), INDIA.

### 1. *Aedes alboscuteUellatus* (Theobald)

1905 a. *Lepidotomyia alboscuteUellatus* Theobald, *Ann. hist. nat. Mus. Hung.* 3 : 80.

1977. *Aedes alboscuteUellatus* : Knight and Stone : 73.—

*Material examined* : 192 ♀♀ : *Bhond* — 1 ♀ (1 Sept. '81) from herb vegetation. *Darbha* — 1 ♀ (1 Aug. '80) from human bait. *Dhaniyalur* — 1 ♀ (12 Jun. '81) from herb vegetation. *Karanji* — 82 ♀♀ (11 Aug. '81 — 8 Sept. '81) from bovine bait ; 14 ♀♀ (11 Aug. '81 — 8 Sept. '81) from human bait. *Kumarawand* — 1 ♀ (22 Aug. '81) from herb vegetation. *Kurandi* — 6 ♀♀ (4 Jul. '80 — 26 Aug. '80) from bovine bait ; 29 ♀♀ (4 Jul. '80 — 30 Oct. '80) from human bait. *Rajur* — 1 ♀ (21 Jul. '80) from herb vegetation ; 1 ♀ (10 Aug. '81) reared from larva from paddy field. *Telengarapur* — 33 ♀♀ (12 Jul. '80) bovine bait, 22 ♀♀ (12 Jul. '80) from human bait.

### 2. *Aedes caecus* (Theobald)

1901 a. *Culex caecus* Theobald, *M. C.* 1 : 413.

1977. *Aedes caecus* : Knight and Stone : 74.

*Material examined* : 7 ♀♀, 4 ♂♂ : *Dhaniyalur*—7 ♀♀, 4 ♂♂ (13 Aug. '81) reared from larvae from cart-track.

### 3. *Aedes jamsei* (Edwards)

1914. *Ochlerotatus jamsei* Edwards, *Bull. Ent. Res.* 5 : 77.

1977. *Aedes jamsei* : Knight and Stone : 77.

*Material examined* : 195 ♀♀ : *Chapar-Bhanpuri* — 4 ♀♀ (28 Aug. '81) from herb vegetation. *Darbha*—1 ♀ (17 Jun. '80) from herb vegetation. *Dhaniyalur*—1 ♀ (11 Aug. '80) from shrubby vegetation. *Dongariguda* — 1 ♀ (26 Jul. '80), 1 ♀ (23 Jul. '81) from herb vegetation. *Gumiyapal*—1 ♀ (24 Jul. '81) from shrubby vegetation. *Kakalgur*—1 ♀ (29 Jul. '81) from herb vegetation. *Karanji*—28 ♀♀ (27 Jul. '81 — 25 Aug. '81) from human bait. *Kotamsar*—69 ♀♀ (5 May '80 — 27 Jun. '80), 2 ♀♀ (26 May '81) from bovine bait, 63 ♀♀ (5 May '80 — 27 Jun. '80), 7 ♀♀ (26 May '81 — 3 Nov. '81) from human bait. *Kumarawand* — 4 ♀♀ (22 Aug. '81) from herb vegetation. *Kurandi* — 3 ♀♀ (4 Jul. '80) from bovine bait and 8 ♀♀ (4 Jul. '80) from human bait. *Tekameta* — 1 ♀ (31 Jul '81) from herb vegetation.

### 4. *Aedes pallidostriatus* (Theobald)

1907. *Culex pallidostriatus* Theobald, *M. C.* 4 : 410.

1977. *Aedes pallidostriatus* : Knight and Stone : 80.

*Material examined* : 3 ♀♀, 2 ♂♂ : *Darbha* — 1 ♂ (5 Aug. '81) reared from larvae from rock pool. *Kurandi* — 1 ♀ (4 Jul. '80) from bovine bait ; 2 ♀♀ (4 Jul. '80) from human bait. *Telengarapur*— 1 ♂ (4 Aug. '80) from herb vegetation.

### 5. *Aedes pipersalatus* (Giles)

1901. b. *Stegomyia pipersalatus* Giles, in Theobald, *M.C.* 2 : 316.

1977. *Aedes pipersalatus* : Knight and Stone : 80.

*Material examined* : 349 ♀♀, 27 ♂♂ : *Adawal* — 1 ♀ (30 Sept. '81) from herb vegetation. *Balenga* — 2 ♀♀ (15 Sept. '81) reared from larva from rainy pit.

