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Research Paper

Additional record of Indian Tree Frog *Polypedates maculatus* (Gray, 1830) (Amphibia, Anura, Rhacophoridae) from Chhatarpur district, Madhya Pradesh (India), with systematic account and distribution

Akhlaq Husain***** and Ashwani Kumar Dubey
(Zoological Survey of India, former Scientist-E), 41, Hari Vihar, Vijay Park, Chakrata Road, Dehra Dun, Uttarakhand, India.
Department of Zoology, Shri Rajiv Gandhi Government College, Banda, Sagar district, Madhya Pradesh, India.
*****Corresponding author email: drakhlaqhusain@gmail.com

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Abstract: This paper deals with new record of *Polypedates maculatus*, Indian Tree Frog, belonging to family Rhacophoridae under order Anura and class Amphibia, from village Nahdora under tehsil Rajnagar and district Chhatarpur (Madhya Pradesh, India), with systematic account, distribution and other aspects. Earlier, it was recorded from Raneh Water Falls, natural waterfalls on river Ken, located in Khajuraho (Chhatarpur district).

Keywords: Additional record, *Polypedates maculatus*, Chhatarpur, Madhya Pradesh.

Introduction:

The amphibian fauna of Madhya Pradesh has attracted the attention of various workers during the past (Gupta, 1975; Chanda, 1995a, b, 2002; Pillai, 1991; Dutta, 1992; Das and Chanda, 1997; Saksena et al., 1998; Eric D'Chuna, 2002; Gajbe, 2003a, b; Chandra & Ray, 2007; Ingle, 2020; Prasad et al., 2020). Gupta (1975) studied amphibians of Sagar district, Saksena et al. (1998) recorded *Polypedates maculatus* (Gray, 1830), the Indian Tree Frog, from Gwalior district, Gajbe (2003b) from Dindori district, Chandra and Gajbe (2005) and Chandra and Ray (2007) from Dindori, Jabalpur and Seoni districts but no attention has been paid on amphibians of Chhatarpur district. Recently a good specimen of *Polypedates maculatus*, belonging to family Rhacophoridae under order Anura and class Amphibia, has been sighted inside a house in village Nahdora, tehsil Rajnagar, district Chhatarpur, Madhya Pradesh (India) and recorded here as new for the area and additional find for the district.

STUDY SITE: Village Nahdora, tehsil Rajnagar, district Chhatarpur, Madhya Pradesh, India.

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Location: Chhatarpur district is located at 24.5500°N 79.3527°E with an average elevation of 305 m, in far north-east border of Madhya Pradesh.

Climate: Humid subtropical with hot summers, a somewhat cooler monsoon season and cool winters; heavy rainfall occurs during monsoon season from late June to September.

Flora: *Acorus calamus* (Acoraceae); *Buchanania lanzan*, *Mangifera indica*, (Anacardiaceae); *Holarrhena pubiscens* and *Rauvolfia serntina* (Apocynaceae); *Asparagus racemosus* and *Chlorophytum tuberosum* (Asperagaceae); *Aloe barbadensis* (Asphodelaceae); *Bixa orellana* (Bixaceae); *Commiphora mukul* (Burseraceae); *Terminalia bellirica* (Combretaceae); *Evolvulus alsinoides* (Convolvulaceae); *Cyprus rotundus* (Cyperaceae); *Dioscorea spp* (Dioscoreaceae); *Butea monosperma*, *Cassia fistula*, *Clitoria ternatea*, *Glycyrrhiza glabra*, *Mucuna pruriens*, *Pongamia pinnata*, *Psoralea corylifolia*, *Senna tora* and *Tamarindus indica* (Fabaceae); *Swertia chirayita* (Gentianaceae); *Azadirachta indica* (Meliaceae); *Curculigo orchioides* (Hypxidaceae); *Ocimum americanum* (Lamiaceae); *Woodfordia fruticosa* (Lythraceae); *Helicteres isora* (Malvaceae); *Azadirachta indica* (Meliaceae); *Tinospora Cordifolio* (Menispermaceae); *Argemone mexicana* (Papaveraceae); *Phyllanthus embilica* (Phyllanthaceae); *Plumbago zeylaniea* (Plumbaginaceae); *Embelia ribes* (Primulaceae); *Aegle marmelos* (Rutaceae); *Withania somnifera* (Solanaceae); *Curcuma longa* (Zingiberaceae) and *Tribulus terrestres* (Zygophyllaceae) (en.wikipedia.org-updated).

