Check-List and distributional records of Phlebotomine Sandflies from Balochistan Province, Pakistan (Diptera, Psychodidae)

Juma-Khan Kakarsulemankhel
Sandflies, Leishmaniasis and Mosquitoes Lab./Zoology, University of Balochistan, Quetta, Pakistan

Abstract: A total number of 23 known species, representing genera Phlebotomus, Sergentomyia and Grassomyia and 5 undetermined species of the genera Phlebotomus and Sergentomyia were identified during the surveys conducted during 1996-2001 in the whole of the Balochistan Province, Pakistan. Out of this, 8 species namely Phlebotomus bergeroti, Ph. andrejevi, Sergentomyia faii, S. dentata arpakensis, S. murghabensis, S. merrynae, S. freetownensis var. and Grassomyia dreyfussi turkestanica are new record from Pakistan whereas eight species viz., Ph. alexandri, Ph. nurii, S. babu babu S. palestinesis, S. grekovi, S. clayeii, S. tibiris komistanica and S. hodgsorni hodgsorni are new record from Balochistan. Seven already reported species namely Ph. papatasi, Ph. salehli, Ph. sergenti, S. punjabiensis, S. theodoris peshitnica, S. baghdadis and Grassomyia indica were collected again, identified and determined. In addition, 5 undetermined species, four are of the genus Phlebotomus, subgenus Phlebotomus and 1 is of the genus Sergentomyia, subgenus Parrotomyia were also recorded (only females). These are not counted here in the total number of species of sandflies because more specimens are required for study. These five flies do not seem to belong to other known species from Pakistan. Taxonomic position of 23 species and their distribution (see Map of Balochistan) are given in the present paper. After this study, the number of sandflies species known from Pakistan becomes 37.

Key words: Sandflies, Phlebotomus, Sergentomyia, Grassomyia

Taxonomic account and distribution of the 23 species of sandflies representing 3 genera, 6 subgenera, recorded by the author from the whole of the Balochistan Province during 1996-2001 (see Map of Balochistan) are given as under:

[A] Genus Phlebotomus Rondani and Berte in Rondani[1]
   a) Subgenus Phlebotomus Rondani and Berte in Rondani[1]

1. Phlebotomus papatasi Scopoli[2]

New record, present survey: Adampur, Awaran, Balichah (Makran), Barkhan, Barshore, Belpat, Bhag, Buleda, Chilgiri, Dalbandin, Dashte Kukdan, Dera Allahyar, Dera Murad Jamali, Dhadar, Duki, Hairdin, Hoshab (Makran), Jangal Pir Aliza, Jal Jhao, Kahan, Kalatuk, Kharan, Khuzdar, Kuchkhal, Kohlu, Mand, Mashakey, Mewand, Mithri, Nal, Nallaint, Nanasaheb ziarat, Nasirabad (Makran), Nushki, Ornach, Panjgour, Parom, Pishin, Qilla Abdullah, Qilla Safiullah, Rahki, Shahrak (Makran), Sohibatpur, Suntar, Tump, Turbat, Usta Muhammad, Winder, Wadh, Ziarat.

Bela[3] [present survey], Bostani[4], Chaman[4], [present survey], Dera Bugti[4], [present survey], Kalat and Khuzdar[4], [present survey], Lehri[5,6,7], Mastung[4], Quetta[8,9,10], [present survey], Sangsila[11,12], [present survey], Sibi[13,14,15], [present survey], Talli[16,17], [present survey], Uthal[18,19,20], [present survey].

2. Ph. bergeroti Parrot (1934)

New record, present survey: Bela, Khuzdar, Panjgour, Trubat, Uthal.

3. Ph. salehli Mesghali[21,22]

New record, present survey: Bela, Chaman, Dashte Kukdan, Khuzdar, Kohlu, Nanasaheb ziarat, Panjgour, Turbat. Kahan[0], (present survey), Uthal[10], [present survey].

i) Phlebotomus (Phlebotomus) Sp. A single ? was collected from Mand.

ii) Phlebotomus (Phlebotomus) Sp. B. A single ? was caught from Parom.

Corresponding Author: Juma-Khan Kakarsulemankhel, Sandflies, Leishmaniasis and Mosquitoes Lab./Zoology, University of Balochistan, Quetta, Pakistan. Fax #: +92-81-9211277; E-mail: jumakhanakar@yahoo.co.uk
iii) *Phlebotomus (Phlebotomus)* Sp. C. A single ♂ was collected from Kahan.

iv) *Phlebotomus (Phlebotomus)* Sp. D. A single ♀ was caught from Lehri.

v) Sub genus *Paraphlebotomus* Theodor[13]

4. *Ph. sergenti* Parrot[14]

**New record, present survey:** Barshore, Chaman, Kohlu, Kuchlak, Muslim Bagh, Ormanch, Panama, Cloila, Qilla Abdullah, Qilla Saifullah, Ziarat. Barkhan and Bibertek[8], Kahan[9], Lehri[5,6], Mastung[5, [present survey], Quetta[4,3], [present survey], Sangsilla[6, Sibi[1,6], Talli[6], Zhob[1].


a) Subgenus *Sergentomyia* Franca and Parrot[17]


b) Sub genus *Parrotomyia* Theodor[11]


c) Sub genus *Sintonius* Nitzulescu[20]


[C] Genus *Grassomyia* Lewis[34] (Previously, *Grassomyia* was designated as a subgenus by Theodor[15])


**ACKNOWLEDGEMENTS**

The author is grateful to Professors Drs. R. Killick-Kendrick; David, J. Bradley, R. W. Ashford, R. P. Lane and Dr. David Evans for their encouragement and valuable guidance on sandflies. My sincerest thanks are also due to respected Joanna Kapusta (BMNH), Linda Huddleston (BMNH), Dr. J.-P. Dedet (France), and Dr. Farrokh Modabber (WHO) and Prof. Dr. V. N. Neronov (Russia) for providing me the literature on sandflies.

**REFERENCES**