*Bhond* — 3 ♀♀, 1 ♂ (25 Aug. '81 — 15 Sept. '81) from herb vegetation. *Bringpal* — 2 ♂♂ (31 Aug. '81) reared from larvae from paddy field. *Chapar-Bhanpuri* — 3 ♀♀ (5 Sept. '81) from herb vegetation. *Darbha* — 12 ♀♀ (20 Jul. '81 — 18 Aug. '81) from bovine bait ; 1 ♀ (12 Nov. '80) from herb vegetation. *Dhaniyalur* — 1 ♀ (13 Aug. '81) from herb vegetation. *Dongariguda* — 1 ♀ (20 Aug. '81) from shrubby vegetation. *Gumiyapal* — 1 ♀ (3 Sept. '81) from herb vegetation. *Kachora* — 1 ♀ (4 Sept. '81) from herb vegetation ; 18 ♀♀, 20 ♂♂ (25 Sept. '81) reared from larvae from paddy fields. *Karanji* — 240 ♀♀ (7 Jul. '81 — 8 Sept. '81) from bovine bait ; 25 ♀♀ (27 Jul. '81 — 8 Sept. '81) from human bait. *Keslur* — 1 ♀ (31 Aug. '81) from herb vegetation. *Kotamsar* — 4 ♀♀ (24 Oct. '80 — 5 Nov. '80), 2 ♀♀ (3 Nov. '81) from bovine bait. *Kumarawand* — 1 ♀ (5 Sept. '81) from herb vegetation. *Kurandi* — 8 ♀♀ (4 Jul. '80 — 13 Nov. '80) from bovine bait ; 3 ♀♀ (4 Jul. '80 — 13 Nov. '80) from human bait. *Lendra* — 1 ♀ (7 Sept. '81) from herb vegetation. *Neganar* — 3 ♀♀ (19 Aug. '81) reared from larvae from paddy fields. *Pakhanjore* — 1 ♀ (27 Aug. '81) from herb vegetation, 7 ♀♀ (20 Nov. '81 — 22 Nov. '81) from cattle shed. *Pandripani* — 2 ♀♀ (17 Aug. '81) reared from larvae from paddy field. *Rajur* — 4 ♀♀ (10 Aug. '81 — 7 Sept. '81) reared from larvae from paddy fields. *Takaraguda* — 1 ♀, 1 ♂ (22 Jul. '81 — 15 Sept. '81) from herb vegetation. *Tekameta* — 1 ♀, 2 ♂♂ (28 Aug. '81 — 9 Sept. '81) from herb vegetation. *Telengarapur* — 1 ♀ (31 Aug. '81) from herb vegetation. *Tokapal* — 1 ♂ (23 Sept. '81) from shrubby vegetation.

#### 6. *Aedes taeniorhynchoides* (Christophers)

1911. *Leslieomyia taeniorhynchoides* Christophers, *Paludism* 2 : 68.

1977. *Aedes tdeniorhynchoides* : Knight and Stone : 82.

*Material examined* : 50 ♀♀ : *Karanji* — 1 ♀ (11 Aug. '81), from bovine bait. *Kotamsar* — 26 ♀♀ (5 May '80 — 27 Jun. '80) from bovine bait ; 9 ♀♀ (20 May '80) from human bait. *Kurandi* — 8 ♀♀ (15 May '80 — 4 Jul. '80) from bovine bait ; 4 ♀♀ (4 Jul. '80) from human bait. *Telengarapur* — 2 ♀♀ (12 Jul. '80) from human bait.

#### 7. *Aedes trimaculatus* (Theobald)

1905. b. *Leslieomyia trimaculatus* Theobald, *Ann. Mus. Nat. Hung.* 3 : 86.

1977. *Aedes trimaculatus* : Knight and Stone : 83.

*Material examined* : 6 ♀♀, 1 ♂ : *Kurandi* — 5 ♀♀ (4 Jul. '80 — 27 Oct. '80) from bovine bait ; 1 ♀ (17 Jul. '80) from human bait. *Pandripani* — 1 ♂ (14 Sept. '81) reared from larvae from cart-track.

#### 8. *Aedes vexans* (Meigen)

1830. *Culex vexans* Meigen, *Syst. Bechr.* 6 : 241.

1977. *Aedes vexans* : Knight and Stone : 83.

*Material examined* : 15 ♀♀, 10 ♂♂ : *Adawal* — 1 ♀ (30 Sept. '81) from herb vegetation. *Dhaniyalur* — 1 ♀ (26 Dec. '81) from herb vegetation. *Dongariguda* — 1 ♀, 1 ♂ (9 Jul. '81) from shrubby vegetation. *Kachora* — 2 ♂♂ (6 Aug. '81 — 20 Aug. '81) from herb vegetation. *Kotamsar* — 2 ♀♀ (7 Jun. '80) from bovine bait. *Kumarawand* — 10 ♀♀, 7 ♂♂ (22 Aug. '81 — 21 Nov. '81) from herb vegetation.

Subgenus **Christophersiomyia** Barraud9. **Aedes thomsoni** (Theobald)

1905. *Stegomyia thomsoni* Theobald, *Gen. Ins. Fam. Culicidae* : 19.

1977. *Aedes thomsoni* : Knight and Stone : 87.

*Material examined* : 33 ♀♀ : *Darbha* — 2 ♀♀ (17 Mar. '80), *Kotamsar* — 7 ♀♀ (5 May '80 — 27 Jun. '80), *Kurandi* — 24 ♀♀ (4 Jul. '80 — 17 Jul. '80). All the specimens were collected from human baits.