SYSTEMATIC ACCOUND WITH DISTRIBUTION AND OTHER ASPECTS

***Polypedates maculatus* (Gray, 1830)**

(Figs. 1, 2a & b, 3)

Hyla maculata Gray, 1830. *Ill. Ind. Zool*., 3: pl. 82, fig. 1 (type-locality: Bengal [India and Bangladesh]).

Buergeria maculata, Tschudi, 1838. *Classif. Batr*., 34: 75 (Kuste von Malaba [Coast of Malabar]).

Hyla reynoudi Tschudi, 1838. *Classif. Batr*., 34: 75.

Polypedates maculatus, Guenther, 1859. *Cat. Batr. Sal. Coll. Brit. Mus*.: 78; Gunther, 1864. *Rept. Brit. India*: 428; Venkateswarulu & Murthy, 1972. *Indian J. Zool.*, 13 (3): 129; Inger & Dutta, 1986. *J. Bombay nat. Hist. Soc*., 83: 139; Sarkar, 1991. *Rec. zool. Surv. India*, 89 (1-4): 216; Kanamadi & Jirnakali, 1991. *Zool. Am*., 226: 149-162; Kanamadi & Jirnakali, 1992. *J. Herpetol.*, 26: 329-335; Kanamadi et al., 1993. *Journal of Biosciences*, 18 (2): 239-245; Lillywhite et al., 1997. *Copeia*, 1997 (1): 88-100; Lillywhite et al., 1998. *Journal of Herpetology*, 32 (2): 169-175; Ray, 1999. *Mem. zool. Surv. India*, 18 (3): 1-102; Vasudevan et al., 2001. *Current Science*, 80 (3): 412; Sarkar & Ray, 2002. *Wetland Ecosystem Series*, 4: 111; Sarkar et al., 2004. *State Fauna Series*, 11: 191-192; Chandra & Gajbe, 2005. *Zoos' Print Journal*, 20 (3): 1813; Srinivasulu et al., 2006. *Rec. zool. Surv. India*, Occ. Paper No. 245: 50-52, fig. 27, 28; Chandra & Ray, 2007. Amphibia. In: Fauna of Madhya Pradesh including Chhattisgarh. *State Fauna Series*, 15 (1): 132-133; Hegde & Roy, 2011. *Frog Leg*, No. 15: 16; Bhandarkar et al., 2012. *International Journal of Environmental Rehabilitation and Conservation*, 3 (1): 44; Gururaja & Ramachandra, 2012. *Anuran diversity and distribution in Dandeli Anshi Tiger Reserve*: 18, 21; Hegde, 2012. *Frog Leg*, No. 18: 18-20; Hegde, 2012. *Frog Leg*, No. 18: 18-20; Padhye & Ghate, 2012. Amphibia. In: Fauna of Maharashtra. *State Fauna Series*, 20 (1): 242; Deuti et al., 2014. *Rec. zool.*

