# Amphibian Fauna of Dudhwa National Park, Uttar Pradesh, India V.D. Hegde\*

### Introduction

Dudhwa National Park (DNP) is located in Indo-Nepal border of Lakhimpur-Kheri district, which comes under Terai region of the state Uttar Pradesh. DNP is of 680 sq. km. area and along with Krishnapur Wildlife Sanctuary (204 sq. km.) and Katernia Ghat Wildlife Sanctuary (440 sq km) constitutes the Dudhwa Tiger Reserve. There are a number of shallow lakes or pools (Taals), there are diverse perennial sources of fresh water in the park and the Suheli and Mohana streams flow in the DNP will provide the best possible habitats for luxuriant growth of forests and diverse fauna. The most important lakes of the park includes Bankeytaal and Bhaditaal. This park contains natural forests of moist deciduous type and grasslands which will be best suitable habitats for some species of frogs.

Recently, Hegde and Roy (2011) studied the amphibian fauna of Katernia Ghat Wildlife sanctuary and reported 10 species belonging to 9 genera under four families. Sarkar and Tiwari (2006) studied the faunal diversity of Dudhwa Tiger Reserve, Uttar Pradesh and reported 47 species of mammals, 418 species of birds, 35 species of reptiles, 6 species of amphibians and 66 species of fishes. So far, no detailed study has been made on the amphibian fauna of DNP. Hence an attempt has been made to explore the amphibian fauna of DNP based on the materials collected and deposited in Northern Regional Centre, Dehradun and from the earlier scattered literature. Present account contains 17 species under 11 genera belonging to 05 families and 10 species are first report to the Dudhwa National Park. The report of Fejervarya syhadrensis (Annandale, 1919) constitutes the first report not only from the DNP but also for the state of Uttar Pradesh.

### **Materials and Methods**

The present paper is based on the field work carried out in different parts of the National park during evening specially during pre and post monsoon season of the year 1985 to 1987 and deposited in Northern Regional Centre, Dehradun. Random surveys were conducted in all the habitat types to document the amphibian diversity. Visual encounter and random-sampling methods were adopted for collecting amphibians. The amphibians were identified at ZSI, Northern Regional Centre, Dehradun using the diagnostic characters and deposited in the same centre. The species marked by asterisk (\*) were not studied and taken from previous reference. For synonymy details Dinesh et al., (2009) and Frost (2011) is referred. Most of the descriptions were given based on the materials examined and the taxonomy followed according to Frost (2011). The paper accounts on the amphibians collected during the survey including the SVL, family, diagnostic characters, distribution, remarks, few photographs and registration numbers.

Systematic Account CLASS: AMPHIBIA ORDER: ANURA Family: BUFONIDAE

Duttaphrynus stomaticus (Lutken, 1862) - Marbled Toad Duttaphrynus melanostictus (Schneider, 1799) - Common Indian Toad.

### Family: DICROGLOSSIDAE

Euphlyctis cyanophlyctis. (Schneider, 1799) – Skipper Frog. Fejervarya syhadrensis(Annandale, 1919) – Syhadry Frog. Hoplobatrachus crassus (Jerdon, 1854) – Jerdon's Bull Frog. Hoplobatrachus tigerinus (Daudin, 1803) – Indian Bull Frog. Sphaerotheca breviceps (Schneider, 1799) - Indian Burrowing Frog.

### Family: MICROHYLIDAE

Kaloula pulchra Gray, 1831 – Painted Frog. Kaulola taprobanica\*Parker, 1934 – Sri Lankan Kaloula. Microhyla ornata (Dumeril and Birbon, 1841) – Ornate Narrow-mouthed Frog.

*Uperodon globulosus* (Gunther,1864) -Greater Balloon Frog. *Uperodon systoma* (Schneider, 1799) – Lesser or Marbled Balloon Frog.