Subgenus **Diceromyia** Theobald10. **Aedes micropteros** (Giles)

1901. *Culex micropteros* Giles, *Journ. Bomb. Nat. Hist. Soc.* 13 : 609

1977. *Aedes micropteros* : Knight and Stone : 88.

*Material examined* : 18 ♀♀, 4 ♂♂ : *Adawal* — 1 ♀ (26 Sept. '80) from herb vegetation. *Bringpal* — 1 ♂ (29 Jun. '81) from herb vegetation. *Darbha* — 3 ♀♀ (1 Aug. '80 — 22 Sept. '80) from bovine bait ; 1 ♀ (21 Jul. '80) from human bait, 1 ♀ (18 Aug. '81) reared from larvae from tree hole. *Dhaniyalur* — 4 ♀♀, 1 ♂ (12 Jul. '81 — 13 Aug. '81) from herb vegetation ; 1 ♀, 1 ♂ (2 Aug. '81) reared from larvae from tree holes. *Dongariguda* — 1 ♀, 1 ♂ (31 Mar. '81 — 9 Jul. '81) from shrubby vegetation. *Kotamsar* — 1 ♀ (27 Jun. '80) from bovine bait. *Kurandi* — 3 ♀♀ (17 Jul. '80 — 26 Aug. '80) from bovine bait ; 1 ♀ (17 Jul. '80) from human bait. *Pandripani* — 1 ♀ (17 Aug. '81) from herb vegetation.

Subgenus **Finlaya** Theobald11. **Aedes albolateralis** (Theobald)

1908. *Stegomyia albolateralis* Theobald, *Rec. Ind. Mus.* 2 : 289.

1977. *Aedes albolateralis* : Knight and Stone : 90.

*Material examined* : 119 ♀♀ : *Darbha* — 60 ♀♀ (7 Jul. '80 — 22 Sept. '80), 8 ♀♀ (20 Jul. '81 — 15 Sept. '81) from bovine bait ; 28 ♀♀ (7 Jul. '80 — 8 Sept. '80), 18 ♀♀ (20 Jul. '81 — 15 Sept. '81) from human bait. *Kotamsar* — 2 ♀♀ (27 Jul. '80 — 24 Oct. '80) from bovine bait. *Kurandi* — 1 ♀ (26 Aug. '80) from bovine bait ; 2 ♀♀ (4 Jul. '80 — 17 Jul. '80) from human bait.

12. **Aedes assamensis** (Theobald)

1908. *Stegomyia assamensis* Theobald, *Rec. Ind. Mus.* 2 : 290.

1977. *Aedes assamensis* : Knight and Stone : 91.

*Material examined* : 89 ♀♀, 48 ♂♂ : *Aghanpur* — 1 ♂ (11 Aug. '81) reared from larvae from discarded tin, *Bhond* — 39 ♀♀, 32 ♂♂ (26 Jun. '81 — 15 Sept. '81) reared from larvae from tree holes. *Darbha* — 2 ♀♀ (22 Sept. '80), 1 (20 Jul. '81) from bovine bait, 1 ♀ (1 Aug. '80), 9 ♀♀ (20 Jul. '81 — 15 Sept. '81) from human bait ; 1 ♀ (18 Aug. '81) reared from larvae from discarded pitcher. *Dhaniyalur* — 1 ♀, 10 ♂♂ (30 Jul. '81 — 13 Aug. '81) reared from larvae from tree hole, 3 ♂♂ (13 Aug. '81) larvae reared from discarded container. *Kakalgur* — 1 ♀ (10 Feb. '81) from herb vegetation. *Kurandi* — 17 ♀♀ (18 May '80 — 4 Sept. '80) from bovine bait ; 17 ♀♀ (18 May '80 — 4 Jun. '80) from human bait. *Retawand* — 1 ♂ (9 Jul. '80) from herb vegetation. *Telengarapur* — 1 ♀ (12 Jul. '80) from human bait.

13. ***Aedes gubernatoris*** (Giles)1901. *Culex gubernatoris* Giles, *Journ. Bomb. Nat. Hist. Soc.* 13 : 607.1977. *Aedes gubernatoris* : Knight and Stone : 96.

*Material examined* : 40 ♀♀, 5 ♂♂ : *Bhond* — 12 ♀♀, 5 ♂♂ (24 Jun. '81 — 15 Sept. '81) reared from larvae from tree holes. *Darbha* — 7 ♀♀ (27 Jul. '80 — 22 Sept. '80), 6 ♀♀ (18 Aug. '81 — 15 Sept. '81), from bovine bait ; 6 ♀♀ (20 Jun. '81 — 15 Sept. '81) from human bait. *Kotamsar* — 1 ♀ (24 Oct. '80) by human bait. *Kurandi* — 5 ♀♀ (17 Jul. '80) from bovine bait ; 3 ♀♀ (17 Jul. '80 — 3 Oct. '80) from human bait.