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Surv. India, 114 (1): 135-136, pl. IV, fig. 25; Sanyal et al., 2014. *Rec. zool. Surv. India*, Occ. Paper No. 361: 20; Das, 2015. *Journal of Threatened Taxa*, 7 (13): 8029; Dinesh et al., 2015. *Checklist of Amphibia of India, updated till January, 2015*: 9; Gangopadhyay et al., 2015. *J. Exp. Zool. India*, 18 (1): 412; Kumar, 2019. Frog Leg, No. 138: 13, 16; Ingle, 2020. Reptiles & Amphibians, 20 (3): 410; Pankaj, 2020. *International Research Journal of Modernization in Engineering Technology and Science*, 2 (1): 79-81; Sharma & Kumar, 2020. *Frog Leg*, No. 140: 18, 20; Husain & Hasan, 2021. *International Journal of Agricultural and Applied Sciences*, 2 (1): 18-19, figs. 5a, b; Pankaj & Nath, 2021. *International Journal of Zoology and Applied Biosciences*; 6 (2): 87; Pankaj & Nath, 2021. *MOJ Biology and Medicine*, 6 (2): Pankaj & Nath, 2021. *Reptiles & Amphibians*, 28 (1): 107; Gupta & Paul, 2022. *Journal of Global Sciences*, 11 (7): 9376-9377, pl. 1, fig. 4; Hiragond, 2022. *Asian Journal of Conservation Biology*, 11 (2): 283; Pankaj & Nath, 2022. *International Journal of Zoology and Applied Biosciences*, 7 (2): 11; Dinesh et al., 2023. *Checklist of Indian amphibians with common names and their IUCN Conservation Status*: 12; Dinesh et al., 2024. Animalia: Chordata: Amphibia. In: *Fauna of India Checklist*: 15; Tripathi et al., 2025. *International Journal of Fauna and Biological Studies*, 12 (2): 6.

Polypedates biscutiger Peters, 1871. *M. B. Ak. Berl*.: 649.

Rhacophorus maculatus, Boulenger, 1882. *Cat. Batr. Sal. Coll. Brit. Mus.* (Ed. 2): 83; Boulenger, 1890. *The Fauna of British India, including Ceylon and Burma, Reptilia and Batrachia*: 475-476; Boulenger, 1889. P. Z. S.: 30.

Rhacophorus maculatus(partim), Boulenger, 1890. *Cat. Batr. Sal*.: 83.

Rhacophorus acanthostomus Werner, 1901. *Zool. Anz*., 24: 98 (type-locality: Ratnapura, Ceylon).

Rhacophorus (*Polypedates*) *maculatus*, Bourret, 1927. *Fauna Indochina*, 3: 264.

Rhacophorus (*Rhacophorus*) *acanthostomus*, Ahl, 1931. *Das Tierreich*, 55: 120, 137.

Rhacophorus (*Rhacophorus*) *maculatus*, Ahl, 1931. *Das Tierreich*, 55: 133; Dubois, 1987. *Alytes*, 5: 77.

Rhacophorus leucomystax maculatus, Wolf, 1936. *Bull. Raffles Mus*., 12: 181.

Polypedates (*Polypedates*) *maculatus*, Mahony et al., 2024. *Vert. Zool*., *Senckenberg*, 74: 256.

Common Names: Big-headed Whipping Frog, Chunam Frog, Common Tree Frog, Common Indian Tree Frog, Indian Tree Frog, Spotted Tree Frog, Spotted Whipping Frog or Tree Frog.

Classification: Class Amphibia Linnaeus, 1758, order Anura (Anoures) Dumeril, 1805, family Rhacophoridae Hoffman, 1932, subfamily Rhacophorinae Hoffman, 1932, genus *Polypedates* Tschudi, 1838.

Sighting: 1example; village Nahdora, tehsil Rajnagar, district Chhatarpur, Madhya Pradesh, India; 10.x.2024; by 2nd author (AKD).

Diagnostic Features:

Head: Head broader than long to almost equal in length, snout pointed with a rounded tip, projecting slightly beyond mouth, longer or slightly about as long as diameter of orbit; nostrils nearer snout tip than to eye rim; interorbital space slightly broader than upper eye-lid; tympanum distinct, more than half, nearly 1/3rd or about 3/4th of eye diameter; canthus rostralis (angular ridge between eye and nostril) distinct; loreal region concave; vomerine teeth arranged in two more or less oblique rows.

