Record of Tailed Jay Butterfly *Graphium agamemnon* (Linnaeus, 1758) (Lepidoptera, Papilionidae) from central Aravalli foothills, Ajmer, Rajasthan, India

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ABSTRACT

The first photographic record of the Tailed jay (*Graphium agamemnon*) from central Aravalli foothills of Ajmer, Rajasthan, India is presented in this paper.

INTRODUCTION

Insect is the largest group of animal kingdom which comprise of more than half of earth's diversity of faunal species along with widest distribution pattern (May, 1992). Insects possess consequence position in various food chains and food webs. Within the ecological communities, insects comprise a large proportion of the biomass and are critical conduits of energy through the system (Battist, 1988). Instead of largest group of Animal kingdom few or meager studies were taken place in concern of their distribution pattern, life cycle and ecology. Indian subcontinent classified mainly under the Oriental Region and partly under Palaearctic Region and having richest and most diverse butterfly faunas of the world. India represents by more than 1,400 species of butterflies. Several records are available in concern of certain aspects of butterflies of India but the major records are available only for the Peninsular India mainly including the Western Ghats and Eastern Gahts (Larsen, 1987, 1988; Gaonkar, 1996; Kunte, 1997, 2000; Solman, 2004;

Nair, 2005; Sreekumar and Balakrishnan, 2001; Padhey, *et al.,* 2006; Chandra *et al.,* 2002 and 2007; Kunte *et al.,* 2008; Wadatkar and Kasambe, 2009; Tiple and Khurad, 2009; Raut and Pendharkar, 2010), Northeast parts of India (Haribal, 1992; Choudhury, 2010) and from Himalayan ranges (Larsen, 2002; Singh, 2005; Singh, 2009; Kunte, 2010). Western part of the country nearly negligible in concern of these types of studies, therefore the present record is an approach to fulfill this research gap.

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We present here the first photographic record of the Tailed jay (*Graphium agamemnon*) (Fig. 1) from central Aravalli foothills, Ajmer, Rajasthan. On the evening of 26 December, 2011 at around 17.30 hrs during the regular field surveys at the wetlands of central Aravalli foothills of Ajmer we photographed two individuals of butterflies with glittering green coloration and with moderate body size, these were sighted on the vegetation nearby the wetland - Anasagar, which is situated at eastern side of foothills of central Aravalli mountain ranges (extends between $26^0$27 North latitude and $74^0$42 east longitude). At the near by area we found 13 individuals of the same species. Each individual was photographed for further identification process with the help of High Resolution Digital Cameras (Sony DX 50 and Canon D70) and the identification was confirmed by using various field guides (Wynther-Blyth, 1957; Kunte, 2000 and 2001; Kehimkar, 2008).

Species Description: The Lepidoptera Order of Class Insects represents most fascinating and glittering members (Butterflies and Moths). Family Papilionidae mainly represented by the Swallowtails butterflies, truly most spectacular group of butterflies. Tailed jay (*Graphium agamemnon*) is a large tropical butterfly with an average wingspan of 85-100 mm that belongs to the Papilionidae family and commonly known as Green Spotted Triangle, Tailed Green Jay or Green Triangle. The butterfly is a predominantly green and black, both sexes black with bright green spots and streaks on wings. Hind wing tails short and stumpy in both male and female, however, tail is shorter in male than in female.

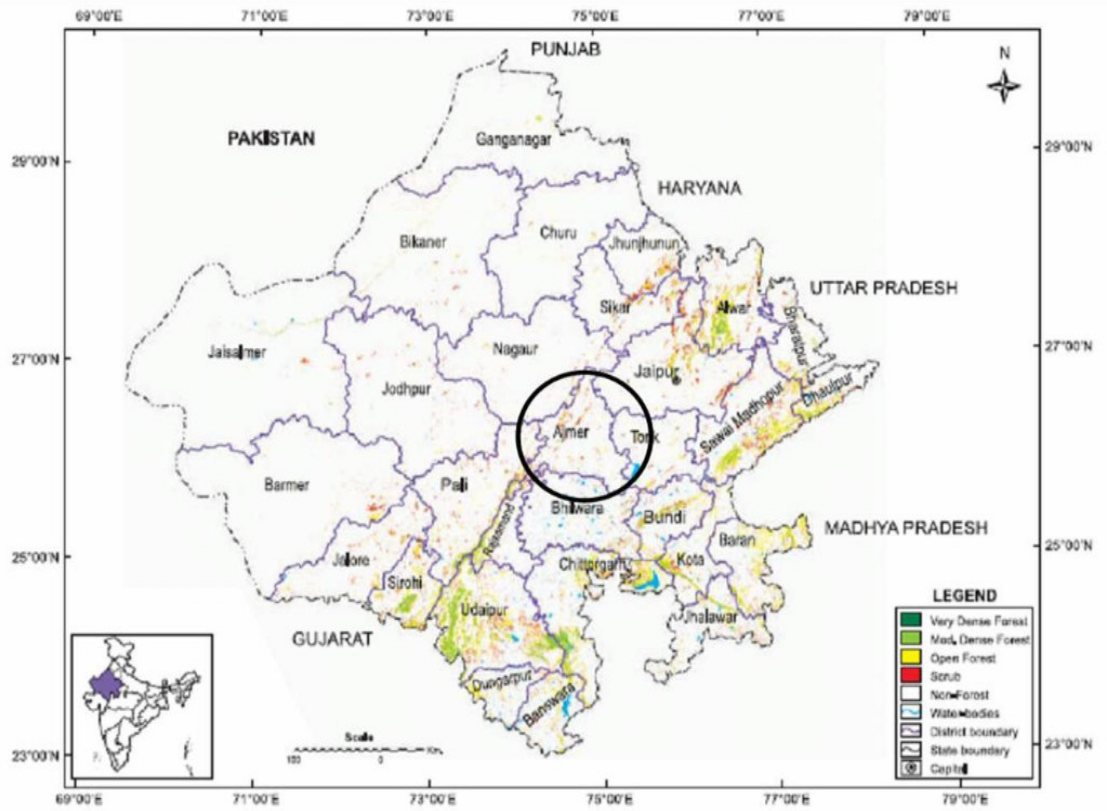

Figure 1. Map of Study Area

Figure 2. Tailed Jay Butterfly

Previous Distribution Range: It is a common, non-threatened species native to India, Sri Lanka through Southeast Asia and into Australia. In India it occurred from South India up to Gujarat (Kutch) and Saurashtra, Uttaranchal to Arunachal Pradesh, Northeast, Andaman and Nicobar Island. Nepal, Sri Lanka, Bangladesh, Brunei, Myanmar, Thailand, Laos, Kampuchea, southern China (including Hainan), Taiwan, South East Asia to New Guinea, Bougainville and Solomon Islands (Kehimkar, 2008).

New Locality Habitat Structure: The central Aravalli Mountain foothill predominantly comes under the Ajmer district and nearby areas. It lies in between 26°16′ N 74°25′ E/ 26°27′ N, 74°42′ E coordinates with an area of 8,481 km². This part of Aravalli range is locally known as "Merwara Hills", this is the thinnest part of the mountain range, the Aravalli Mountain having nearly less than 10 km wide expansion at this part (Heron 1953). This area experiences a mean annual rainfall of 573 mm but scanty and often uncertain and temperature ranging from 2^0 to 46^0 C. The summers are extremely hot in this part and categorized as Semiarid Zone of the Western India (Fig. 2).

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