14. ***Aedes pseudotaeniatus*** (Giles)1901. *Culex pseudotaeniatus* Giles, *Journ. Bomb. Nat. Hist. Soc.* 13 : 607.1977. *Aedes pseudotaeniatus* : Knight and Stone : 102.

*Material examined* : 43 ♀♀, 36 ♂♂ : *Darbha* — 2 ♀♀ (1 Aug. '80 — 22 Sept. '80) from human bait, 41 ♀♀, 36 ♂♂ (29 Aug. '81 — 5 Aug. '81) reared from larvae from rock pools.

Subgenus ***Neomelaniconion*** Newstead15. ***Aedes lineatopennis*** (Ludlow)1905. *Taeniorhynchus lineatopennis* Ludlow, *Can. Ent.* 36 : 133.1977. *Aedes lineatopennis* : Knight and Stone : 120.

*Material examined* : 25 ♀♀ : *Adawal* — 1 ♀ (30 Sept. '81) from herb vegetation. *Chapar-Bhanpuri* — 1 ♀ (5 Sept. '81) from herb vegetation. *Dongariguda* — 1 ♀ (30 Sept. '81) from herb vegetation. *Kachora* — 1 ♀ (6 Aug. '81) from shrubby vegetation. *Karanji* — 7 ♀♀ (11 Aug. '81 — 30 Oct. '81) from bovine bait ; 3 ♀♀ (25 Aug. '81 — 30 Oct. '81) from human bait. *Kotamsar* — 1 ♀ (3 Nov. '81) from human bait. *Kumarawand* — 2 ♀♀ (19 Sept. '81 — 26 Sept. '81) from herb vegetation. *Kurandi* — 5 ♀♀ (17 Jul. '80 — 3 Oct. '80) from bovine bait ; 1 ♀ (4 Jul. '80) from human bait. *Takaraguda* — 1 ♀ (1 Aug. '81) from herb vegetation. *Tekameta* — 1 ♀ (9 Sept. '81) from herb vegetation.

Subgenus ***Stegomyia*** Theobald16. ***Aedes aegypti*** (Linnaeus)1762. *Culex aegypti* Linnaeus, *Hasselquist's Reise nach Palestina* : 470.1977. *Aedes aegypti* : Knight and Stone : 154.

*Material examined* : 1 ♀ : *Jagdalpur* — 1 ♀ (11 Oct. '81) reared from larvae from discarded motor tyre.

17. ***Aedes albopictus*** (Skuse)1894. *Culex albopictus* Skuse, *Ind. Mus. Notes* 3 : 20.1977. *Aedes albopictus* : Knight and Stone : 156.

*Material examined* ; 1762 ♀, 1175 ♂♂ : *Adawal* — 3 ♀♀, 2 ♂♂ (30 Aug. '80 — 2 Oct. '80), 2 ♀♀, 6 ♂♂ (9 Jun. '81 — 30 Sept. '81) from herb vegetation ; 42 ♀♀, 73 ♂♂ (20 Aug. '81 — 25 Sept. '81) reared from larvae from discarded earthen pitchers. *Aghanpur* — 1 ♀ (11 Aug. '81) from herb vegetation ; 11 ♀♀,