Teeth: Vomerine teeth arranged in two, more or less oblique, series between choanae (internal nostrils).

Limbs: Fingers with rudimentary web and lateral fringe, tips with large adhesive discs with circum-marginal grooves, 1st

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sub-equals 2nd, subarticular tubercles prominent, glandular supernumerary on ventral aspects of metatarsals, palmer tubercle elongated; toe long, thin, with tips having gluey horse-shoe-shaped discs with circum-marginal grooves; subarticular tubercles of fingers and toes moderate and distinct; toes 1/2nd, 2/3rd or 3/4th webbed, web extending till about half the length of 4th toe; two phalanges of 4th toe free distally, a distinct ovoid inner metatarsal tubercle present, outer metatarsal tubercle absent; tibio-tarsal articulation reaching eye or in between eye or snout tip; heels overlap when tibiae folded at right angles to long axis of body.

Webbing not extending up to discs, two phalanges of 1st, 2nd and 3rd toes free except for a minor fringe, three phalanges of 4th toe without webbing, only 5th toe webbed up to base of disc; toes nearly 3/4th webbed, two distal phalanges of 4th toe free.

Skin: Smooth above, granulate on belly and under thighs, a supra-tympanic fold extending from eye to behind shoulder, free on head, anal fold present.

Colouration: Body colour variable, plain white-fawn, brownish, yellowish-brown, yellowish, greenish or greyish above with darker spots or markings, rarely with an hour-glass-shaped marking on back of head and front of back, frequently with W-shaped inter-orbital mark; loreal and temporal regions dark; with a light-line on upper lip; dark line from snout through eyes and along sides; limbs cross-barred, hind side of thighs lighter with round yellow and brown spots, usually separated by a dark brown or purplish network; dull whitish or yellowish below.

Sexual Dimorphism: Males with internal vocal sacs.

Size: About 7-8 cm in body length (Boulenger, 1890); SVL 43-68 mm (Sanyal et al., 1992); 11-62 (Sarkar, 1991); SVL 42-53 mm (Ray & Tilak, 1995); SVL 35-65 mm (Chanda, 2002); SVL 17-73 mm (Sarkar et al., 2004); SVL 33-63 mm (Chandra & Ray, 2007); SVL 30-85 mm (Srinivasulu et al., 2006); SVL 35-85 mm (Ingle, 2011); SLV up to 70 mm (Hegde, 2012); SVL male 35-55 mm, female 50-75 mm (Deuti et al., 2014); SVL males 34-57 mm, females 44-89 mm (Husain, 2015); SVL 35-65 mm (Ingle, 2020); SVL males 43.3-46.9 mm, females 60.3 mm and unsexed individuals 38.8-51.9 mm (Prasad et al., 2020); SVL 5.1 cm, width 3.8 cm and weight 20 g (Gupta and Paul, 2022).

Tadpoles: Measure up to 44 mm in length; brownish or yellowish an irregularly mottled with dark brown pigments; tail acutely pointed, depth of its muscular part more than half of total depth, tail crest transparent and equal through; spiracle opening directed backwards and upwards.

Altitudinal Range: Up to 700 m (Ray, 1999); plains in general (Chandra & Ray, 2007); sea level up to at least 1,500 m (Husain, 2015; www.iucnredlist.org); below 3,000 m (Frost, 2024).

Distribution:

India:

Madhya Pradesh:

Chhatarpur district: Rane Water Falls, Khajuraho (Chandra & Ray, 2007); Panna Tiger Reserve, partly (Husain & Hasan, 2021); village Nahdora, tehsil Rajnagar (present record).

Elsewhere in Madhya Pradesh: Chhindwara, Dhar, Dindori, Gwalior, Jabalpur, Hoshangabad, Mandla, Panna, Raisen, Ratlam, Satna, Seoni, Shahdol, Sheopur, Sidhi, Ujjain and Umaria districts; Panna Tiger Reserve, Panna & Chhatarpur districts; Pench Tiger Reserve, Seoni district.

