

Survey of Amphibian fauna from Poladpur tehsil, Western Ghats, Maharashtra, India

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ABSTRACT

We surveyed the selected spots of western part of Poladpur Tehsil of Raigad district from June to November 2016 to 2017 during rainy season. Western Ghats of India is well known for biodiversity hotspot. These was preliminary survey of Poladpur tehsil of Raigad district of Western Ghats. The selected spots, Karje, Umarath, kapda, Poladpur and Kangori are well known biodiversity hotspots in Poladpur Tehsil. These are located in the western ghat and the ecological parameters viz. rain fall, temperature, humidity etc. are favorable for inhabitations of amphibians. We reported 15 species of amphibians belongs to 5 families 6 genera in Poladpur Tehsil of 342 species of amphibian found in India belongs to 15 families.

Key words: Survey, Amphibian fauna, Poladpur tehsil.

INTRODUCTION

India has two well-known biodiversity hotspots amongst the 25 biodiversity hotspots of the world. Out of two, Western Ghats is one of the well-known biodiversity hotspot in India. As far as biodiversity is concerned the southern part of Western Ghats is more explored then the northern Western Ghats, Maharashtra. As far as Estern part of Poladpur Tehsil is concerned Karje,Umarath, kapada and Poladpurare well known biodiversity hotspots. Due to abundant endemic and endangered species of wild fauna reported inPoladpur tehsil ,Kangori and Lohare from Poladpur Tehsil are well known for the endemic and endangered wild life faun a especially for amphibians.

Poladpur Tehsil in Raigad district of Maharashtra lies between latitude 17° 55' and 18°05' N and longitude 73°50' and 74°30' E. The famous Karje located at latitude 17°55'N and longitude 73° 05'E, Umarath and kapada situated at laitude17°20' N and longitude 73° 15' E . The Poladpur and Kangori located at latitude 17°55' and 18° 00'N and longitude73°25'E and 73°30'E respectively. The selected spots covered with grassland, semi evergreen forest and deciduous forest. Altitude of Kangori is 754 m above the sea level and an average rainfall 30380mm/year. Average temperature was 26°C. Biodiversity of frogs and caecilians were least known. Hence, the attempt has been made on fauna of amphibian from Poladpur Tehsil.

Survey carried out in Poladpur Tehsil of Raigad district from June to November 2016 to 2017 during rainy season. Karje, Umarath, kapda, Poladpur and Kangori are well known biodiversity hotspots in Poladpur Tehsil. The ecological parameters viz. rain fall, temperature, humidity etc. are favourable for inhabitations of amphibians. We reported 15 species of amphibians belongs to 5 families 6 genera in Poladpur Tehsil of 342 species of amphibian found in India belongs to 15 families.

Western Ghats of India is one of the 25 biodiversity hotspots in world. The current status of India's biodiversity suggests that amongst vertebrate's highest endemism in amphibians and reptiles. The Western Ghats with heavy rainfall, moderate temperature, well grown vegetations with short dry season, provide the ideal environment for the occurrence of the amphibians. Frogs, toads and Caecilians are more explored in South and Central Western Ghats of India than northern Western Ghats of Maharashtra, might be enrich the frogs, toads and caecilian diversity. The survey on Indian amphibian fauna has been developed by many herpetologists such as Taylor (1968), Danial (2002), Sekar (1999), Pillai (1990), Pillai and Ravichandran (1999), Daniel (1996), Mayer et al (2000), Padhye et al (2000), Giri (2004), Gururaja (2011), Dinesh et al (2011) and Dinesh et al (2012).

MATERIALS AND METHODS

Surveys were carried out in different parts of Poladpur tehsil Western Ghats to study of amphibian fauna, mostly Karje, Umarath, kapada, Poladpur and kangori at fifteen days interval mostly during night in rainy season in 2016-2017. Surveyed various habitats such

as open land, dense forest, mixed forest and cultivated fields such as groundnut, paddy and nachani. Studies diversity of amphibians especially Frogs, Toads and Caecilians particularly during night at ponds, shallow streams, hilly waterfalls, and moist places nearby rivers, brooklets, ponds, swamps and its nearby moist and shadow places. Only sample specimen of unknown species carried out in laboratory for further identification.

During survey used the Nikon Camera for photographs of frogs, toads and caecilians; Head torches for light, Plastic bottles for only collecting unknown sample specimen. After getting photographs frogs, toads and caecilians were released in their natural habitat. Caecilians especially Ichthyophis, was encountered by digging the soil up to depth 10 to 30 cm, rolling the stones, logs, leaf litters and also surveyed the road accident specimens.

RESULTS AND DISCUSSION:

During this survey, we reported 15 species of amphibians belongs to 5 families 6 genera in Poladpur Tehsil of 342 species of amphibian found in India belongs to 15 families. Padhye and Ghate (2002) reported 43 species which are distributed in six families from the Maharashtra.

Table 1: Checklist of Amphibian Fauna of Poladpur Tehsil of Raigad district, Maharashtra.

S.N.	Amphibian species	
A) Family :-Ranidae Gray 1825		
I	Genus: <i>Rana</i> Linnaeus 1758	
	1. <i>Ranatigerina</i> Daudin, 1802	Least Concern
	2. <i>Ranaxadactyla</i> Lesson, 1834	Least Concern
	3. <i>Ranqbeddomi</i>	Least Concern
	4. <i>Ranacyanophlyctis</i> Schneidr, 1799	
	5. <i>Rananilagirica</i>	
	6. <i>Rana temporalis</i> Gunther, 1864	Least Concern
B) Family:-Rhacophoridae Hoffman 1932		
II	Genus: <i>Polypedates</i> Tschudi 1838	
	7. <i>Polypedates maculatus</i> Gray, 1834	Least Concern
	8. <i>Polypedates leucomystax</i> Gravanhorst, 1829	
C) Family:-Bufonidae Gray 1825		
III	Genus: <i>Bufo</i> Laurenti 1768	
	9. <i>Bufometanosticus</i> Schneider, 1799	Least Concern
	10. <i>Bufostomaticus</i> Lutken, 1862	Least Concern
	11. <i>Bufobeddmii</i> Gunther 1799	Least Concern
D) Family:-Microhylidae Gunther 1858		
IV	Genus: <i>Microhyla</i> Tschudi 1838	
	12. <i>Microhyla ornate</i> Dumeril and Bibron, 1843	Least Concern
V	Genus: <i>Uperodon</i> 13. Dumeril and Bibron, 1843	Least Concern
	14. <i>Uperodon globulosus</i> Gunter, 1864	Least Concern
F) Family:-Ichthyophide Taylor 1968		
VI	Genus: <i>Ichthyophis</i> Fitzinger 1826	
	15. <i>Ichthyophis bombayensis</i> Taylor, 1960	Least Concern

Sawarkar and kasable (2009) reported 10 species from Nagpur city Maharashtra. Padhye and Ghate (2002) reported 30 species which are distributed in six families from the Pune district, Maharashtra. Prasad, salvi and Jadhav(2013) reported 37 species distributed in 8 families and 14 generas from satara district .

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