Filth flies collected by the late Dr. T. Ohse in Ethiopia and thirteen African countries with record of Dr. Kano's collection in Africa

2. Calliphoridae and Sarcophagidae

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Abstract. Filth flies, Muscidae, Calliphoridae and Sarcophagidae, collected by the late Drs. T. Ohse and R. Kano in Ethiopia and thirteen African countries, Brundi, Cameroon, Congo, Gambia, Ghana, Haute Volta, Ivory Coast, Kenya, Nigeria, Ruwanda, Tanzania and Uganda, were studied. In the present paper, I recorded 12 genera and 31 species of calliphorids and 4 genera and 22 species of sarcophagid flies. Among them, 9 species of calliphorids, *Pericallimya curvinerva* Villeneuve, *P. immaculata* Zumpt, *P. similia* Zumpt, *P. spinigera* Villeneuve, *Phumosi longiseta* Malloch, *Isomyia connivens* Villeneuve, *I. grossa* Villeneuve, *I. eos* Zumpt and *Stegosoma vinculatum*, and 6 species of sarcophagids, *Hoplcephala tessellata* Macquart, *Heteronychia zumpti* Engel, *H. calicifera* Boettcher, *Sarcophaga nubia* Jaennike, *S. burungae* Curran and *S. pennopluma* Zumpt, were newly recorded from Ethiopia.

INTRODUCTION

The author reported 24 genera and 82 species of muscid flies collected by the late Drs. T. Ohse and R. Kano in Ethiopia and 13 African countries in a previous paper (Shinonaga, 2001). The present paper is the 2nd report which is the result of the taxonomic study of Calliphoridae and Sarcophagidae collected in the same localities and by the collectors. Among the data of specimens, the collector's name is T. Ohse unless stated otherwise.

For identification of those flies, I have used the monographs of Zumpt (1956, 1958, 1961, 1972). Scientific names used in the paper are cited from "Catalogue of the Diptera of Afrotropical Region" (Dear, 1980; Pont, 1980). The material were compared with identified specimens during an extended visit at The Natural History Museum, London, and with the kind

advice and help in the identification by Dr. Adrian C. Pont.

The materials used in this study are preserved in National Science Museum, Tokyo.

RECORDS

CALLIPHORIDAE

Subfamily CALLIPHORINAE

Bengalia depressa Walker, 1858

Specimens examined. KENYA: 4 males, Nairobi City, Park, 2,000 m, 9 Oct. 1968, R. Kano.

Bengalia floccosa (Wulp, 1884)

Specimens examined. KENYA: 1 male, Nairobi, City Park, 9 Oct. 1968, R. Kano.

Bengalia spinifemorata Villeneuve, 1913

Specimens examined. ETHIOPIA: 2 females, Wolliso, 21 Oct. 1968, R. Kano and T. Ohse; 1 female, Koka Shoa, 17 Apr.

1980; 1 female, Arba Minch, Gamu Gofa, 31 Jan. 1976; 1 female, Asbetefari, Harar, 15 Aug. 1969. KENYA: 1 male, 1 female, Nairobi, 2,000 m, 6 Oct. 1968, R. Kano; 1 male, 1 female, Nairobi, City Park, 9 Oct. 1968, R. Kano.

Calliphora croceipalpis Jaennicke, 1867

Specimens examined. ETHIOPIA: Addis Ababa: 2 females, 22 Jan. 1969; 2 females, 6 Mar. 1975; 1 male, 1 female, 4 Apr. 1975; 1 female, 22 May 1975; 1 male, 1 female, 1 June 1975; 7 female, 5 July 1975; 1 female, 9 July 1975; 7 males, 1 female, 14 Aug. 1975; 1 male, 3 females, 30 Aug. 1975; 3 males, 12 females, 10 Oct. 1975; 1 male, 6 females, 25 Oct. 1975; 5 females, 10 Nov. 1975; 4 males, 1 female, 10 Dec. 1975; 1 female, 20 Mar. 1976; 1 male, 1 female, 3 Apr. 1976; 2 females, 6 Apr. 1976; 2 males, 5 females, 5 June 1976; 1 female, 7 June 1976; 1 male, 12 June 1976; 6 males, 5 females, 19 June 1976; 32 males, 23 females, 26 June 1976; 1 female, 2 July 1976; 7 females, 9 July 1976; 2 males, 1 female, 24 July 1976; 2 males, 8 females, 14 Aug. 1976; 2 males, 6 females, 28 Aug. 1976; 2 males, 3 females, 4 Sept. 1976; 1 male, 8 females, 31 Dec. 1976; 1 male, 6 females, 12 Mar. 1977; 8 females, 2 Apr. 1977; 1 male, 6 female, 30 Apr. 1977; 3 males, 18 females, 7 July 1977; 3 males, 7 females, 6 Aug. 1977; 4 males, 4 females, 20 Aug. 1977; 2 males, 2 females, 27 Aug. 1977; 3 males, 2 females, 5 Nov. 1977; 2 males, 4 Dec. 1977; 1 female, 12 June 1980. Koka Shoa: 1 male, 3 May 1975; 2 females, 21 Aug. 1976; 1 female, 5 Apr. 1980. Wollamo Soddoo Sidamo: 2 females, 4 Feb. 1976. Assela Arussi: 2 males, 4 females, 29 July 1969; 3 females, 29 Nov. 1969. 2 males, Sagure Arussi, 30 Nov. 1969; 3 females, Bobe Sodore, 28 Sept. 1969. 3 males, 18 females, Addis Ababa, I.C.L.R.I., 2,700 m, 16 Oct. 1968, R. Kano and T. Ohse; 1 male, 4 females, Addis Ababa, Entotto, 3,000 m, 17 Oct. 1968, R. Kano and T. Ohse; 1 female, Addis Ababa, 15 Oct. 1968, R. Kano and T. Ohse; 1 male, 1 female, Woliso, 21 Oct. 1968, R. Kano and T. Ohse; 2

