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Life History of Red Vented Bulbul *Pycnonotus cafer* (*Linnaeus*, 1766) bird from egg laying to first flight.

Bhole P. N.

Department of Zoology, Kasturbai Walchand College, Sangli (M.S.). Email- pratibha28283@gmail.com

Abstract

The present investigation deals with the breeding performance of the Red Vented Bulbul (*Pycnonotus cafer*) at the Tehsil Walwa, District Sangli, Maharashtra.

Breeding activity were observed from egg laying to first flight in the study area

from 29 August 2021 to 19 September 2021. Nest was constructed within 4 days in leafy shrub of *Hibiscus rosa sinensis*. The height of nest was 1.5 meter from ground. Incubation period of Red Vented Bulbul was 9 to 10 days and growth period required 10 days.

Keyword- Red Vented Bulbul, Nesting, Egg laying, Hatching, Fledging.

Introduction

Red Vented Bulbul is a bird of cultivated lands, open forests and plains. The single most important factor that determines the distribution of the species is vegetation (Robert, 1991; Lepage, 2007). The Pycnonotidae is the family of bulbul bird and is the largest group of passerine birds with about 138 species. This family is widely distributed from Africa, South Asia, Islands of Western Indian Ocean to Madagascar (Sibley & Monroe, 1990; Fishpool & Tobias, 2005).

Red list status of Red Vented Bulbul (*Pycnonotus cafer*) is categorized least concern (IUCN Red List of threatened species, 2020). Many factors influences the breeding biology of birds such as availability of food, predation risk, selection of site for the nest, nesting materials and landscape (Newton ,1998). Many investigations have been carried out on breeding aspects of Red Vented Bulbul (Ali, 1930; McCann, 1931; Baker, 1932; Dutt, 1932; Dixit,1963; Dhondt, 1977; Lamba, 1968; Vijayan, 1980; Watling,1983).

Many studies reported that nesting and breeding parameters such as nest position on plant, nest structure, clutch size, hatching success and fledging rate differ due to landscapes and habitats (Bhatt & Kumar, 2001; Brooks, 2013; Manju & Sharma, 2013; Zia et al., 2014).

Materials and methods

The present investigation was conducted in Tehsil Walwa, District Sangli, Maharashtra. Nest and nesting site were observed from 29 August 2021 (before egg laying). Nesting behaviour in terms of nesting characteristics like nesting plant, nest height from ground were recorded with measuring tape. During observations photographs were taken with the help of Redmi 16MP camera.

Breeding behaviour was recorded daily for about 22 days from day of egg laying to first flight. Breeding behaviours like hatching time period and fledging time period were recorded. Other activities of red vented bulbul were also observed during study period.

Results

Results of present study showed that the breeding activity of Red Vented Bulbul was observed from end of August (2021) to end of September (2021) in Tehsil Walwa, District Sangli, Maharashtra, India

In present investigation the observed red vented bulbul preferred leafy shrub of *Hibiscus rosa* sinensis for the nest construction at height of 1.5 meter from ground.

Breeding activity of red vented bulbul was observed for total 22 days daily.

- Tracking Timeline- 29 August to 19 September.
- Eggs of Bulbul- 2 September (Plate I, Fig.b).
- Incubation period- 2 September to 10 September.
- Youngones hatched 10 September (Plate-II, Fig.c).
- Growth tracking and Duration 11 September to 19 September (Plate-II, Fig.d to l).
- Day of First Flight- 19 September (Plate –II, Fig. 1).

1. Breeding season

In present study breeding season starts from end of August (2021) to end of September (2021).

2. Nesting plant, nest height and site

The observed nest of Red vented bulbul was bowl shaped and constructed of twigs and rootlets. The height of nest was recorded 1.5 meter from ground in leafy shrub of *Hibiscus rosa sinensis*. The nest was constructed within 4 days. Both male and female have contributed to construction of the nest during breeding season.

3. Incubation and Growth Period

Total three pale pink eggs marked with large irregular red brown blotches were observed in nest. Eggs were incubated by both male and female. According to present investigation the incubation period of the Red Vented bulbul was 9 to 10 days and growth of youngones from hatching to first flight requires 10 days

PLATE- I (FIGURE-a to c)

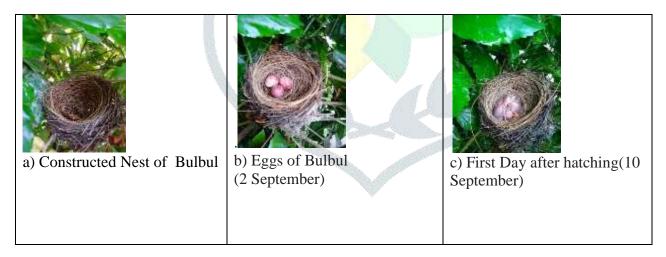


PLATE- II (FIGURE- d to l)		
d) Second Day after hatching	e) Third Day after hatching	f) Fourth Day after hatching(13
(11 September)	(12 September)	September)
g) Fifth Day after hatching	h) Sixth Day after hatching	i) Seventh Day after hatching(
(14 September)	(15 September)	16 September)
j) Eighth Day after hatching (17 September)	k) Ninth Day after hatching (18 September)	I) Tenth Day after hatching- Ready for First Flight(19 September)

Discussion

Different ranges of breeding season of Red Vented Bulbul were reported by many studies starting from February to August (Balakrishnan,2007), March to May in Harayana (Manju & Sharma,2013), March to October in Sikar region, India (Rao *et al.*,2013), May to August at Tehsil Mansehra, Pakistan (Awais *et al.*, 2015).

The changes in breeding biology are due to changes in abiotic factors like temperature and humidity (Hughes, 2000). For detection of changes in breeding biology long term observations are necessary (Sutherland, 1996; Newton, 1998; Thiollay, 2000).

Present investigation is in agreement with previous investigations that reported April to September is breeding season and peak in August to September at Balaram-Ambaji Wildlife Sanctuary Gujarat, India (Prajapati *et al.*, 2011).

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