16 ♂♂ (5 Sept. '80), 77 ♀♀, 59 ♂♂ (11 Aug. '81 — 26 Sept. '81) reared from larvae from discarded motor tyres ; 2 (11 Aug. '81) reared from larvae from discarded tin, 7 ♀♀, 5 ♂♂ (5 Sept. '81) reared from larvae from insect hole in a wooden log. *Balenga* — 1 ♀, 2 ♂♂ (15 Sept. '81) reared from larvae from plastic container. *Bastar* — 3 ♀♀ (28 Aug. '80 — 20 Nov. '80) from herb vegetation, *Bhond* — 27 ♀♀, 25 ♂♂ (24 Jun. '81 — 15 Sept. '81) reared from larvae from (tree holes, 14 ♀♀, 14 ♂♂ (15 Sept. '81) reared from larvae from discarded container. *Bringpal* — 3 ♀♀, 2 ♂♂ (29 Jun. '81 — 14 Sept. '81) from herb vegetation, 4 ♀♀, 4 ♂♂ (20 Jul. '81) reared from larvae from discarded tub, 7 ♀♀, 9 ♂♂ (31 Aug. '81) reared from larvae from tree hole ; 23 ♀♀, 13 ♂♂ (31 Aug. '81 — 14 Sept. '81) reared from larvae from log hole ; 24 ♀♀, 17 ♂♂ (24 Sept. '81) reared from larvae from discarded earthen container. *Chapar* — *Bhanpuri* — 71 ♀♀, 49 ♂♂ (28 Aug. '81) reared from larvae from discarded pitcher. *Chindawada* — 1 ♂ (29 Aug. '81) from herb vegetation ; 3 ♀♀, 1 ♂ (15 Jul. '81) reared from larvae from rock pools, 74 ♀♀, 60 ♂♂ (15 Jul. '81 — 10 Sept. '81) reared from larvae from broken pitcher. *Darbha* — 8 ♀♀ (7 Jul. '80 — 30 Oct. '80), 2 ♀♀ (7 May '81) from bovine bait ; 2 ♀♀ (7 Jul. '80), 13 ♀♀ (2 Mar. '81 — 15 Sept. '81) from human bait ; 3 ♀♀, 1 ♂ (17 Jun. '80 — 12 Nov. '80) from herb vegetation ; 2 ♀♀, 1 ♂ (5 Aug. '81) reared from larvae from tree hole ; 9 ♀♀, 8 ♂♂ (18 Aug. '81 — 16 Sept. '81) reared from larvae from a log hole ; 26 ♀♀, 22 ♂♂ (18 Aug. '81) reared from larvae from discarded pitcher, 2 ♀♀ (16 Sept. '81) larvae collected from a lichen, 9 ♀♀, 1 ♂ (16 Sept. '81) reared from larvae from rock pool. *Daurgaon* — 1 ♂ (5 Sept. '81) from herb vegetation ; 16 ♀♀, 14 ♂♂ (15 Sept. '81) reared from larvae from a discarded pitcher. *Dhaniyalur* — 1 ♀ (11 Jul. '80), 1 ♀ (30 Jul. '81) from herb vegetation ; 40 ♀♀, 22 ♂♂ (2 Jul. '81 — 13 Aug. '81) reared from larvae from a tree hole ; 79 ♀♀, 59 ♂♂ (16 Jul. '81 — 13 Aug. '81) reared from larvae from discarded pitcher. *Dongariguda* — 1 ♀ (30 Aug. '80), 8 ♀♀, 1 ♂ (23 Jul. '81 — 9 Nov. '81) from herb vegetation ; 80 ♀♀, 31 ♂♂ (20 Aug. '81) reared from larvae from discarded pitchers. *Gumiyapal* — 2 ♀♀ (24 Jul. '81) from herb vegetation ; 17 ♀♀, 26 ♂♂ (17 Sept. '80) reared from larvae from discarded pitchers. *Jadgalpur* — 8 ♀♀, 1 ♂ (10 Apr. '81 — 12 Nov. '81) from herb vegetation ; 239 ♀♀, 135 ♂♂ (13 Jul. '81 — 12 Nov. '81) reared from larvae from discarded motor tyres ; 64 ♀♀, 44 ♂♂ (27 Aug. '81 — 10 Oct. '81) reared from larvae from discarded containers. *Kachora* — 1 ♀ (25 Sept. '81) from herb vegetation ; 93 ♀♀, 64 ♂♂ (9 Jul. '81 — 4 Sept. '81) reared from larvae from discarded pitchers. *Kakalgur* — 14 ♀♀, 5 ♂♂ (29 Aug. '81 — 10 Sept. '81) reared from larvae from discarded pitchers ; 8 ♀♀, 3 ♂♂ (10 Sept. '81) reared from larvae from tree hole. *Karanji* — 2 ♀♀ (27 Jul. '81 — 11 Aug. '81), from bovine bait ; 3 ♀♀ (11 Aug. '81) from human bait ; 1 ♀, 1 ♂ (24 July '80 — 12 Sept. '81) from herb vegetation. *Keslur* — 1 ♀ (28 Jul. '80) from shrubby vegetation ; 19 ♀♀, 13 ♂♂ (17 Aug. '81 — 31 Aug. '81) reared from larvae from discarded pitcher. *Kotamsar* — 10 ♀♀ (5 May '80 — 27 Jun. '80) from bovine bait ; 39 ♀♀ (5 May '80 — 27 Jun. '80) from human bait ; 1 ♀, 1 ♂ (28 Jun. '80) from herb vegetation. *Kumarawand* — 4 ♀♀, 2 ♂♂ (5 Sept. '81 — 10 Nov. '81) from shrubby vegetation. *Kuranai* — 3 ♀♀ (16 Jun. '80 — 4 Sept. '80) from bovine bait ; 19 ♀♀ (15 May '80 — 26 Aug. '80), 2 ♀♀ (26 Mar. '81 — 1 Apr. '81) from human bait ; 1 ♀, 1 ♂ (30 Aug. '80 — 11 Feb. '81) from herb vegetation. *Lendra* — 6 ♀♀, 1 ♂ (24 Aug. '81) reared from larvae from discarded pitcher. *Pandripani* — 3 ♀♀, 1 ♂ (17 Aug. '81 — 16 Nov. '81) from herb vegetation. 22 ♀♀, 10 ♂♂ (17 Aug. '81 — 14 Sept. '81) reared from