females, Tibila, 7 Nov. 1968, R. Kano and T. Ohse; 1 female, Assela, 8 Nov. 1968, R. Kano and T. Ohse.

Hemigymnochaeta varia Hough, 1898

Specimens examined. ETHIOPIA: 2 males, Alemaya, Harar, 17 Aug. 1969.

Hemipyrellia fernandica (Macquart, 1855)

Specimens examined. ETHIOPIA: Koka Shoa: 1 male, 1 female, 9 Aug. 1976; 1 male, 21 Aug. 1976; 1 female, 7 Aug. 1976; 1 female, 26 Apr. 1976; 1 female, 15 Jan. 1977; 1 male, 15 Jan. 1977. 1 male, 2 females, Bonga Kaffa, 8 July 1980; 1 male, Nazareth Shoa, 28 Feb. 1977; 2 males, 1 female, Awash River, Koka, 1,300 m, 17 Oct. 1968, R. Kano and T. Ohse; 3 females, Awash, 900 m, 12 Oct. 1968, R. Kano and T. Ohse; 3 males, Tibilam 7 Nov. 1968, R. Kano and T. Ohse. IVORY COAST: 1 male, 3 females, Abidjan, 30 Nov. 1976. KENYA: 16 males, 7 females, Nairobi, City Park, 9 Oct. 1968, R. Kano.

Hemipyrellia pulchra Wiedemann, 1830

Specimens examined. ETHIOPIA: 1 female, Koka Shoa, 13 Mar. 1976; 1 female, ditto, 29 Jan. 1977. HAUTE VOLTA: 22 females, Ouagadongon, 2-3 Dec. 1976. IVORY COAST: 1 female, Abidjan, 29 Nov. 1976.

Lucilia cuprina (Wiedemann, 1830)

Specimens examined. ETHIOPIA: Addis Ababa: 21 males, 5 females, 7 June 1975; 1 female, 17 June 1975; 3 males, 2 females, 7 July 1975; 2 males, 1 female, 30 Aug. 1975; 2 males, 1 female, 10 Oct. 1975; 2 males, 2 females, 25 Oct. 1975; 1 female, 11 Dec. 1975; 14 males, 6 females, 6 Mar. 1976; 2 males, 2 females, 20 Mar. 1976; 14 males, 15 females, 5 June 1976; 4 males, 4 females, 12 June 1976; 8 males, 4 females, 19 June 1976; 3 males, 10 females, 26 June 1976; 1 male, 4 female, 24 July 1976; 1 female, 14 Aug. 1976; 7 males, 3 females, 28 Aug. 1976; 1 female, 12 Mar. 1977; 1 female, 7 July 1977; 2 males, 3 females, 4

Dec. 1977. Koka Shoa: 1 male, 1 female, 13 Dec. 1975; 2 females, 13 Mar. 1976; 2 females, 11 Apr. 1976; 5 females, 7 Aug. 1976; 1 male, 1 female, 8 Aug. 1976; 1 female, 20 Aug. 1976; 2 females, 21 Aug. 1976; 7 females, 5 Sept. 1976; 4 females, 15 Jan. 1977; 1 male, 10 June 1980; 2 males, 12 July 1980; 5 females, 18 July 1980; 67 females, 2 Aug. 1980. Bonga Kaffa: 1 male, 8 July 1969; 1 female, 6 Aug. 1969; 1 male, Bedele Kaffa, 6 July 1968; Wollamo Soddo Sidamo: 6 males, 20 females, 30 Jan. 1976; 1 female, 2 Feb. 1976; 7 females, 3 Feb. 1976; 1 male, 15 females, 4 Feb. 1976; 1 male, 1 female, Alemaya Harar, 17 Aug. 1969; 2 males, 2 females, Nazareth Shoa, 21 Sept. 1969; 1 male, 1 female, Bishoftu Shoa, 10 Apr. 1976; 1 male, 4 females, ditto, 22 Jan. 1977; 1 male, 2 females, Shashamane Shoa, 5 Feb. 1976. CAMEROON: 3 males, 7 females, Yaounde, 23 Sept. 1975. GHANA: 1 male, 7 females, Accra, 28 Nov. 1976. UGANDA: 1 male, 7 females, Kampala, 17 Sept. 1976.

