

LEECHES OF SIMLA HILLS, HIMACHAL PRADESH

By

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INTRODUCTION

Harding and Moore (1927)¹ have reported five species of leeches, viz. *Paraclepsis praedatrix* Harding, *Barbronia weberi* (Blanchard), *Herpobdelloidea indica* (Kaburaki), *Hirudinaria granulosa* (Savigny), *Haemadipsa zeylanica* (Moquin-Tandon), from Simla Hills, apart from which there is no other reference to any of the forms described in the present communication from this area, though Bhatia (1939)², Soota (1959)³ and Chandra (1970)⁴ have recorded some of the forms included here from other mountain areas of Kashmir, Arunachal Pradesh and plains of Uttar Pradesh respectively.

The present paper is a report on a collection of leeches made mostly from temporary ponds and hill streams by the staff of High Altitude Zoology Field Station, Solan (H. P.), during January, 1969 to August, 1972. The authors collected the major part of the material which contains nine species and one subspecies, out of which five are new records, from the area. The region of Simla Hills comprises of districts of Simla, Solan, Sirmour and Bilaspur of Himachal Pradesh.

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SYSTEMATIC ACCOUNT

Order RHYNCHOBDELLAE

Family GLOSSIPHONIDAE

Genus *Glossiphonia* Johnson, 1816

1. *Glossiphonia reticulata* Kaburaki, 1921

1921. *Glossiphonia reticulata* Kaburaki, *Rec. Indian Mus.*, 22 (5) : 65.

* High Altitude Zoology Field Station, Zoological Survey of India, Solan.

1. Harding, W. A. and Moore, J. P. 1927. *Fauna of British India* (Hirudinea).

2. Bhatia, M. L. 1939. *Bull. Punj. Univ. Zool.* 2 : 1-16.

3. Soota, T. D. 1959. *Rec. Indian Mus.*, 54 (1 & 2) : 2 (1956).

4. Chandra, M. 1970. *Rec. zool. Surv. India*, 64 (1-4), : 107-109. (1966.)

Material.—(1) 1 ex., North of Renuka lake, Renuka, District Sirmour, (attached to stones). 7.iv.70. Coll. *M. Chandra*. (ii) 8 exs., Dukali, Bilaspur, 25.viii. 72, Coll. *K. K. Mahajan*

Distribution.—Simla Hills (H. P.) (first record) as above. Elsewhere : India -Jullundhur, Maharashtra.

2. *Glossiphonia weberi* Blanchard, 1897

1897. *Glossiphonia weberi* Blanchard, *Zool. Ergeb. einer Reise*, Max Weber, 4 : 332, fig. 1.

1959. *G. weberi* : Soota, *Rec. Indian Mus.*, 54 (1 & 2) : 2. (1956).

Material.—(i) 25 exs., Parshuram Tank, Renuka, District Sirmour, (attached to stones), 6.iv.70, Coll. *M. Chandra*. (ii) 16 exs., Tank at Arki, 50 km. from Solan, 23-24.x.71, Coll. *M. Chandra*. (iii) 2 exs., Kanela Ambi, near Bilaspur, 21.iv.72, Coll. *M. Chandra*. (iv) 6 exs., Meiri, Ghumarwin, Bilaspur, 7.iv.72, Coll. *M. Chandra*. (v) 10 exs., Changar Khud, Bilaspur, 11.viii.72, Coll. *K. K. Mahajan*. (vi) 2 exs., Gohal Village, Bilaspur, 16.viii.72, Coll. *K. K. Mahajan*. (vii) 33 exs., Maigpur, Bhakra Nangal, 27.viii.72, Coll. *K. K. Mahajan*.

Distribution.—Simla Hills (H. P.) as above (first record). Elsewhere : India-widely distributed.

Genus *Hemiclepsis* Vejdovsky, 1882

3. *Hemiclepsis marginata asiatica* Moore, 1924

1924. *Hemiclepsis marginata asiatica* Moore, *Proc. Acad. Nat. Sci. Philadelphia*, 81 : 343-388, Pls. xix-xxi.

1959. *H. marginata asiatica* : Soota, *Rec. Indian Mus.*, 54 (1 & 2) : 2 (1956).