larvae from bamboo-cuts, 5 ♀♀, 6 ♂♂ (14 Sept. '81) reared from larvae from log hole. *Potanar* — 1 ♂ (3 Sept. '81) from herb vegetation ; 56 ♀♀, 61 ♂♂ (28 Aug. '81 — 17 Sept. '81) reared from larvae from discarded pitchers ; 11 ♀♀, 17 ♂♂ (3 Sept. '81 — 17 Sept. '81) reared from larvae from tree hole. *Rajur* — 24 ♀♀, 12 ♂♂ (10 Aug. '81 — 7 Sept. '81) reared from larvae from broken bottle ; 13 ♀♀, 9 ♂♂ (23 Sept. '81) reared from larvae from log hole ; 27 ♀♀, 9 ♂♂ (23 Sept. '81) reared from larvae from tree hole. *Retawand* — 3 ♀♀, 4 ♂♂ (7 Jul. '81) reared from larvae from discarded pitchers. *Tahakapal* — 36 ♀♀, 13 ♂♂ (10 Jul. '81) reared from larvae from tar barrel, 78 ♀♀, 49 ♂♂ (3 Sept. '81 — 17 Sept. '81) reared from larvae from discarded pitchers, *Takaraguda* — 3 ♀♀ (17 Jun. '81 — 15 Nov. '81) from herb vegetation ; 58 ♀♀, 32 ♂♂ (7 Jul. '81 — 18 Aug. '81) reared from larvae from discarded pitcher. *Tandpal* — 1 ♀, 1 ♂ (3 Sept. '81 — 17 Sept. '81) from herb vegetation ; 22 ♀♀, 18 ♂♂ (10 Jul. '81) reared from larvae from tree hole ; 39 ♀♀, 35 ♂♂ (21 Aug. '81 — 3 Sept. '81) reared from larvae from log hole. *Tekameta* — 2 ♀♀ (21 Nov. '81) from herb vegetation ; 47 ♀♀, 39 ♂♂ (3 Jul. '81 — 9 Sept. '81) reared from larvae from discarded pitchers. *Telengarapur* — 5 ♀♀ (12 Jul. '80) from human bait ; 1 ♀♀, 2 ♂♂ (31 Aug. '81) reared from larvae from tree hole, *Tokapal* — 12 ♀♀, 10 ♂♂ (7 Sept. '81) reared from larvae from log hole ; 36 ♀♀, 30 ♂♂ (7 Sept. '81 — 23 Sept. '81) reared from larvae from bamboo cuts.

#### 18. *Aedes flavopictus* Yamada

1921. *Aedes flavopictus* Yamada, *Ann. Zool. Jap.* **10** : 52.

1977. *Aedes flavopictus* : Knight and Stone : 160.

*Material examined* : 1 ♂ : Tekameta 1 ♂ (3 Jul. '81) reared from larva from discarded pitcher.

#### 19. *Aedes novalbopictus* Barraud

1931. *Aedes novalbopictus* Barraud, *Ind. Journ. Med. Res.* **19** : 224.

1977. *Aedes novalbopictus* : Knight and Stone : 162.

*Material examined* : 2 ♂♂ : Kotamsar - 2 ♂♂ (7 Jun. '80) from bovine bait.

#### 20. *Aedes pseudalbopictus* Borel

1928. *Aedes pseudalbopictus* Borel, *Arch. des. Inst. Pasteur d'Indochine* : 85.

1977. *Aedes pseudalbopictus* : Knight and Stone : 163.

*Material examined* : 1 ♂ : *Darbha* - (18 Nov. '80) from herb vegetation.

#### 21. *Aedes subalbopictus* Barraud

1931. *Aedes subalbopictus* Barraud, *Ind. Journ. Med. Res.* **19** : 225

1977. *Aedes subalbopictus* : Knight and Stone : 165.

*Material examined* : 6 ♀♀, 2 ♂♂ : *Dhaniyalur* - 6 oo, 2 ♂♂ (2 Jul. '81) reared from larvae from tree hole.

#### 22. *Aedes unilineatus* (Theobald)

1906. *Quasistegomyia unilineatus* Theobald, *2nd Rept. Wellc. Res. Lab.* : 70.

1977. *Aedes unilineatus* : Knight and Stone : 166.

*Material examined* : 2 ♀♀, 4 ♂♂ : *Tandpal* - 2 oo, 4 ♂♂ (21 Aug. '81) reared from

larvae from log hole.

### 23. *Aedes vittatus* (Bigot)

1861. *Culex vittatus* Bigot, *Ann. Soc. Ent. France* 4(1) : 227.

1977. *Aedes vittatus* : Knight and Stone : 166.