Pericallimya curvinerva Villeneuve, 1915

Specimens examined. ETHIOPIA: 4 males, Alemaya, Harar, 17 Aug. 1969 (New record from Ethiopia).

Pericallimya greatheadi Zumpt, 1971

Specimens examined. ETHIOPIA: 2 males, Alemaya, Harar, 17 Aug. 1969; 1 male, Assela Arussi, 29 July 1969.

Pericallimya immaculata Zumpt, 1956

Specimens examined. ETHIOPIA: 1 female, Koka Shoa, 3 May 1975; 1 female, Assela Arussi, 29 July 1969 (New record from Ethiopia).

Pericallimya similis Zumpt, 1956

Specimens examined. ETHIOPIA: 1 female, Residemo, Harar, 17 Aug. 1969. KENYA: 1 female, Nairobi, City Park, 9 Oct. 1968, R. Kano (New record from Ethiopia).

Pericallimya spinigera Villeneuve, 1915

Specimens examined. ETHIOPIA: 1 male, Tibila, 7 Nov. 1968, R. Kano and T. Ohse; 1 male, Tibila, 7 Nov. 1968, R. Kano and T. Ohse (New record from Ethiopia).

Phumosia longiseta Malloch, 1926

Specimens examined. ETHIOPIA: 3 females, Assela Arussi, 29 July 1969 (New record from Ethiopia).

Subfamily CHRYSOMYINAE

Chrysomya chloropyga Wiedemann, 1818

Specimens examined. ETHIOPIA: Addis Ababa: 4 females, 22 Jan. 1969; 5 females, 5 July 1969; 1 male, 24 May 1975; 1 male, 7 June 1975; 2 males, 7 July 1975; 3 males, 1 female, 30 Aug. 1975; 1 male, 3 females, 10 Oct. 1875; 1 male, 25 Oct. 1975; 7 males, 4 females, 14 Nov. 1975; 2 males, 2 females, 6 Mar. 1976; 2 males, 20 Mar. 1976; 104 males, 90 females, 5 June 1976; 18 males, 4 females, 12 June 1976; 19 males, 2 females, 18 June 1976; 10 males, 5 females, 26 June 1976; 8 males, 1 female, 28 Aug. 1976; 1 female, 2 Apr. 1877; 1 female, 30 Apr. 1977; 3 males, 2 females, 5 Nov. 1977; 1 female, 5 Nov. 1980. Koka Shoa: 2 males, 7 females, 13 Dec. 1975; 1 male, 1 female, 10 July 1976; 2 females, 7 Aug. 1976; 2 females, 8 Aug. 1976; 3 males, 1 female, 21 Aug. 1976; 3 males, 22 Aug. 1976; 1 female, 25 Dec. 1976; 12 males, 2 females, 15 Jan. 1977; 24 males, 4 females, 13 Dec. 1977; 1 female, 28 Mar. 1980; 1 female, 29 Mar. 1980; 1 female, 27 Apr. 1980; 13 males, 2 females, 12 July 1980; 2 males, 7 females, 18 July 1980. 3 males, 6 females, Omo Gibe Kaffa, 10 July 1969; 1 male, Bonga Kaffa, 6 Aug. 1969. Wollamo Soddo Sidamo: 1 male, 1 female, 23 Jan. 1976; 1 female, 25 Jan. 1976; 6 males, 3 females, 26 Jan. 1976; 10 males, 7 females, 2 Feb. 1976; 78 males, 36 females, 3 Feb. 1976; 1 female, 4 Feb. 1976. 1 male, Assela Arussi, 29 July 1969; 3 males, 4 females, Asbetefari Harar, 15 Aug. 1969; 1 male, 1 female, Langhie Harar, 19 Aug. 1969; 1 male, Residemo Harar, 17 Aug. 1969. Nazareth Shoa: 1 female, 21 Sept. 1969; 1 male, 12 Dec. 1974;