### Family: RANIDAE

Hylarana erythraea (Schlegel, 1837) – Golden –lined Frog Hylarana tytleri\* Theobald, 1868 – Yellow- striped Frog.

### Family: RHACOPHORIDAE

Chiromantis dudhwaensis Ray, 1992 – Dudhwa Tree Frog. Polypedates maculatus (Gray, 1833) - Chunam or Common Tree Frog.

Polypedates taeniatus (Boulenger, 1906) - Bengal Whipping Froq

### **Species Account**

### Duttaphrynus stomaticus -(Lutken, 1862) -Marbled

Adult size: Medium (SVL up to 80 mm).

Description of the Adult: Yellow-olive brown with or without bold marblings. Upper lip and under parts white. Skin smoother than *B. melanostictus*. Parotid glands not cornified. Tympanum about as large as the eye.

Material examined: 3 exs., Near Bankati Forest Rest House, DNP, 21.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A33; 1 ex., Outside of DNP Forest Rest House Campus, 17.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A39; 2 exs., Belrayan Forest Rest House Compound, Dudhwa NP, 24.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A58; 1 ex., Bankati Forest Rest House Campus, DNP, 25.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A98; 4 exs., near Bhira Forest Rest House, DNP, 08.vii.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A132.

**Distribution** in India: Western and Eastern Himalayas, Assam, West Bengal, Uttar Pradesh, Karnataka, Bihar, Orissa, Maharashtra and Andhra Pradesh (Dinesh *et al.* 2009).

Remark: Very much common near human settlement, under the street light and constitutes the first report from DNP.

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## Duttaphrynus melanostictus (Schneider, 1799) - Common Indian Toad.

Adult size: Large (SVL up to 100 mm).

Description of the Adult: Yellow to olive brown, red or black Marbled or plain. White-grey below with fine marblings. Throat in mature males yellow orange. Cornified parts black or tipped black. Tympanum as large as eye. Two rows of paired dorsal warts on hind neck considerably enlarged. Toes ½ webbed.

Material examined: 1 ex., Outside of Dudhwa FRH Campus, 17.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A38; 1 ex. Bhira FRH Campus, DNP, 26.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A51; 1 ex., Chandan Chauki Forest, DNP, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A53; 1 ex., Belrayan FRH Campus, DNP, 22.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A92; 05 exs., rainwater pool near Dudhwa FRH, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A96; 2 exs., From a hole in the mango tree near Bhira FRH, DNP, 18.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A113; 2 exs., Bankati FRH, in decayed logs of wood, Coll. R. Tilak, 20.xii.1985, Reg. No. NRS/A119; 05 exs., Sathiyana Forest, 10.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A125; 01 ex., Sathiyana Forest, 12.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A12 6.

**Distribution** in India: Throughout India. (Dinesh *et al.* 2009).

Remark: One of the commonest toad in DNP.

## **Euphlyctis cyanophlyctis** (Schneider, 1799) – Skipper Frog.

Adult size: Medium (SVL up to 70 mm).

Description of the Adult: Brown-olive (sometimes greenish or black) with distinct black spots on back and limbs. White below. A white stripe along sides and on rear side of thighs distinct. Pale mid-dorsal stripe absent. Skin generally smooth. Tympanum distinct. Toes fully webbed. Eyes rather dorsally placed. This differs from *Rana hexadactyla* in having thinner thighs. The first finger not longer than the second.

Material examined: 2 exs., Piara Nala near Suheli River, Sathiyana Forest, 15.xii.1985, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A35; 08 exs., FRH near Jorha Nala, 3 km away from Sonaripur, 14.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A48; 02 exs. FRH near Jorha Nala, 3 km away from Sonaripur, 14.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A64; 02 exs., Suheli River, 11 km South of Sonaripur, 16.vii.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A67; 01 ex., Jorha Nala 3 km from Masank Hamb FRH, 27.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A73; 01 ex., Johara Nala, Belrayan to Kila Forest Road, 7.5.km from Kila FRH, 24.vi. 1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no.NRS/A89; 1 ex., Latna Kauwa 2 km South of Dudhwa, 23.vii.1983, Coll. R. Tilak, Reg. no. NRS/A91; 03 exs. Suheli River 1.5 km West from Sathiyana FRH,11.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A101; 01 ex., Suheli River 6 km West from Sathiyana FRH,12.vi.1987, Coll. R. Tilak and