Rest of India: Andhra Pradesh (Nagarjunasagar, Srisailam Tiger Reserve, Eastern Ghats); Arunachal Pradesh (East Siang, Tirap and West Kameng districts), Bihar (Chhota Nagpur: Dhanbad, Palamau, Ranchi and Singhbhum districts; Aurangabad and Gaya districts),

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Chhattisgarh (Bastar, Bijapur, Bilaspur, Dantewada, Dhamtari, Jashpur, Kanker, Kondagaon, Narainpur and Sukma districts; Indravati Tiger Reserve, Bijapur district; Kanger Valley National Park, Bastar district), Delhi, Goa (North and South Goa districts), Gujarat (Dang district), Haryana, Himachal Pradesh, Jharkhand, Karnataka (Bengaluru Urban and Rural and Shivamogga districts; Dandeli Anshi Tiger Reserve, Uttara Kannada district; Western Ghats; Kadatoka village, Uttara Kannada district), Kerala (Kollam and Thrissur districts), Maharashtra (Chandrapur, Malva, Pune, Raigad, Ratnagiri, Sangli, Sindhudurg and Thane districts; Navegaon National Park, Gondia district; Western Ghats and Chandgad Taluka, Kohlapur district), Odisha (Damanjodi, Koraput district and Rayagada district), Puducherry, Punjab, Rajasthan (Durganour district), Sikkim, Tamil Nadu (Kalakad-Mundanthurai Wildlife Sanctuary; Western Ghats; Chennai district), Telangana (Medak district), Uttarakhand (Almora, Dehra Dun, Haridwar, Pauri and Uttarkasi districts; Gobind Pashu Vihar; Rajaji Tiger Reserve), Uttar Pradesh (Katarniaghat Wildlife Sanctuary, Behraich distirct; Gardhi village, Gonda district; Dudhwa Tiger Reserve, Lakhimpur-Kheri district) and West Bengal (Bankura, Darjeeling, Kolkata, Midnapur, Purba Bardhaman, Purulia and South 24 Pargana districts).

Elsewhere: Bangladesh, Bhutan, Myanmar, Nepal and Sri Lanka.

Habitat: Generally found inside moist areas (entering wash rooms of human dwelling where it finds moist atmosphere), trees, bushes, shrubs , burrows on walls of old houses and roofs of thatched village huts and tree holes.

Diet: Feeds on insects and their larvae.

Call: Loud '*ta-ta-tak-tak*' or low rumbling '*da-da-da-da*' or '*do-do-do-do*' (Hegde & Roy, 2011; Hegde, 2012).

Breeding: Breeds during monsoon season; female lays eggs in pendulous foam-nests, measuring 7-11 cm in diameter, overhanging water body (ponds or ditches) in which tadpoles fall and develop (Deuti e al., 2014).

Kanamadi & Jirnakali (1991, 1992) studied seasonal changes in its gonads and Kanamadi et al. (1993) studied the vocalization of it.

Nature/Behaviour: Nocturnal; during rest time keep limbs tucked in well under body. Lillywhite et al. (1997, 1998) studied its whipping and basking behaviours.

Conservation Status: IUCN Red List-Least Concern.

Threats: Habitat pollution by agrochemicals and some flies which lays their eggs in frog egg-nests affect tadpole development (www.iucnredlist.org).

Remarks: Records of this species from north-east India (Arunachal Pradesh, Assam, Meghalaya, N. West Bengal) and central Bhutan, actually belong to *Polypedates himalayensis* (Annandale, 1912), the Himalayan Tree Frog (Gogoi & Sengupta, 2017).

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References:

Gupta, U. S. (1975) Amphibians of Sagar (M. P.) and their habitat. *Proc. 63rd Session of Indian Science Congress Association*, Abstracts, 202.

Chanda, S. K. (1995a) Amphibia. In: Fauna of Indravati Tiger Reserve. Fauna of Conservation Aras, 6, 71-75.