4 males, 3 females, 26 Feb. 1977. Bishoftu Shoa: 3 males, 4 females, 19 Apr. 1976; 1 male, 7 females, 28 Feb. 1876; 26 males, 20 females, 22 Jan. 1977. 5 males, 17 females, Arba Minch Gamu Gofa, 31 Jan. 1976; 2 females, ditto, 1 Feb. 1976; 1 female, Yoko Kaffa, 5 July 1969. IVORY COAST: 2 males, 2 females, Abidjan, 29 Nov. 1976; 11 males, 8 females, ditto, 30 Nov. 1976. CAMEROON: 6 females, Douala, 14 Sept. 1975; 1 male, Kumba, 18 Mar. 1987; 1 male, 15 females, Yaounde, 16 Sept. 1975; 2 males, 7 females, ditto, 18 Sept. 1975; 2 males, 46 females, 23 Sept. 1975; 1 male, 2 females, 28 Sept. 1975. CONGO: 1 female, Brazzaville, 3 Oct. 1975; 10 males, 65 females, ditto, 6 Sept. 1977; 10 males, 20 females, ditto, 30 June 1980. GAMBIA: 11 males, Banjul, 29 Mar. 1987. GHANA: 5 males, 24 females, Accra, 28 Nov. 1976. HAUTE VOLTA: Ouagadougou: 4 males, 18 females, 2 Dec. 1976; 5 males, 24 females, 3 Dec. 1976; 19 males, 69 females, 4 Dec. 1976; 7 males, 37 females, 5 Dec. 1876. RWANDA: 1 female, Akagera Parc, 10 May 1980; 1 male, 4 females, 23 May 1980; 38 males, 25 females, Kigali, 3 May 1980; 8 males, 12 females, ditto, 15 May 1980; 1 male, 1 female, Rusumo, 10 May 1980. RWANDA-BURUNDI: 9 males, 5 females, Kannyalu, 23 May 1980. TANZANIA: 2 males, Bukoba, 27 May 1980; 3 males, 5 females, ditto, 39 May 1980; 2 males, 7 females, Dar es Salaam, 28 July 1985; 1 male, 6 females, Mwanza, 30 May 1980. UGANDA: Kampala: 1 female, 9 Sept. 1876; 1 female, 12 Sept. 1976; 43 males, 66 females, 16 Sept. 1976; 78 males, 174 females, 17 Sept. 1976; 3 males, 5 females, 18 Sept. 1976.

Chrysomya albiceps (Wiedemann, 1819)

Specimens examined. ETHIOPIA: 1 female, Awash River, Koka, 1,300 m, 12 Oct. 1968, R. Kano and T. Ohse; 1 male, Nazareth, 1,600 m, 14 Oct. 1968, R. Kano and T. Ohse; 2 females, Aberti, 1,800 m, 25 Oct. 1968, R. Kano and T. Ohse.

Chrysomya regalis Robineau-Desvoidy,

1830

Specimens examined. ETHIOPIA: 1 female, Abelti, 1,800 m, 25 Oct. 1968, R. Kano and T. Ohse. IVORY COAST: 6 males, 93 females, Abidjan, 25 May 1987.

Subfamily RHINIINAE

Cosmina prasina (Brauer & Bergenstamm, 1889)

Specimens examined. ETHIOPIA: Koka Shoa: 1 male, 25 Apr. 1970; 2 males, 7 females, 10 June 1980; 2 males, 4 females, 21 June 1980; 4 females, 19 Apr. 1980; 3 females, 12 July 1980; 4 females, 1 Aug. 1980; 3 females, 15 Jan. 1977; 2 females, 19 July 1977; 1 female, 24 Apr. 1976; 1 female, 5 Sept. 1976; 1 female, 7 Aug. 1976; 1 female, 29 Jan. 1977; 1 female, 26 Apr. 1976. 1 female, Residemo, Harar, 17 Aug. 1969; 1 female, Sodore, 1,300 m, 13 Oct. 1968, R. Kano and T. Ohse.

Cosmina viridis Townsend, 1917

Specimens examined. ETHIOPIA: 1 male, Sodore, 1,300 m, 13 Oct. 1968, R. Kano and T. Ohse; 1 male, Awash Shoa, 15 Aug. 1969.

Isomyia connivens Villeneuve, 1917

Specimens examined. ETHIOPIA: 1 male, Addis Ababa, 7 July 1975; 1 female, Bedele, Kaffa, 6 July 1969; 1 male, 1 female, Jimma, 1,700 m, 24 Oct. 1968, R. Kano and T. Ohse (New record from Ethiopia).

Isomyia dubiosa Veilleneuve, 1917

Specimens examined. ETHIOPIA: 1 male, 1 female, Bedlle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse.

Isomyia eos Zumpt, 1958

Specimens examined. ETHIOPIA: 1 male, 1 female, Koka Shoa, 15 Jan. 1977; 1 female, Ever Gota, 31 Oct. 1968, R. Kano and T. Ohse. HAUTE VOLTA: 1 female, Ouagadougou, 5 Dec. 1975 (New record from Ethiopia).

Isomyia grossa Villeneuve, 1917

Specimens examined: ETHIOPIA: 1 female, Asbe Teferi, 26 Oct. 1968 (New record from Ethiopia).

Isomyia tristis Bigot, 1888

Specimens examined. ETHIOPIA: 1 male, 1 female, Bedele, Kaffa, 6 July 1969; 1 male, Gimbo, Kaffa, 9 July 1969; 1 male, Assela, Arussi, 29 July 1969; 2 males, Koka Shoa, 3 May 1975; 1 female, Bonga, Kaffa, 6 Aug. 1969; 1 female, Asbe Teferi, 28 Oct. 1969.