Juvenile of Euphlyctis cyanophlyctis

Pranjalendu Ray, Reg. no. NRS/A112; 09 exs., Mohana river 2 km North of Bankati FRH, 26.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A128; 03 exs., NardahaTaal, 23.xii.1983, Coll. R. Tilak, Reg. no. NRS/A263.

**Distribution** in India: Throughout India. (Dinesh *et al.* 2009).

Remark: Quite common in water bodies and floats on water. Feeds on floating aquatic insects. Tadpoles were common throughout the park.

## Fejervarya syhadrensis (Annandale, 1919) – Syhadry Frog.

Adult size: Medium (SVL up to 40 mm).

Description of the adult: Dorsal surface grayish with a series of black spots. A pale mid-dorsal line is often present. In male, the throat is generally mottled with black. Ventral surface immaculate. Dorsal skin covered with a number of prominent warts and tubercles. A more or less distinct fold present across the head and behind the eyes. Lower parts generally smooth. Posterior part of the belly and the proximal part of the thighs granulate. Head longer than broad. Snout pointed and projecting slightly beyond the mouth. An oval inner and an outer metatarsal tubercle present.

Material examined: 01 ex., Near Rain Water Pool, Dudhwa FRH, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A69; 01 ex., Jorha Nala 3 km from Masank Hamb FRH, 27.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A75; 01 ex., Chandan Chauki, near Railway Station, 23.xii.1985, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A97; 02 exs., around Dudhwa FRH Campus, 17.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no.



### Hoplobatrachus crassus

NRS/A107; 01 ex., Suheli River, 6 Km West of Sathiyana, 12.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A101; 05 exs., Bankati, in decayed logs of wood 20.xii. 1985, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A117; 02 exs., Mohana River 2Km North of Bankati FRH, 26.xi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A121; 01 ex., Sathiyana FRH, 12.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A129; 03 exs., near Dudhwa FRH, Coll. G.S. Arora and Party, 03.iv.1990, Reg. no. NRS/A133.

**Distribution** in India: Karnataka, Maharashtra, Orissa and Uttar Pradesh (Lakhimpur-Kheri).

Remark: Constitutes the first report from DNP as well as from the Uttar Pradesh state.

## Hoplobatrachus crassus (Jerdon, 1854) - Jerdon's Bull Frog.

Adult size: Big (SVL up to 90 mm).

Description of the Adult: Generally confusable with *Hoplobatrachus tigerinus*. Differs from that by darker colouration and being more spotted than streaked. White below. Breeding individuals do not develop the bright yellow as that in *Hoplobatrachus tigerina*. Mid-dorsal stripes less striking; more often absent than present. Smaller than *tigerina*. Skin more warty (vs.thin long folds). Snout and limbs (especially hind) much shorter. Metatarsal tubercle much larger.

Material examined: 01 ex., Within Sal Forest, near DNP FRH, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A26; 01 ex., near Bankati Forest Rest House, 21.vi. 1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A34; 02 exs., near FRH Compound within Sal Forest, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A44; 01 ex., on Chandan Chauki Dudhwa Road, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A62; 03 exs. Kila nearly 1 km West of FRH, 22.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A94.

**Distribution** in India: Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal, Assam, Uttar Pradesh, Madhya Pradesh and Orissa (Dinesh *et al.* 2009).

Remark: Constitutes the first report from DNP.

## Hoplobatrachus tigerinus (Daudin, 1802) – Indian Bull Frog.

Adult size: Big (SVL up to 120 mm).