*Material examined* : 222 ♀♀, 207 ♂♂ : *Bringpal* - 3 ♀♀, 3 ♂♂ (20 Jul. '81) reared from larvae from discarded tub, *Chindawada* - 23 ♀♀, 39 ♂♂ (15 Jul. '81) larvae reared from rock pools. *Darbha* - 1 ♀ (17 Mar. '81) from bovine bait ; 3 ♀♀ (7 Jul. '80 - 1 Aug. '80), 4 ♀♀ (20 Jul. '81 - 18 Aug. '81) from human bait, 4 ♀♀, 2 ♂♂ (29 Aug. '80), 47 ♀♀, 66 ♂♂ (5 Aug. '81 - 16 Sept. '81) reared from larvae from rock pools. *Jagdapur* - 3 ♂♂ (10 May '81) from herb vegetation ; 6 ♀♀ (27 Aug. '81) reared from larvae from discarded enamel tray. *Karanji* - 2 ♀♀ (27 Jul. '81) from bovine bait ; 4 ♀♀ (27 Jul. '81) from human bait, 13 ♀♀, 21 ♂♂ (11 Aug. '81) reared from larvae from rock pools. *Kotamsar* - 3 ♀♀ (20 May '80 - 27 Jun. '80) from bovine bait ; 1 ♀ (24 Oct. '80) from human bait. *Kurandi* - 1 ♀, 1 ♂ (15 May '80 - 4 Jun. '80) from bovine bait ; 21 ♀♀, 3 ♂♂ (15 May '80 - 17 Jul. '80) from human bait. *Tandpal* - 70 ♀♀, 66 ♂♂ (21 Aug. '81 - 17 Sept. '81) reared from larvae from log hole. *Telengrapur* - 3 ♀♀ (12 Jul. '80) from bovine bait ; 8 ♀♀, 1 ♂ (12 Jul. '80) from human bait ; 1 ♀ (31 Aug. '81) from herb vegetation ; 4 ♀♀, 2 ♂♂ (20 Jul. '81) reared from larvae from rock pools.

### 24. *Aedes w-albus* (Theobald)

1905. *Stegomyia walbus* Theobald, *Ann. Mus. Nat. Hung.* 3 : 74.

1977. *Aedes w-albus* : Knight and Stone : 166.

*Material examined* : 107 ♀♀, 43 ♂♂ : *Adawal* - 1 ♀ (9 Nov. '81) from herb vegetation. *Bringpal* - 1 ♀ (21 Jul. '80) from herb vegetation ; 1 ♀ (31 Aug. '81) reared from larva from tree hole. *Darbha* - 2 ♀♀ (7 Jul. '80) from bovine bait ; 13 ♀♀, 1 ♂ (17 Jun. '80 - 18 Nov. '80), 2 oo (7 May '81 - 18 Aug. '81) from shrubby vegetation. *Dhaniyalur* - 2 ♀♀ (4 Apr. '81 - 30 Jul. '81) from herb vegetation ; 35 ♀♀, 27 ♂♂ (2 Jul. '81 - 13 Aug. '81) reared from larvae from tree holes. *Dharampura* - 2 ♀♀ (14 Jul. '81) larvae reared from Ant-well. *Karanji* - 1 ♀ (11 Aug. '81) from bovine bait, 4 ♀♀ (11 Aug. '81 - 25 Aug. '81) from human bait. *Kotamsar* - 1 ♀, 7 ♂♂ (7 Jun. '80) from bovine bait ; 26 ♀♀, 1 ♂ (14 Apr. '80 - 27 Jun. '80), 4 ♀♀ (8 Apr. '81 - 26 May '81) from human bait ; 4 ♀♀ (28 Jun. '80) from herb vegetation, *Kurandi* - 6 ♀♀ (4 Jul. '80), 1 ♀ (1 May '81) from human bait. *Pandripani* - 1 ♀ (21 Jul. '80), 2 ♀♀ (17 Aug. '81) from herb vegetation. *Retawand* - 3 ♂♂ (9 Jul. '80) from herb vegetation. *Tahakapal* - 1 ♀ (10 Jul. '81) reared from larvae from tar barrel. *Tekameta* - 1 ♀ (9 Sept. '81) from herb vegetation.

### SUMMARY

The present paper describes the distribution record of *Aedes alboscuteellatus*, *A. pipersalatus*, *A. taeniorhynchoides*, *A. trimaculatus*, *A. vexens*, *A. thomsoni*, *A. micropterus*, *A. gubernatoris*, *A. assamensis*, *A. pseudotaeniatus*, *A. albolateralis*, *A. lineatopennis*, *A. aegypti*, *A. albopictus*, *A. flavopictus*,



*A. novalbopictus*, *A. pseudalbopictus*, *A. subalbopictus*, *A. unilineatus*, *A. vittatus* and *A. w-albus* from Bastar district, Madhya Pradesh. Out of the 24 recorded species, only *Aedes albopictus*, *A. vittatus* and *A. w-albus* was collected by earlier workers. *A. scatophagoides* reported earlier, was absent from the present collection.

#### ACKNOWLEDGEMENTS

The authors are thankful to the Director, National Institute of Communicable diseases, Delhi for providing facilities at the Field Operational Research Station, Jagdalpur, Bastar district, Madhya Pradesh.