Rhyncomya cassotis Walker, 1849

Specimens examined. ETHIOPIA: Koka Shoa: 1 female, 19 Apr. 1975; 1 female, 22 Feb. 1976; 2 males, 6 females, 4 July 1976; 2 males, 34 females, 10 July 1976; 2 females, 7 Aug. 1976; 4 females, 8 Aug. 1976; 1 male, 1 female, 20 Aug. 1976; 1 female, 22 Aug. 1976; 1 male, 1 female, 18 Dec. 1976; 2 males, 3 females, 15 Jan. 1977; 2 females, 29 Jan. 1977; 1 male, 5 Apr. 1980; 5 males, 6 females, 10 June 1980; 1 male, 18 females, 21 June 1980; 12 males, 71 females, 12 July 1980; 4 males, 26 females, 19 July 1980; 11 females, 2 Aug. 1980. 1 male, Addis Ababa, 7 July 1975; 1 female, Nazareth Shoa, 12 Dec. 1974. IVORY COAST: 2 females, Abidjan, 30 Nov. 1976.

Rhinia apicalis Wiedemann, 1830

Specimens examined. ETHIOPIA: Koka Shoa: 1 female, 13 Dec. 1975; 1 male, 4 July 1976; 1 male, 23 Apr. 1976; 2 male, 24 Apr. 1976; 2 female, 25 Apr. 1976; 1 male, 7 Aug. 1976; 1 male, 8 Aug. 1976; 1 female, 20 Aug. 1976; 4 females, 21 Aug. 1976; 1 male, 18 Dec. 1976; 2 males, 25 Dec. 1976; 26 males, 9 females, 15 Jan. 1977; 1 female, 29 Jan. 1977; 1 male, 2 females, 21 June 1980; 11 males, 3 females, 12 July 1980; 2 males, 19 July 1980; 1 male, 2 Aug. 1980. 2 males, Bishoftu Shoa, 22 Jan. 1977. Wolamo Soddo, Sidamo: 3 females, 25 Jan. 1976; 1 male, 2 females, 3 Feb. 1976; 3 females, 4 Feb. 1976. 1 female, Nazareth Shoa, 26 Feb. 1977. IVORY COAST: Abidjan: 1 female, 14 Nov. 1976; 34 males, 120

females, 29 Nov. 1976; 4 males, 8 females, 30 Nov. 1976.

Rhinia nigricornis Macquart, 1843

Specimens examined. 1 male, Omo Gibo, Kaffa, 10 July 1969; 1 male, Bedelle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse.

Stegosoma vinculatum Loew, 1863

Specimens examined: ETHIOPIA: Koka Shoa: 1 male, 18 Dec. 1976; 1 male, 19 July 1980; 2 females, 15 Jan. 1977; 2 females, 21 June 1980; 1 female, 12 July 1980; 1 female, 10 July 1980; 1 female, 10 July 1976 (new record from Ethiopia).

Stomorphina cribata Bigot, 1874

Specimens examined. ETHIOPIA: Koka Shoa: 1 male, 3 May 1975; 1 male, 10 June 1980; 1 female, 12 July 1980; 2 males, 4 July 1976; 2 males, 21 Aug. 1976; 1 male, 11 July 1976; 1 male, 15 Jan. 1977.

Stomorphina lunata Fabricius, 1805

Specimens examined. ETHIOPIA: Addis Ababa: 1 male, 1 female, 30 Aug. 1975; 1 male, 14 Aug. 1975; 1 male, 28 Aug. 1975; 1 female, 14 July 1975.

Stomorphina rugosa Bigot, 1888

Specimens examined. ETHIOPIA: Koka Shoa: 1 female, 11 Apr. 1976; 1 male, 10 July 1976; 2 females, 11 July 1976; 1 male, 21 Aug. 1976; 1 female, 5 Sept. 1976; 15 males, 33 females, 15 Jan. 1977; 7 males, 4 female, 29 Jan. 1977; 1 female, 5 Apr. 1980; 2 females, 21 June 1980; 41 males, 40 females, 12 July 1980; 10 males, 6 females, 19 July 1980. Addis Ababa Shoa: 2 females, 30 Aug. 1975; 1 female, 19 June 1976; 1 female, 26 June 1976; 1 female, 14 Aug. 1976; 2 females, 28 Aug. 1976; 1 female, 2 Apr. 1977; 1 male, 4 Dec. 1977. 1 female, Bishoftu Shoa, 22 Jan. 1977; 1 female, Bonga Kaffa, 6 Aug. 1969; 1 male, 1 female, Nazareth Shoa, 21 Sept. 1969; 1 male, 1 female, Nazareth 1,600 m, 19 Oct. 1968, R. Kano and T. Ohse.

SARCOPHAGIDAE

Subfamily MILTOGRAMMINAE

Hoplcephala tessellata Macquart, 1846

Specimens examined. ETHIOPIA: Bedlle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse (New record from Ethiopia).

Subfamily SARCOPHAGINAE

Heteronychia destructor Malloch, 1929

Specimens examined. ETHIOPIA: 1 male, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse.