Chanda, S. K. (1995b) Amphibia. In: Fauna of Kanha Tiger Reserve. Conservation Area Series, 7, 47-49.

Chanda, S. K. (2002) Handbook Indian Amphibians: 273 pp., 39 pls.

Pillai, R. S., Ravichandran, M. S. and Tamilarasan, P. (1991) Herpetological survey of Narmada valley- Madhya Pradesh. 2. Amphibia of Narmada valley. Cobra, 5, 12-14, 18-19.

Dutta, S. K., 1992. Amphibians of India: updated species list with distribution record. Hamadryad, 17, 1-13.

Das, I. and Chanda, S. K. (1997) *Philautus sanctisilvaticus* (Anura: Rhacophoridae), a new frog from the scared groves of Amarkantak, Central India. Hamadryad, 22 (1), 21-27.

Saksena, D. N., Sarkar, A. K. and Tiwari, K. K. (1998) Anuran fauna of Gwalior and Chambal Divisions of Madya Pradesh, India. J. Hydrobiol., 4 (1), 25-27.

Eric D'Chuna, E. P. (2002) Range extension of *Rana malabarica* (Bibr.) in Madhya Pradesh. J. Bombay nat. Hist. Soc., 99 (2), 332-333.

Gajbe, P. (2003a) New record of Painted Frog *Kaloula taprobanica* Parker from Shahdol district, Madhya Pradesh. Cobra, 52, 17-18.

Gajbe, P. (2003b) Herpetofauna diversity of Dindori district, Madhya Pradesh. Cobra, 54, 6-8.

Chandra, K. and Ray, S. (2007) Amphibia. In: Fauna of Madhya Pradesh including Chhattisgarh. State Fauna Series, 15 (1), 113-134.

Ingle, M. (2020) Herpetofauna of the Amarkantak Plateau in central India. Reptiles and Amphibians, 27 (3) 397-410 (401).

Prasad, V. K., Gautam, B. K., Gupta, S. K., Murthy, R. S., Ramesh, K., Shinde, A. D. and Vishnu, J. B. (2020) Identification of anuran species diversity of the Panna Tiger Reserve, Central India, using an integrated approach. Zootaxa, 4851 (3), 450-476.

Chandra, K. and Gajbe, P. U. (2005) An inventory of herpetofauna of Madhya Pradesh and Chhattisgarh. Zoos' Print Journal, 20 (3), 1812-1819. (1813).

Srinivasulu, C., Srinivasulu, B. and Rao, C. A. N. (2006) Amphibian fauna of Nagarjunasagar Srisailam Tiger Reserve, Andhra Pradesh. Rec. zool. Surv. India, Occ. Paper No. 245, 1-57 (50-52, fig. 27, 28).

https://en.wikipedia.org/wiki/Flora_and_fauna_of_Madhya_Pradesh

Hegde, V. D. and Roy, S. (2011) Amphibian fauna of Katerniaghat Wildlife Sanctuary, Uttar Pradesh. Frog Leg, No. 15, 12-17.

Hegde, V. D. (2012) Amphibian fauna of Arecanut plantation in Kadatoka (Uttara Kannada) Western Ghats, Karnataka. Frog Leg, No. 18, 10-20 (18-20).

Sarkar, A. K. (1991) The amphibians of Chota Nagpur (Bihar), India. Rec. zool. Surv. India, 89 (1-4), 209-217.

Kanamadi, R. D. and Jirnakali, C. S. (1992) Testicular activity in *Polepedates maculatus* (Rhacophoridea): Seasonal changes in spermatogenesis and fat bodies. J. Herpetol., 26, 329-335.

Kanamadi, R. D., Schneider, H., Hiremath, C. R. and Jirnakali, C. S. (1993) Vocalization of the tree frog *Polepedates maculatus* (Rhacophoridea). Journal of Biosciences, 18 (2), 239-245.