Material.—(i) 1 ex., Parshuram Tank, Renuka, District Sirmour, 6.iv.70, Coll. *M. Chandra* (attached to submerged stones). (ii) 5 exs., South bank of Renuka lake, Renuka, District Sirmour, 5.iv.70, Coll. *M. Chandra*.

Distribution.—Simla Hills (H.P.) as above (first record). Elsewhere : India-Kashmir.

Genus *Helobdella* Blanchard, 1896

4. *Helobdella stagnalis* (Linnaeus), 1758

1758. *Hirudo stagnalis* Linnaeus, *Systema Naturae*, 10th Ed. : 649

1939. *Helobdella stagnalis* : Bhatia, *Bull. Punj. Univ. Zool.*, 2 : 1-16.

Material.—(i) 10 exs., Yamuna River, Paonta, District Sirmour, (Attached to submerged stones). 12.iv.70, Coll. *M. Chandra*. (ii) 5 exs., Rajgarh, district Sirmour, 42 km. from Solan, 1.iii.71, Coll. *H. P. Agrawal*. (iii) 4 exs., Giripul, 20 km. from Solan, 23.xii.70, Coll. *M. Chandra*.

Distribution.—Simla Hills (H. P.) as above (first record). Elsewhere : India-Kashmir.

Genus *Paraclepsis* Harding, 1924

5. *Paraclepsis praedatrix* Harding, 1924

1924. *Paraclepsis praedatrix* Harding, *Ann. Mag. nat. Hist. Ser. (9) 14* : 489, pls. ix-xv.
 1927. *P. praedatrix* : Harding, *Fauna of British India-Hirudinea.* : 88-90, Fig. 36, pl. II, figs 11 & 12.

Material.—(i) 20 exs., tank near Arki, 50 km. from Solan, District Solan. 23-24.x.71, Coll. *M. Chandra*. (ii) 2 exs., Kanella Ambi, near Bilaspur, 21.iv.72, Coll. *M. Chandra*.

Distribution.—Simla Hills, (H. P.) as above. Elsewhere : India-South India, Maharashtra, West Bengal, Assam.

6. *Paraclepsis vulnifera* Harding, 1924

1924. *Paraclepsis vulnifera* Harding, *Ann. Mag. nat. Hist. Ser. (9) 14* : 489, pls. ix-xv.
 1927. *P. vulnifera* : Harding, *Fauna of British India-Hirudinea.* : 91-92, Fig. 37.

Material.—(i) 13 exs., Meiri, Ghumarwin, Bilaspur, 7.iv.72, Coll. *M. Chandra*.

Distribution.—Simla Hills (H.P.) as above (first record). Elsewhere : India-South India.

Order ARHYNCHOBDELLAE

Family ERPOBDELLIDAE

Genus *Barbronia* Johnson, 1918

7 *Barbronia weberi* (Blanchard), 1897

1897. *Dina weberi* Blanchard, *Zool. Ergeb. Reise, iv.* : 332-335, 11 text-figs.
 1939. *Barbronia weberi* : Bhatia, *Bull. Punj. Univ. Zool. 2* : 1-16.

Material.—(i) 2 exs., Yamuna river, (attached to submerged stones), Paonta, District Sirmour, 12.iv.70, Coll. *M. Chandra*. (ii) 12 exs.,

Parwanu, near Kalka (attached to submerged stones), 16.i.72, Coll. *M. Chandra*. (iii) 1 ex. Parwanu near Kalka, 14.iv.71, Coll. *K. K. Mahajan*. (iv) 4 exs. Sadhupul, 30 km. from Solan, Chail road, 18.v.71, Coll. *K. K. Mahajan*. (v) 6 exs., Kuthar, 36 km. from Solan, 19.ii.71, Coll. *M. Chandra*. (vi) 22 exs., Ochhghat, 10 km. from Solan, (attached to stones). 23.xii.70, Coll. *M. Chandra*. (vii) 3 exs., Ashwani Khud, 10 km. from Solan, 19.vi.70. Coll. *M. Chandra*. (viii) 2 exs., Nihal Village, Bilaspur, 13.iv.72, Coll. *M. Chandra*. (ix) 11 exs., Meiri, Ghumarwin, Bilaspur, 15.iv.72, Coll. *M. Chandra*. (x) 13 exs., Changar Khud, Bilaspur 11.viii.72, Coll. *K. K. Mahajan*. (xi) 2 exs., Oyal Village, Bilaspur, 15.viii.72, Coll. *K. K. Mahajan*. (xii) 8 exs., Ali Khud, Ghaghas, Bilaspur, 13.viii.72, Coll. *K. K. Mahajan*. (xiii) 8 exs., Nangal, Forest Rest House, Bhakra, 22.viii.72. Coll. *K. K. Mahajan*. (xiv) 16 exs., Nangal, Forest Rest House, Bhakra, 22.viii.72, Coll. *K. K. Mahajan*.