Heteronychia zumpti Engel, 1938

Specimens examined. ETHIOPIA: 2 males, Jimma, 1,700 m, 24 Oct. 1968, R. Kano and T. Ohse (New record from Ethiopia).

Heteronychia calicifera Boettcher, 1912

Specimens examined. ETHIOPIA: 3 males, Sodore, 1,300 m, 28 Oct. 1968, R. Kano and T. Ohse (New record from Ethiopia).

Heteronychia inducta Curran, 1934

Specimens examined. KENYA: 28 males, 11 females, Nairobi, City Park, 2,000 m, 9 Oct. 1968, R. Kano.

Heteronychia lindneriana Zumpt, 1954

Specimens examined. KENYA: 29 males, 12 females, Nairobi, City Park, 2,000 m, 9 Oct. 1968, R. Kano.

Poecilometopa octomaculata Jaenicke, 1867

Specimens examined. ETHIOPIA: Addis Ababa, Entotto, 3,000 m, 17 Oct. 1968, R. Kano and T. Ohse.

Poecilometopa spilogaster Wiedemann, 1824

Specimens examined. KENYA: 1 male, Nairobi, 2,000 m, 8 Oct. 1968, R. Kano; 3 males, 1 female, Nairobi, City Park, 2,000 m, 9 Oct. 1968, R. Kano.

Sarcophaga monospila (Bezzi, 1827)

Specimens examined. ETHIOPIA: Addis Ababa: 1 male, 6 Mar. 1975; 1 male, 12 Mar. 1975; 3 males, 1 female, 4 Apr. 1975; 2 males, 1 female, 1 June 1975; 3 males, 5 June 1975; 2 females, 10 Oct. 1975; 2 males, 3 females, 14 Nov. 1975; 2 males, 1 female, 30 Nov. 1975; 1 male, 21 Feb. 1976; 1 female, 20 Mar. 1976; 3 females, 3 Apr. 1976; 1 male, 18 Apr. 1976; 2 males, 2 females, 5 June 1976; 1 male, 1 female, 12 June 1976; 3 males, 4 females, 19 June 1976; 2 males, 2 females, 26 June 1976; 3 males, 24 July 1976; 1 male, 28 Aug. 1976; 1 male, 5 Sept. 1976; 1 male, 31 Dec. 1976; 1 male, 12 Mar. 1977; 5 males, 1 female, 30 Apr. 1977; 2 males, 5 females, 7 July 1977; 1 male, 5 Nov. 1977; 1 male, 4 Dec. 1977; 1 male, 22 Feb. 1980; 1 male, 15 Apr. 1980; 1 male, 12 June 1980; 1 male, 20 June 1980. 1 male, Koka Shoa, 21 June 1980; 2 females, Baptist mission, Addis Ababa, 29 Nov. 1969; 1 female, Taza Kambatta Shoa, 20 Jan. 1976; 1 female, Wolamo Soddo Sidamo, 24 Jan. 1976; 1 female, ditto, 30 Jan. 1976; 1 female, ditto, 3 Feb. 1976; 1 male, ditto, 4 Feb. 1976; 1 male, Yoko Kaffa, 5 July 1969.

Sarcophaga nubia Jaennike, 1867

Specimens examined. ETHIOPIA: 6 males, Assela, 8 Nov. 1968, R. Kano and T. Ohse; 1 male, Jimma, 1,700 m, 24 Oct. 1968, R. Kano and T. Ohse; 1 male, Nazareth, 1,800 m, 19 Oct. 1968, R. Kano and T. Ohse. KENYA: 3 males, Nairobi, City Park, 9 Oct. 1968, R. Kano (New record from Ethiopia).

Sarcophaga aruno Curran, 1834

Specimens examined. ETHIOPIA: 2 males, Nazareth, 1,600 m, 19 Oct. 1968, R. Kano and T. Ohse; 2 males, Bedlle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse; 1 male, Bonga Kaffa, 6 Aug. 1969; 1 male, Baptist mission, 29 Nov. 1969; 1 male, Dosha Arussi, 30 Nov. 1969; 2 males, Hirua Harar, 15. Aug. 1969; 1 male, Kachama Arussi, 30 Nov. 1969.

***Sarcophaga burungae* Curran, 1934**

Specimens examined. ETHIOPIA: Addis Ababa: 2 males, 6 Mar. 1975; 1 male, 12 Mar. 1975; 1 male, 25 Oct. 1975; 1 male, 3 Apr. 1976; 1 male, 5 June 1976; 3 males, 19 June 1976; 1 male, 26 June 1976; 1 male, 12 Mar. 1977; 1 male, 6 Aug. 1977; 1 male, 29 Aug. 1977; 1 male, 5 Nov. 1977; 1 male, Koka Shoa, 21 June 1980; 1 male, Assela Arussi, 28 June 1969; 1 male, Bishoftu Shoa, 21 Feb. 1976; 3 males, ditto, 28 Feb. 1876; 2 males, 22 Jan. 1977. Wollamo Soddo Sidamo: 1 male, 25 Jan. 1976; 1 male, 29 Jan. 1976; 2 males, 3 Feb. 1976; 1 male, 4 Feb. 1976; 1 male, 5 Dec. 1976. 1 male; 1 male, Taza Kambatta Shoa, 29 Jan. 1976; 12 males, Addis Ababa, Entotto, 3,000 m, 17 Oct. 1968, R. Kano and T. Ohse; 1 male, Assela, 8 Nov. 1968, R. Kano and T. Ohse; 4 males, Assela, 8 Nov. 1968, R. Kano and T. Ohse; 1 male, Bedlle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse. UGANDA: 1 male, Kampala, 17 Sept. 1976 (New record from Ethiopia).