#### REFERENCES

- Barraud, P. J. 1931. Notes on some Indian mosquitoes of the subgenus *Stegomyia*, with description of new species. *Indian J. med. Res.* **19** : 221-227.
- Barraud, P. J. 1934. *The Fauna of British India. Diptera, vol. v. Family Culicidae. Tribal Megarhinini and Culicini, XXViii + pp. 1-463.* Taylor and Francis, London.
- Bigot, J.M.F. 1861. Trois dipteres nouveaux de la corse. *Ann. Soc. ent. Fr.* (4) **1** : 227-229.
- Borel, E. 1928. *Les moustiques de la Cochinchine et du Sud-Annam. Monogr. Coll. Soc. Pat. exot.* **3**, 423 pp. Paris.
- Christophers, S.R. 1911. Notes on mosquitoes II, A new anopheline *Neocellia fowleri* n. sp. *Paludism Simla* **2** : 64-68.
- Edwards, F.W. 1914. New species of Culicidae in the British Museum, with notes on the genitalia of some African *Culex*. *Bull. ent. Res.* **6** : 63-81.
- Giles, G.M. 1901. A plea for the collective investigation of Indian Culicidae, with suggestions as to moot points for enquiry, and a prodromus of species known to the author. *J. Bombay Soc.* **13** : 592-610.
- Huang, Y.M. 1977. Medical entomology studies. VII. The subgenus *Stegomyia* of *Aedes* in southeast Asia. II. - The *edwardsi* group of species. III.- the *w-albus* group of species. (Diptera : Culicidae), *Contrib. Am. Entoml. Inst.* (Ann Arbor). **25**(1) : 1-111.
- Haung, Y.M. 1979. Medical entomology studies-XI. The subgenus *Stegomyia* of *Aedes* in the Oriental region with keys to the species (Diptera : Culicidae). *Contrib. Am. Entomol. Inst.* (Ann Arbor). **15**(6) : 1-79.
- Hussasiny, Z.H. 1981. Distribution record of culicine Mosquitoes of Bastar district, Madhya Pradesh, India (Diptera : Culicidae). *J. Bombay nat. Hist. Soc.*, **77** : 277-284.
- Knight, K.L. 1978. *Supplement to A Catalog of the Mosquitoes of the World (Diptera:Culicidae) Vol. 6 (Suppl.)*, Entomological Society of America : College Park, Md. USA pp. 1-107.

- Knight, K.L. and Stone, A. 1977. *A Catalog of the Mosquitoes of the World (Diptera:Culicidae) Ed. II. vol. VI*, pp. 1-611. Thomas Say Foundation, Maryland.
- Linnaeus, C. 1762. *Zweyter Theil, enthalt Beschreibungen Verschiedener wichtiger Naturalien*. pp. 267-606. In Hasselquist, F., *Reise nach Palastina in den Jahren Von 1749 bis 1752*. 606pp. Rostock, Germany.
- Ludlow, C.S. 1905. Mosquito notes. - No. 3. *Can. Ent.* **37**: 129-135.
- Meigen, J.W. 1830. *Systematische Beschreibung der bekannten europaeischen zweifluegeligen Insekten*. Vol. 6, 401 pp.
- Rajput, K.B. and Kulkarni, S.M. 1984. Records of culicine mosquitoes from Bastar district (Madhya Pradesh), India. (Diptera:Culicidae), Part-I, Genus *Toxorhynchites*, *Tripteroides*, *Uranotaenia* and *Orthopodomyia*. *Rec. zool. Surv. India* (In press).
- Reinert, J.F. 1973. Contribution to the mosquito fauna of Southeast Asia. XVI. Genus *Aedes* Meigen, subgenus *Aedimorphus* Theobald in Southeast Asia. *Contrib. Am. ent. Inst.* **9**(5) : 1-128.
- Skuse, F.A.A. 1894. The banded mosquito of Bengal. *Indian Mus. notes* **3**:20.
- Theobald, F.V 1901 a. *A monograph of the Culicidae or mosquitoes. Vol 1*, 424 pp. London.
- Theobald, F.V. 1901b. A monograph of the Culicidae of the World. Br. Mus. (Nat. Hist.), London Vol 2, 391 pp.
- Theobald, F.V 1905a. A catalogue of the Culicidae in the Hungarian National museum, with descriptions of new genera and species. *Ann. hist. nat. Mus. hung.* **3** : 61-120.
- Theobald, F.V 1905b. *Genera Insectorum. Diptera, Fam. Culicidae. Fascicle 26*, 50pp. Belgium.
- Theobald, F.V 1906. Report on economic entomology. Part I. Second report on the mosquitoes or Culicidae of the Sudan. *Report Wellcome Laboratories, Gordon college, Khartoum* **2** : 67-83.
- Theobald, F.V 1907. *A monograph of the Culicidae or mosquitoes Vol. 4*, 639 pp.
- Theobald, F.V 1908. First report on the Collection of Culicidae and Corethridae in the Indian Museum, Calcutta, with descriptions of new genera and species. *Rec. Indian Mus.* **2** : 287-302.
- Yamada, S. 1921. Description of ten new species of *Aedes* found in Japan with notes on the relation between some of these mosquitoes and the larva of *Filaria bancrofti* Cobbold. *Annot. Zool. Jap.* **10** : 45-81.