Description of the Adult: Yellow to olive green (the green disappearing with age) with black spots and stripes. Pale and broad lateral and mid-dorsal bands frequently present. Pale limbs with bold bands, white underparts, males turn yellow during breeding. Vocal sacs cobalt blue large size. Long snout with wide gaps. Prominent tympanum and eyes. Long and powerful limbs. Toes almost fully webbed. Metatarsal tubercle small. Skin on back longitudinally folded.

Material examined: 01 ex., Roadside water bodies on Chandan Chauki Bankati Road, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A46; 01 ex., Chandan Chauki Forest near Rainwater Pool, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A55; 02 exs., Approx. 3 Km. from Sonaripur FRH in JorhaNala, 14.vi. 1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A63; 01 ex., Rainwater pool near Dudhwa FRH, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A100; 01 ex., Dudhwa FRH Campus, 09.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A121; 03 exs., near Bhira FRH, 26.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A276.

**Distribution** in India: Throughout India (Dinesh *et al.* 2009).

Remark: The largest Indian frog, found always near water bodies or inside the water. Gets beautiful colouration during breeding season.

## Sphaerotheca breviceps (Schneider, 1799) - Indian Burrowing Frog.

Adult size: Medium (SVL up to 50 mm).

Description of the Adult: Pale to dark brown-grey above. Pale lateral bands and snout. Skin smooth above or granulate, with some scattered tubercles or short, interrupted longitudinal folds; a strong fold from the eye to the shoulder; belly and lower surfaces of thighs granulate. Light brown or olive above, with darker spots or marblings; often a light vertebral band, and sometimes another on the upper side of each flank; throat of males blackish, of females usually brown-spotted. Stocky build. Blunt nose.



Sphaerotheca breviceps

Metatarsal tubercle well developed, sharp-edged, shovel-shaped. Tympanum 2/3 diameter of eye. First finger much longer than second. Male with two much-developed internal subgular vocal sacs. Vomerine teeth in two oblique groups extending a little beyond the hinder edge of the choanae.

Material examined: 01ex., within Sal Forest near Dudhwa FRH, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A25; 01 ex., near Ranwar Taal nearly 2.5 Km from Behraien FRH, 22.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A27; 02 exs., Sathiyana FRH compound, 10.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A30; 01 ex., Outside of Dudhwa FRH Campus, 17.vii. 1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A40; 02 exs., near Belrayan FRH Compound, 18.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A49; 05 exs., Chandan Chauki Forest, near Rainwater pool, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A56; 01 ex., 2.5 Km North of Belrayan FRH Compound, 21.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A66; 01 ex., In JorhaNala, Sonaripur, Belrayan Road, 11.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A105.

**Distribution** in India: Karnataka, Maharashtra, Punjab, Orissa, West Bengal, Rajasthan, Kerala and Tamil Nadu (Dinesh *et al.* 2009).

Remark: It is seen when come out for feeding and breeding. Constitutes the first report from DNP.

### Kaloula pulchra Gray, 1831 - Painted Frog.

Adult size: Medium (SVL up to 45 mm).

Description of the Adult: Head broader than long; snout rounded, as long as the diameter of the eye; nostrils nearer to the tip of the snout than to eye; tympanum hidden. Fingers free, first shorter than second, tips bearing well developed truncate discs; subarticular tubercles of fingers and toes distinct. Toes one third webbed, tips swollen, inner metatarsal tubercles well developed, large, shovel-shaped; outer metatarsal tubercles small, shovel-shaped. Dorsum rough with scattered warts and greyish with reddish brown patches fringed with black.

Material Examined: 03 exs., Near Bhira FRH campus, 26.vii. 1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A28; 01 ex.(Juvenile), under leaf litter near Dudhwa FRH Compound, 17.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A37; 06 exs., outside grassy field near Dudhwa FRH at night, 15.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A47; 04 Tadpoles on the roadside rainwater pool, Chandan Chauki Dudhwa Road, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A61; 01 ex., outside Dudhwa FRH, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A77.

