

On a small collection of Aquatic Beetles from Dudhwa Tiger Reserve, Uttar Pradesh, India

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Dudhwa National Park (DNP) is located at Indo-Nepal border of Lakhimpur-Kheri district, which comes under Terai region of the state of Uttar Pradesh. The park harbours natural forest of moist deciduous type and grasslands which provides suitable habitats for entomofauna. DNP with 680 sq. km. area, Krishnapur Wildlife Sanctuary (204 sq. km.) and Katernia Ghat Wildlife Sanctuary (440 sq. km.) constitutes together the Dudhwa Tiger Reserve. There are number of shallow lakes or pools, diverse perennial sources of fresh water in the park. Suheli and Mohana streams flowing through the DNP provides the best possible habitats for luxuriant growth of forests and diverse aquatic insect fauna. The most important lakes of the park includes Bankeytaal and Bhaditaal.

The current knowledge of aquatic beetle fauna of Protected Areas of Uttar Pradesh is limited to the works of Ghosh (2011) who reported aquatic beetle fauna from Sandi Bird Sanctuary and Ghosh *et al.* (2011) published a paper on Suraha Tal Wildlife Sanctuary. The present paper is based on a small collection of aquatic beetles, collected from different parts of Dudhwa Tiger Reserve by authors in February 2011. Altogether 11 species belonging to 8 genera and 3 families (Noteridae, Dytiscidae and Hydrophilidae) of aquatic Coleoptera were recorded during this survey. All the species are recorded for the first time from DNP.

I. Family Noteridae

1. ***Canthydrus angularis*** Sharp, 1882
1882. *Canthydrus angularis* Sharp: *Sci. Trans. R. Dublin Soc.*, 2: 277.
1977. *Canthydrus morsbachi* (Wehncke): Vazirani, *Rec. zool. Surv. India*, Occ. paper No. 6: 7.
2011. *Canthydrus angularis*: Nilsson, A. *World Catalogue of the Family Noteridae*, Version 16. Viii. 2011, p. 9.

Material examined: 1ex.

Distribution: (India): Andhra Pradesh, Goa, Kerala, Maharashtra, Orissa, Tamil Nadu and Uttar Pradesh. Elsewhere: Myanmar, Cambodia, Indonesia, Singapore, Vietnam and Sri Lanka.

II. Family Dytiscidae

2. ***Cybister (Cybister) tripunctatus lateralis*** Fabricius, 1798
1798. *Dytiscus lateralis* Fabricius: *Suppl. Entom. Syst.*, p. 64.

2012. *Cybister (Cybister) tripunctatus lateralis*: Ghosh & Nilsson, *Skorvnopparn, nef, supplement*, 3: 21.

Materials examined: 2exs.

Distribution: (India): Andaman & Nicobar Islands, Andhra Pradesh, Assam, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

Elsewhere: Afghanistan, Bangladesh, Bhutan, Myanmar, Nepal, Pakistan, Sri Lanka, China, Cyprus, Iran, Iraq, Japan, Kyrgyzstan, Mongolia, Russia, Syria, Tajikistan, Turkmenistan, Turkey, Uzbekistan and Europe.

3. *Hydroglyphus flammulatus* (Sharp, 1882)

1882. *Bidessus flammulatus* Sharp: *Sci. Trans. R. Dublin Soc.*, 2: 359.

2012. *Hydroglyphus flammulatus*: Ghosh & Nilsson, *Skorvnopparn, nef, supplement*, 3: 29.

Materials examined: 7exs.

Distribution: (India): Himachal Pradesh, Madhya Pradesh, Rajasthan, Sikkim, Uttarakhand and Uttar Pradesh.

Elsewhere: Afghanistan, Bhutan, Nepal, Pakistan, China, Cyprus, Iran, Iraq, Israel, Kazakhstan, Kyrgyzstan, Lebanon, Mongolia, North Korea, Russia, Saudi Arabia, Syria, Tajikistan, Turkey, Turkmenistan, Uzbekistan, Vietnam, Europe and North Africa.

4. *Hydroglyphus pendjabensis* (Guignot, 1954)

1954. *Guignotus pendjabensis* Guignot: *Opusc. Ent. Lund*. 19: 221.

2012. *Hydroglyphus flammulatus*: Ghosh & Nilsson, *Skorvnopparn, NEF, supplement*, 3: 31.

Materials examined: 1ex.

Distribution: (India): Andhra Pradesh, Delhi, Goa, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal.

Elsewhere: Bangladesh, Myanmar, Nepal and Pakistan.

5. *Hyphoporus bengalensis* Severin, 1890

1890. *Hyphoporus bengalensis* Severin, *Ann. Soc. Ent. Belg.*, 34: *Bull.* (4): 12: 191.

Material examined: 1ex.

Distribution: (India): Jharkhand, Tamil Nadu, Punjab and West Bengal.

Elsewhere: No reports.

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6. ***Laccophilus flexuosus*** Aube, 1838
1838. *Laccophilus flexuosus* Aube: in *Dejean's Species Coleopteres*, 6: 430.

Material examined: 1ex.

Distribution: (India): (Andaman & Nicobar Islands, Andhra Pradesh, New Delhi, Jharkhand, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal.
Elsewhere: China, Honkong, Indonesia, Iran, Myanmar, Nepal, Pakistan and Sri Lanka.

7. ***Laccophilus sharpi*** Régimbart, 1889
1889. *Laccophilus sharpi* Régimbart: *Ann. Soc. Ent. Fr.* (6) 9: 151.

Material examined: 1ex.

Distribution: (India): Andaman Island, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, New Delhi, Odisha, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

Elsewhere: China, Myanmar, Nepal, Pakistan and Sri Lanka.

8. ***Laccophilus uniformis*** Motschulsky, 1859
1859. *Laccophilus uniformis* Motschulsky, *Etudes Entomologiques*, 8: 46.

Material examined: 1ex.

Distribution: (India): Andaman Island, Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Manipur, New Delhi, Odisha and West Bengal.
Elsewhere: China, Myanmar and Sri Lanka.

III. Family Hydrophilidae

9. ***Sternolophus rufipes*** (Fabricius, 1792)
1792. *Hydrophilus rufipes* Fabricius: *Entom. Syst.*, 1: 183.

Materials examined: 2exs.

Distribution: (India): Andhra Pradesh, Bihar, Jammu & Kashmir, Maharashtra, Meghalaya, Manipur, Punjab, S. India, Sikkim, Tripura, Uttar Pradesh and West Bengal.

Elsewhere: Sunda Is., Myanmar, Philippines, Japan, Taiwan, Indonesia, Indochina, China and Sri Lanka.

10. ***Berosus pulchellus*** Macleay, 1817
1817. *Berosus pulchellus* Macleay: *Annul. Jav*: 35.

Materials examined: 4exs.

Distribution: (India): Andhra Pradesh, Delhi, Haryana, Karnataka, Kerala, Madhya Pradesh, Meghalaya, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal.

Elsewhere: China, Hong Kong, Indonesia, Japan, Malaysia, Nepal, Philippines, Sri Lanka and Taiwan.

11. ***Regimbertia attenuate*** Fabricius, 1801
1801. *Regimbertia attenuata* Fabricius: *Syst. Eleuth.*, 1: 253.

Materials examined: 3exs.

Distribution: (India): Andhra Pradesh, Andaman & Nicobar Islands, Bihar, Jammu & Kashmir, Manipur, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal.

Elsewhere: Sri Lanka, S. Asia, Philippines, Sunda Is., Australia, Japan, Taiwan, Indonesia, Cambodia, Vietnam and Indochina.

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