***Sarcophaga cruentata* Meigen, 1826**

Specimens examined. ETHIOPIA: Addis Ababa: 1 male, 17 May 1975; 1 male, 1 June 1975; 2 males, 5 June 1875; 1 male, 18 June 1976; 2 males, 26 June 1976; Koka Shoa: 2 males, 13 Dec. 1975; 1 male, 28 Mar. 1976; 1 male, 24 Apr. 1976; 2 males, 26 Apr. 1976; 5 males, 7 Aug. 1876; 3 males, 21 Aug. 1976; 1 male, 10 June 1980; 1 male, 12 July 1980. Wollamo Soddo Sidamo: 1 male, 22 Jan. 1976; 1 male, 24 Jan. 1976; 1 male, 30 Jan. 1976; 1 male, 3 Feb. 1976; 1 male, 4 Feb. 1976. 3 males, Adjaba Kambatta Shoa, 27 Jan. 1976; 2 males, Alemaya Harar, 17 Aug. 1976; 1 male, Arba Minch Gamu Gofa, 1 Feb. 1976; 3 males, Bishofutu Shoa, 28 Feb. 1976; 10 males, ditto, 22 Jan. 1977; 8 males, Bonga Kaffa, 8 July 1969; 6 males, ditto, 6 Aug. 1969; 1 male, Didessa Kaffa, 6 July 1969; 2 males, Hirua Harar, 19 Aug. 1969; 1 male, Nazareth Shoa, 21 Sept. 1969; 1 male, ditto, 26 Feb. 1977; 1 male, Sagure Arussi, 30 Nov. 1969; 1 male, Shashamane Shoa, 5 Feb. 1976; 2 males, Taza Kambatta Shoa,

29 Jan. 1976; 3 male, Awash River, Koka, 1,300 m, 20 Oct. 1968, R. Kano and T. Ohse; 1 male, Dire Dawa, 29 Oct. 1968, R. Kano and T. Ohse; 1 male, Alemaya, 29 Oct. 1968, R. Kano and T. Ohse; 2 males, Besedimo, 15 km S. of Ifarar, 30 Oct. 1968, R. Kano and T. Ohse; 1 male, Ever Gota, 31 Oct. 1968, R. Kano and T. Ohse; 2 males, Nazareth, 1,600 m, 12 Oct. 1968, R. Kano and T. Ohse; 2 males, Sodore, 1,300 m, 13 Oct. 1968, R. Kano and T. Ohse; 3 males, Tibila, 7 Nov. 1968, R. Kano and T. Ohse; 1 male, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse; 1 male, Assendabo, 1,600 m, 25 Oct. 1968, R. Kano and T. Ohse; 1 male, Bedelle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse; 1 male, Lange, 1 Nov. 1968, R. Kano and T. Ohse; 1 male, Dire Dawa, 29 Oct. 1968, R. Kano and T. Ohse. KENYA: 2 males, Nairobi, City Park, 9 Oct. 1968, R. Kano. UGANDA: Kampala: 3 males, 9 Sept. 1976; 2 males, 16 Sept. 1976; 1 male, 17 Sept. 1976. 1 male, Jinja, 12 Sept. 1976.

***Sarcophaga inaequalis* Austen, 1909**

Specimens examined. ETHIOPIA: Addis Ababa: 1 male, 5 June 1975; 2 males, 30 Aug. 1975; 3 males, 5 June 1976; 2 males, 12 June 1976; 3 males, 26 June 1976. Koka Shoa: 1 male, 3 May 1975; 1 male, 29 Mar. 1975; 2 males, 3 Jan. 1976; 1 male, 28 Mar. 1976; 1 male, 7 Aug. 1976; 1 male, 22 Aug. 1976; 2 males, 18 Dec. 1976; 2 males, 15 Jan. 1977; 1 male, 12 July 1980. Wollamo Soddo Sidamo: 1 male, 23 Jan. 1976; 1 male, 24 Jan. 1976; 3 males, 29 Jan. 1976; 1 male, 3 Feb. 1976; 1 males, 4 Feb. 1976. 6 males, Adjaba Kambatta Shoa, 27 Jan. 1976; 14 males, Alemaya Harar, 17 Aug. 1969; 3 males, Bishoftu Shoa, 28 July 1968; 7 males, ditto, 22 Jan. 1977; 2 males, Bonga Kaffa, 8 July 1969; 5 males, ditto, 6 Aug. 1969; 2 males, Hirua Harar, 15 Aug. 1969; 6 males, Nazareth Shoa, 21 Sept. 1969; 7 males, ditto, 26 Feb. 1977; 1 male, Omo Gibe Kaffa, 10 July 1969; 1 male, Kachama Arussi, 30 Nov. 1969; 2 males, Langhie Harar, 19 Aug. 1969; 2 males, Residemo Harar, 17 Aug. 1969; 2 males, Shashamane Shoa, 5 Feb. 1976; 6 males, Taza