**Distribution** in India: Meghalaya, Gujarat, West Bengal, Madhya Pradesh, Karnataka, Tamil Nadu and Uttar Pradesh. Elsewhere: Bangladesh, Myanmar, Thailand, China, Singapore, Sumatra, Borneo, Sri Lanka and Sulawesi (Frost, 2008).

Remark: Constitutes the first report from DNP.

### Kaulola taprobanica Parker, 1934 – Sri Lankan Kaloula

Adult size: Medium (SVL up to 45 mm).

Material examined: Nil.

Description of the Adult: Head small, depressed, broader than long; nostrils nearer to the tip of the snout than to the eye; snout short, rounded as long as diameter of the eye; tympanum hidden; fingers free with well developed truncate discs; toes ending obtusely about one third e webbed; subarticular tubercles moderate; two compressed metatarsal tubercles; skin smooth or granular covered with scattered flat tubercles on the back, and on the throat in males; belly smooth around the vent. (Srinivasulu et al 2006).

**Distribution** in India: Assam, Bihar, Karnataka, Madhya Pradesh, Meghalaya, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal.

Elsewhere: Nepal and Sri Lanka (Frost, 2008).

Remark: Not recorded during above mentioned surveys.

## Microhyla ornata (Dumeril and Birbon, 1841) – Ornate Narrow-mouthed Frog.

Adult size: Small (SVL rarely exceeds 25 mm).

Description of the Adult: Golden to earth brown with darker symmetrical markings on back (frequently arrow-shaped). Legs cross barred. White below. Throat black in breeding males. Narrow head and broader trunk is the characteristic. Fingers and toes without dilated tips. Toes without web. Metatarsal tubercles very small.

Material examined: 01 ex., Sathiyana FRH compound, 10.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A29; 09 exs., near Dudhwa FRH compound within Sal Forest, 09.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A43; 01 ex., Chandan Chauki Forest near rainwater Pool, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A54; 01 ex., Stagnant waterbody near Sardanadi, 26.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A114; 11 ex., inside the Sal leaf litter in Dudhwa FRH Campus, 16.xii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A118; 01 ex., near Bhira FRH, 26.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A309.

**Distribution** in India: Throughout India including Andaman and Nicobar Islands. (Dinesh *et al.* 2009).

Remark: Most common ornate frog in moist places during night. Calls were common in the sanctuary. Constitutes the first report from DNP.

## Uperodon globulosus (Gunther, 1864)- Greater Balloon Frog.

Adult size: Medium (SVL up to 60 mm).

Description of the Adult: head small, broader than long; nostrils nearer to the tip of the snout than to the eye; snout rounded and twice as long as the diameter of the eye, projecting slightly beyond the mouth, tympanum hidden; fingers free, without any discs, metatarsal tubercles

indistinct toes short with rounded tips, about one third webbed; shovel shaped metatarsal tubercle; skin smooth to weakly tuberculated on the back.

Material Examined: 01 Adult and 66 Tadpoles, rainwater pool near Belrayan FRH Campus, 24.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A36;01 ex., near Bhira FRH, 26.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A42; 41 tadpoles, Chandan Chauki Forest inside rainwater pool, 16.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A57.

**Distribution** in India: West Bengal, Orissa, Assam, Bihar, Madhya Pradesh, Gujarat, Maharashtra, Karnataka and Kerala (Dinesh *et al.* 2009).

Remark: Constitutes the first report from DNP.

## Uperodon systoma (Schneider, 1799) – Lesser or Marbled Balloon Frog.

Adult size: Medium (SVL up to 60 mm).

Description of the Adult: Olive green-yellow with black marblings. White below. Black throat in breeding males. Smaller size and distinctly marbled colour pattern separate from *Uperodon globulosus*. Metatarsal tubercles less developed.

