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New Locality Record of *Chamaeleo zeylanicus* Laurenti, 1768 from Ramnagar II, Purba Medinipur, West Bengal, India

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Abstract:

This article is based on the field observation of the species *Chamaeleo zeylanicus* Laurenti, 1768, the only Indian species which is very rare in West Bengal. It is first time reported to have been seen from Ramnagar II block in Contai sub division of Purba Medinipur. The authors observed 5 specimen in several village of Ramnagar II block (21.7338°N 87.5501°E) in Contai sub division of Purba Medinipur district in the West Bengal state of India. Taxonomic status, distribution and diagnosis of the species has been done on the basis of present observation.

Keywords: *Chamaeleo zeylanicus*, Taxonomic status and distribution, Purba Medinipur

1. Introduction

Chamaeleo zeylanicus has been mentioned earlier mainly from the peninsular part of India and Sri Lanka (Trench, 1912; Biswas and Achariyo, 1977; Singh, 1986). The species shows a fragmente distribution pattern in South Asia (Boulenger, 1890; Parashad, 1914; Smith, 1935; Deraniyagala, 1953; Viyas, 2002). The distribution of *Chamaeleo zeylanicus* with further range extensions has been described by Singh (1986) and includes areas to the south and west of the Gigantic plains in north India. Biswas and Achariyo (1977) reported the specimen from Oddisha.

We suddenly observed a green colored lizard like specimen crossing the Depal-Majna-Contai road on 7th February 2014. We collected the live specimen and took some photographs, we set free the specimen to the road side tree. After that we make a survey of *Chamaeleo zeylanicus* in Ramnagar II from February 2014-July 2014 by the help of local people. During the survey we encountered 5 (five) *Chamaeleo zeylanicus* in several village of Ramnagar II, Purba Medinipur, which had not been reported before by any earlier worker.

The objective of this survey was to locate the species in Ramnagar II and also its distribution pattern within the area. We found it at Depal, Manikabasan and Belbani.

It is observed that the frequent distribution pattern of this lizard is associated with the distribution of *Pandanus fascicularis*, *Anacardium occidentale* and *Bambusa tulda* found in this region of Ramnagar II, which can provide food (insect) and safe shelter to this lizard. We collect some live specimen for taking some data, photographs and video script. After that we set free these specimen to their natural habitat. On the basis of observation the specimen is diagnosed as *Chamaeleo zeylanicus*.

2. Result

2.1. Systematic Position

- Kingdom: Animalia
- Phylum: Chordata
- Class: Reptilia
- Order: Squamata
- Suborder: Iguania
- Infraorder: Acrodonta
- Family: Chamaeleonidae
- Genus: *Chamaeleo*
- Species: *zeylanicus*

2.2. Synonym

- *Chamaeleo zeylanicus* LAURENTI 1768: 46
- *Chamaeleo coromandelicus* FITZINGER 1843
- *Chamaeleo vulgaris* var. *marmoratus* GRAY 1865
- *Chamaeleo ceylonicus* - STOLICZKA 1872 (n. emend. pro *Chamaeleo zeylanicus* LAURENTI 1768)
- *Chamaeleo zeylanicus* — TILBURY & TOLLEY 2009
- *Chamaeleo zeylanicus* — TILBURY 2010: 539
- *Chamaeleo* (*Chamaeleo*) *zeylanicus* — NECAS 1999: 113

2.3. Type locality

Ceylon (= Sri Lanka), restricted by Mertens 1969.

2.4. Survey Report

SL.NO	VILLAGE	SEX	LENGTH	WEIGHT	CURRENT HABITAT	NOTICABLE FACT
1.	Depal	M	14 cm	120 gm	Grass land	green color with black bands
2.	Manikabasan	M	17 cm	175 gm	Cashew tree	Moulting occurs
3.	Manikabasan	F	17 cm	190 gm	Bamboo tree	green color with white and yellow blotches
4.	Belbani	M	8 cm	50 gm	Bamboo tree	Light green color
5.	Belbani	F	18 cm	200 gm	Cashew tree	green color with orange and yellow blotches

Table 1

3. Diagnosis

Indian Chameleon (*Chamaeleo zeylanicus*) is famous for its color changing nature. They can change color rapidly for communication (visual signal of mood and territory, aggression, mating behavior) with other Chameleons and for controlling body temperature by changing to dark color to absorb heat. Generally males are green with turquoise, green and/or black bands. Females are also green with orange, white and sometimes, yellow blotches. Male with little bumps (tarsal spur) on the back of their hind legs and the females one without it. They can focus each of the two eyes in different direction and observe two different objects at a time. Mostly arboreal, prehensile tail acts as a fifth leg to support their body by grasping objects. Digits are arranged in bundles of two and three, in the hand the inner bundles is formed of three, outer of two digits. It is the reverse in the foot. Another interesting thing about *Chamaeleon* is their unique robotic walk and extremely long tongue. Tongue tip is a bulbous ball of muscle and having sticky saliva. When the tongue hits a prey it rapidly forms a suction cup around the prey and draws the prey into the mouth. They defend themselves by making a unique hissing sound. Teeth are small, pointed (acrodont teeth), useful to hold insect.



Figure 1: Green color Male *C.zeylanicus* at the study area

Figure 2: Yellow color Male *C.zeylanicus* at the study area



Figure 3: Mouling stage of male *C.zeylanicus* at the study area

Figure 4: Tarsal spur of male *C.zeylanicus*

Figure 5: Young *C.zeylanicus*



Figure 6: Male *C.zeylanicus* change its color (green to yellow) when interacted with female *C.zeylanicus*

Figure 7: prehensile tail

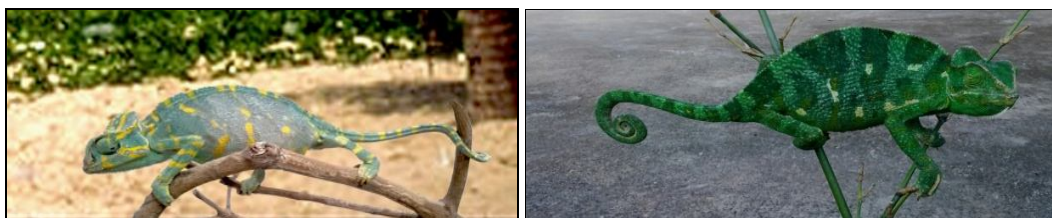


Figure 8: Female *C.zeylanicus* at the study area

Figure 9: Female *C.zeylanicus* at the study area



Figure 10: Male *C.zeylanicus* at study area

Figure 11: Female *C.zeylanicus* at the study area

4. Distribution

Sri Lanka, India (Gujrat, Southern plains of the Ganges), Pakistan.

5. Acknowledgement

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6. Threats

Unfortunately deforestation and uncontrolled urbanization has resulted in habitat loss and indiscriminate use of pesticides on cashew tree has reduced abundance of this lizard particularly in this area.

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