Lillywhite, H. B., Mittal, A. K., Garg, T. K and Agrawal, N. (1997) Wiping behavior and its ecophysiological significance in the Indian Tree Frog *Polypedates maculatus*. Copeia, 1997 (1), 88-100.

Ray, P. and Tilak, R. (1995) Amphibia. In: Fauna of Rajaji National Park. Fauna of Conservation Areas, 5, 55-75.

Sarkar, A. K., Biswas, M. L. and Ray, S. (1992) Amphibia. In: Fauna of West Bengal. Part-2. State Fauna Series, 3, 67-100.

Sarkar, A. K., Das, S. and Ray, S. (2004) Amphibia. In: Fauna of Bihar (including Jharkhand), Paer-1. State Fauna Series, 11, 181-193.

Deuti, K., Sethy, P. G. S. and Ray, S. (2014) Amphibians of the eastern ghats. Rec. zool. Surv. India, 114 (1), 119-144.

Kumar, R. (2019) Amphibian diversity of Rajgir Wildlife Sanctuary, Bihar, India. Frog Leg, No. 138, 12-17 (13, 16).

Boulenger, G. A. (1890) *The Fauna of British India, including Ceylon and Burma*, *Reptilia and Batrachia*: xviii + 460 pp. Taylor and Francia, London.

Ingle, M. (2011) Herpetofauna of Naglok region, Jashpur district, Chhattisgarh. Rec. zool. Surv. India, 111 (4), 79-96.

Ingle, M., 2012. *Inventorization of herpetofaunal diversity of Madhya Pradesh*. Technical Report.

Husain, A. (2015) Amphibians of Doon Valley (Dehra dun, Uttarakhand) with their systematics, distribution, ecology, conservation status and threats. In: *Aquatic Ecosystem*: *Biodiversity, Ecology and Conservation*, 217-229.

Frost, D. R. (2024) Amphibian Species of the World: An Online Reference. Version 6.2. Electronic Database accessible at https://amphibiansoftheworld.amnh.org /index.php. American Museum of Natural History, New York, USA. doi.org/10.5531/db.vz.0001

Gupta, A. and Paul, N. (2022) Occurrence of amphibans (Anurans) in Gardhi village, Gonda, Uttar Pradesh. Journal of Global Sciences, 11 (7), 9474-9382. (9376, pl. 1, fig. 4).

Ray, P. (1999) Systematic studies on the amphibian fauna of the district Dehradun, Uttar Pradesh, India. Mem. zool. Surv. India, 18 (3), 1-102.

https://www.iucnredlist.org/species/17426 5377/174451114#geographic-range

Husain, A. and Hasan, W. (2021) Review and updating: Anurans (Amphibia) of Bihar and Jharkhand, India, with some new records from Jehanabad (Bihar) and their role as potential biological controllers. International Journal of Agricultural and Applied Sciences, 2 (1), 1-23.

Kanamadi, R. D. and Jirnakali, C. S. (1991) Ovarian activity in the tree frog *Polepedates maculatus*: A qualitative and quantitative study of ovarian cycle and its relation to oviduct and fat body cycle. Zool. Am., 226, 149-162.

Lillywhite, H. B., Mittal, A. K., Garg, T. K.; Das, I. (1998) Basking behavior, sweating and thermal ecology of the Indian Tree Frog *Polypedates maculatus.* Journal of Herpetology, 32 (2), 169-175.

Gogoi, J. and Sengupta, S. (2017) Validity of the nomen *Polypedates himalayensis* (Annandale, 1912). In: Das, A. (ed.), *Diversity and Ecology of Amphibians of India*. ENVIS Bulletin: Wildlife & Protected Areas, 19, 33-48. Wildlife Institute of India, Dehradun, India.

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Figure 1. ***Polypedates maculatus***

Figure 2a. ***Polypedates maculatus***

Figure 2b. ***Polypedates maculatus***

Figure 3. ***Polypedates maculatus***