Material examined: 02 adult and 01 juvenile near Dudhwa FRH compound within Sal Forest, 09.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A41; 03 juveniles, near Belrayan FRH Compound, 24.vii.1986, Coll. R. Tilak and Pranjalendu Ray, Reg. no.NRS/A59.

**Distribution** in India: West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Himachal Pradesh and Uttar Pradesh (Dinesh *et al.* 2009).

Remark: Found during breeding season and can be located near wooded water lodged in the Park.

## Hylarana erythraea (Schlegel, 1837) - Golden-lined Frog

Adult size: Medium (SVL up to 45 mm).

Description of the Adult: Head Pointed, longer than broad; tympanum distinct, two-third of eyes. Fingers free; tips of fingers dilated in to small discs, bearing grooves, separating the upper surface from the lower one. Third finger longest. Hind limbs moderately long; tibiotarsal articulation reaching tip of snout; two-third webbed; tips of toes dilated onto small discs with prominent grooves, separating the upper surface from the lower one.

Material Examined: 34 exs., Ranwar Taal, nearly 2.5 Km North of Belrayan FRH Campus, 27.vi.1987, Coll. R. Tilak and Party, Reg. no. NRS/A20; 05 exs., Jorha Nala nearly 3 Km from Masan khamb, 27.vi.1987, Coll. R. Tilak and Party, Reg. no. NRS/A21; 07 exs., Jorha Nala on Sonaripur Belrayan Road, 18.vi.1987, Coll. R. Tilak and Party, Reg. no. NRS/A22; 03 exs., Kakraha Taal nearly 8 Km S. of Sonaripur FRH, 17.vi.1987, Coll. R. Tilak and Party, Reg. no. NRS/A23.

**Distribution** in India: Assam, Meghalaya, Mizoram, West Bengal and Uttar Pradesh.

Remark: Constitutes the first report from DNP.

## Hylarana tytleri Theobald, 1868 - Yellow- striped Frog.

Adult size: Medium (SVL up to 40 mm).

Description of the Adult: Head elongate; webbing with more than two phalanges free of web Body uniformly greenish with two whitish or yellow lines laterally on back but without middorsal line; two distinct brown lines on inner side of latero-dorsal folds.

Material Examined: Nil.

**Distribution** in India: Assam, Meghalaya, Mizoram, Nagaland, Orissa, Uttar Pradesh and West Bengal, (Dinesh *et al.* 2009).

Remark: Not found during the above mentioned surveys.

## Chiromantis dudhwaensis Ray, 1992 – Dudhwa Tree Frog.

Adult size: Medium (SVL up to 30 mm).

Description of the Adult: These have parallel grey bands that run along the length of the body. The intensity of these bands and its intensity changes with ambient light conditions. Tympanum distinct. Inner metatarsal tubercle present. Third and fourth fingers ¼ webbed. It has fingers that can grasp reeds and scale them at ease. The tadpoles of the species has a transparent body.

Material Examined: 01 ex., Near Dudhwa FRH (Alt. 180 mt.), 17.vii.1986, Coll. R. Tilak and Party, Reg. no. NRS/A16; 12 exs., Belrayan FRH campus (Alt. 185 mtrs.), 22.vii. 1986, Coll. R. Tilak and Party, Reg. no. NRS/A17.

**Distribution** in India: Uttar Pradesh. (Sarkar and Tiwari, 2006).

Remark: DNP is the type locality of this species and found only in the terai region.



Polypedates maculatus

**Polypedates maculatus** (Gray, 1833) Chunam or Common Tree Frog.

Adult size: Medium (SVL up to 75 mm).

Description of the Adult: Colour variable from almost plain white-fawn to yellowish-brown with darker markings. Dark line fron snout through eyes and along the sides. Rear side of hind limbs marbled yellow and brown. White below. Toes ½ webbed. Web extends till about half length of fourth toe. Tympanum distinct (more than ½ diameter of eye).