Kambatta Shoa, 29 Jan. 1976; 3 males, Nazareth, 1,600 m, 19 Oct. 1968, R. Kano and T. Ohse; 2 males, Bedlle, 2,000 m, 23 Oct. 1968, R. Kano and T. Ohse; 1 male, Alemaya, 29 Oct. 1968, R. Kano and T. Ohse; 4 males, Lange, 1 Nov. 1968, R. Kano and T. Ohse; 3 males, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse; 9 males, Awash River, Koka, 1,300 m, 13 Oct. 1968, R. Kano and T. Ohse; 3 males, Assndabo, 1,600 m, 25 Oct. 1968, R. Kano and T. Ohse; 5 males, Besedimo, 15 km S. of Harar, 30 Oct. 1968, R. Kano and T. Ohse; 2 males, Asbe Tefari, 28 Oct. 1968, R. Kano and T. Ohse; 2 males, Ever Gota, 31 Oct. 1968, R. Kano and T. Ohse; 1 male, Dire Dawa, 29 Oct. 1968, R. Kano and T. Ohse; 1 male, Wolliso, 31 Oct. 1968, R. Kano and T. Ohse. KENYA: 3 males, Nairobi, City Park, 9 Oct. 1968, R. Kano. IVORY COAST: 1 male, Abidjan, 14 Nov. 1976. UGANDA: 2 males, Kampala, 9 Sept. 1976; 2 males, 17 Sept. 1976.

***Sarcophaga parasurcoufi* Zumpt, 1972**

Specimens examined. ETHIOPIA: Addis Ababa: 3 males, 6 Mar. 1975; 4 males, 4 Apr. 1975; 1 male, 5 May 1975; 6 males, 17 May 1975; 1 male, 5 June 1975; 1 male, 7 June 1975; 1 male, 30 Aug. 1975; 2 males, 14 Nov. 1975; 1 male, 20 Mar. 1976; 2 males, 5 June 1976; 1 male, 12 June 1976; 7 males, 26 June 1976; 1 male, 24 July 1976; 2 males, 30 Apr. 1977; 1 male, 7 July 1977; 3 males, 6 Aug. 1977; 1 male, 20 Aug. 1977; 1 male, 4 Dec. 1977; 2 males, 15 Apr. 1980; 1 male, Baptist mission, 29 Nov. 1989; 2 males, Bishoftu Shoa, 22 Jan. 1969; 1 male, Kachama Arussi, 30 Nov. 1969; 1 male, Wollamo Soddo Sidamo, 29 Jan. 1976.

***Sarcophaga tibialis* Macquart, 1851**

Specimens examined. ETHIOPIA: 3 males, Awash River, 1,300 m, 12 Oct. 1968, R. Kano and T. Ohse; 1 male, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse.

***Sarcophaga hirtipes* Wiedemann, 1830**

Specimens examined. ETHIOPIA: 1 male, Sodore, 1,300 m, 13 Oct. 1968, R.

Kano and T. Ohse; 1 male, Dire Dawa, 29 Oct. 1968, R. Kano and T. Ohse; 1 male, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse.

***Sarcophaga exuberans* Pandelle, 1896**

Specimens examined. ETHIOPIA: 1 male, Awash River, Koka, 1,300 m, 12 Oct. 1968, R. Kano and T. Ohse; 1 male, Sodore, 1,300 m, 12 Oct. 1968, R. Kano and T. Ohse. KENYA: 1 male, Nairobi, City Park, Oct. 1968, R. Kano.

***Sarcophaga inzi* Curran, 1934**

Specimens examined. 3 males, Assendabo, 1,500 m, 25 Oct. 1968, R. Kano and T. Ohse.

***Sarcophaga monospila* Bezzi, 1908**

Specimens examined. ETHIOPIA: 3 males, Addis Ababa, Entotto, 3,000 m, 17 Oct. 1968, R. Kano and T. Ohse; 1 female, Esedimo, 15 km S. of Harar, 20 Oct. 1968, R. Kano and T. Ohse.

***Sarcophaga pennopluma* Zumpt, 1972**

Specimens examined. ETHIOPIA: 3 males, Awash River, Koka, 1,300 m, 12 Oct. 1968, R. Kano and T. Ohse (New record from Ethiopia).

***Wohlfahrtia indigens* Villeneuve, 1928**

Specimens examined. ETHIOPIA. 1 female, Awash, 900 m, 1 Nov. 1968, R. Kano and T. Ohse.

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