Distribution.—Simla Hills (H. P.) as above. Elsewhere : India-Kashmir and widely distributed throughout North India.

Genus *Herpobdelloidea* Kaburaki, 1921

8. *Herpobdelloidea indica* (Kaburaki), 1921

1921. *Nematobdella indica* Kaburaki, *Rec. Indian Mus.*, **18** : 706-707.

1927. *Herpobdelloidea indica* : Moore, *Fauna of British India -Hirudinea* : 144-148, pl. III, fig. 3, VI, figs. 15, 16.

Material.—(i) 6 exs., Parshu Ram Tank, Renuka, District Sirmour (attached to stones), 6.iv.70, Coll. *M. Chandra*. (ii) 2 exs., South bank of Renuka lake, Renuka, District Sirmour, 5.iv.70, Coll. *M. Chandra*. (iii) 10 exs., Taradevi near Simla, 3.ii.71. Coll. *H. P. Agrawal*. (iv) 4 exs., Ashwani Khud, 10 km. from Solan, 18.vi.70, Coll. *M. Chandra*. (v) 15 exs., Sarkaghat, Mandi, 4.iv.72, Coll. *M. Chandra*. (vi) 5 exs., Meiri, Ghumarwin, Bilaspur, 7.iv.72, Coll. *M. Chandra*. (vii) 1 ex., Nainadevi, Bilaspur, 24.iv.72, Coll. *M. Chandra*. (viii) 6 exs., Old Bilaspur, 16.iv.72, Coll. *M. Chandra*. (ix) 3 exs., Maigpur, Bhakra, 27.viii.72, Coll. *K. K. Mahajan*. (x) 3 exs., Dukali, Bhakra, 25.viii.72, Coll. *K. K. Mahajan*.

Distribution.—Simla Hills (H. P.) as above, Elsewhere ; India-Punjab, Madhya Pradesh and Maharashtra.

Family HIRUDIDAE

Genus *Hirudinaria* Whitman, 1866

9. *Hirudinaria granulosa* (Savigny)

1820. *Sanquisuga granulosa* Savigny, *Systeme des Annelides*, Paris : 115

1970. *Hirudinaria granulosa* : Chandra, *Rec. zool. Surv. India*, **64** (1-4): 107-109 (1966).

Material.—(i) 1 ex., Kuthar, 36 km. from Solan on Solan Patta road, 19.ii.71, Coll. *M. Chandra*. (ii) 2 exs., Ghaghas, Bilaspur, 14.viii.72. Coll. *K. K. Mahajan*. (iii) 1 ex., Oyal Village, Bilaspur, 15.viii.72, Coll. *K. K. Mahajan*. (iv) 8 exs., Gohal, Bilaspur, 16.viii.72, Coll. *K. K. Mahajan*.

Distribution.—Simla Hills (H. P.) as above. Elsewhere : India-widely distributed throughout India.

Genus *Haemadipsa* Tennent, 1859

10. *Haemadipsa zeylanica* (Moquin-Tandon)

1826. *Sanguisuga zeylanica* Moquin-Tandon, *Monographie de la famille Hirudinees*, Montpellier : 126
1970. *Haemadipsa zeylanica* : Chandra, *Rec. zool. Surv. India*, **64** (1-4) : 107-109 (1966).

Material.—25 exs., Nohra, Sirmour, 1.vii.72, Coll. *M. Chandra*.

Distribution.—Simla Hills (H. P.) as above. Elsewhere : India-Arunachal Pradesh.

SUMMARY

Nine species and one sub-species belonging to eight genera and three families are reported from Simla Hills of which four species and one subspecies are reported for the first time from Simla Hills.