Material examined: 07 exs., Near Dudhwa FRH Campus, 09.vi.1987, Coll. R. Tilak& Party, Reg. no. NRS/A19; 01 ex., near Belrayan FRH compound, 18.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A50; 01 ex., on Johra Nala Sonaripur Belrayan Road, 11.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A102; 03 exs., near Bankati Forest, 25.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A122; 01 ex., Sathiyana Forest, 12.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A127; 01 ex., near Sonaripur Forest Rest House, 15.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A131.

**Distribution** in India: Throughout India (Dinesh *et al.* 2009).

Remark: Common throughout DNP. Constitutes the first report from DNP.

## Polypedates taeniatus (Boulenger, 1906) - Bengal Whipping Frog

Adult size: Medium (SVL up to 45 mm).

Description of the Adult: Slender smooth-skinned arboreal frog, tip of snout acuminate, nostrils nearer to the tip of the snout than the anterior corner of eye. Vomerine teeth in small groups in between choanae. Tongue broad and fleshy, narrower in front and wider behind. Head length 1.0-1.1 times its width and 3.3 to 3.6 times SVL. Diameter of eye 1.3-1.7 times length of snout; tympanum 1.3-1.5 times eye diameter and internarial distance 1.0-1.2 times interorbital width.

Material Examined: 03 exs., Mohana river 02 Km N. of Bankati FRH, 26.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A130; 07 exs., Sathiyana Forest Rest House, 11.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A188; 02 exs., Sathiyana FRH within tall grasses, 14.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A189; 09 exs., 1 Km W. of Sathiyana FRH, 10.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A190; 04 exs., near Dudhwa FRH compound, 09.vi.1987, Coll. R. Tilak and Pranjalendu Ray, Reg. no. NRS/A232.

**Distribution** in India: Assam and Uttar Pradesh.

Remark: Common throughout DNP.

### Discussion

Present account contains 17 species under 11 genera belonging to 05 families. Eventhough the 10 species are first report to the Dudhwa National Park, the report of *Fejervarya syhadrensis* (Annandale, 1919) from Dudhwa Tiger Reserve constitutes the first report not only from the Dudhwa National Park but also for the state of Uttar Pradesh. Since it is a protected place, and there are a number of shallow lakes or pools (Taals), DNP will provide the best possible habitats for luxuriant growth of amphibians.

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#### References

Dinesh, K. P., Radhakrishnan C., Gururaraja, K.V. and Bhatta, G.K. (2009). An annotated checklist of Amphibia of India with some insights into the patterns of species discoveries, distribution and endemism. *Rec. zool. Surv. India*, *Occ. Paper No.* 302: 1-153 (Published by the Director, Zool. Surv. India, Kolkata).

**Frost, D.R. (2011).** Amphibian species of the world: an online reference, version5.5 (31January,2011) Electronic Database accessible at http://research.amnh.org/vz/herpetology/amphibia/American Museum of Natural History, New York, USA. downloaded on 14.11.2011.

**Hegde, V.D.** and **S. Roy.** (2011). Amphibian fauna of Katernia Ghat Wildlife Sanctuary, Uttar Pradesh, India. *Frog Leg News letter*, (News Letter of Amphibian Network of South Asia): P. 12-17.

**Sarkar.P. and Tiwari, S.K. (2006).** Faunal Diversity in Dudhwa Tiger Reserve, Uttar Pradesh. In: Faunal Diversity of Tiger Reserves in India- J. R. B. Alfred, Ramakrishna and Rajesh Gopal eds. Vol. I: P. 73-98.

**Srinivasulu, C., Srinivasulu Bhargavi and Nageshwar Rao, C.A. (2006)** Amphibian Fauna of Nagarjunasagar Srisailam Tiger Reserve, Andhra Pradesh. *Rec. zool. Surv. India. Occ. Paper no.* 245: 1-57 (4 pp Plates) (Published by the Director, *Zool. Surv. of India*, Kolkata).