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## First photographic record of *Danaus chrysippus chrysippus* form *alcippoides* (Linnaeus, 1758) from Nepal

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### Abstract

*Danaus chrysippus chrysippus* form *alcippoides* (Linnaeus, 1758) has been photographed for the first time from Nepal. This very rare form was photographed from Pokhara, Kaski in Gandaki Province.

**Keywords:** Plain tiger, new form, Nepal butterflies, photographic record

### Introduction

*Danaus chrysippus* aka the Plain Tiger is one of the commonest butterflies found in Asia, Australia and Africa. However, it has extended its range into Europe as well colonizing several coastal parts of Spain, France, Italy, Greece and islands like Corsica, Sardinia, Sicily and Malta (Burton 2003)<sup>[1]</sup>.

Talbot (1943)<sup>[6]</sup> established three subspecies of *D. chrysippus* viz.: *alcippus*, *dorippus* and *chrysippus*. Later, the study conducted by Owen & Chanter (1968)<sup>[3]</sup> concluded them merely as color forms which were sympatric during the year. According to Smith *et al.* (2005)<sup>[4, 5]</sup>, *dorippus* has been elevated as a separate species, and there are 3 spp. of *D. chrysippus*, viz: *ssp. chrysippus* (=aegyptius), *ssp. alcippus* and *ssp. orientalis* (=liboria). Among these, the one found in Indo-China region is *Danaus chrysippus chrysippus*. Somewhere in Central and East Africa including the Kampala region in Uganda and Khartoum in Sudan, there is a hybrid zone where additional forms are found, viz. *alcippoides*, *transiens*, *albinus* and *semialbinus* (Smith *et al.*, 1998).<sup>[4]</sup>

Moore (1883)<sup>[2]</sup> had described '*Limnas alcippoides* n. sp.' from Nepal that differed from the Western African specimens of *Danaus chrysippus alcippus* in "forewing having a broader series of white sub apical oblique spots, the white spot below them (between the upper and middle medial veins) is much larger; and there is a lower discal spot on the red area between the middle and lower medians, which is not present in any Western African specimens that I have seen. The hindwing had somewhat less white than the African specimens" (Fig 7).

Likely, Marshal and Nicéville have also reported it from plains of Northern India (Sind, Nurpur in Punjab) in the N.W. Provinces (Lucknow) and also from Rangoon (Moore 1883).

Evidently, it is very rare that this form *alcippoides* has been seen in Nepal. Mr. Mahendra Singh Limbu, an avid butterfly photographer/expert from Nepal, further confirms this form to be very rare indeed (personal communication, Nov 7, 2019 at 6:20 AM).

### Materials and Methods

A male specimen was encountered in May, 2019 during a photography trip in the forest trails of Sarangkot, Pokhara of Kaski district in mid hills of Nepal. The major floral components of the location were *Castanopsis indica*, *Schima wallichii*, *Lantana camara*, and mostly *Rubus paniculata*. The sighting was recorded capturing photos in Sony Cyber-Shot DSC-HX90V 18.2MP camera. The Global Positioning System (GPS) details of location, altitude and date were recorded on the photos itself. Upon exploring the entire altitude of the same hillock for over several months, only one specimen of this particular form was seen which was flying among tens of other specimens of *Danaus chrysippus chrysippus* (normal orange form). It was seen flying around the bushes of *Lantana camara*, a plant whose flowers most Danaids are fond of.

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## Results and Discussions

Images of all sightings:



**Fig 1-4:** *Danaus chrysippus chrysippus* form *alcippoides*



**Fig 5-6:** *Danaus chrysippus chrysippus* (normal orange form)



**Fig 7:** Moore (1883) *Limnas alcippoides* n sp

**Table 1:** Details of Sightings

Location	District	GPS	Altitude	Environment	Time of Day	Date	Number of specimens recorded
Sarangkot, Pokhara (Fig 1-4)	Kaski	28°13'02.6"N 83°57'45.4"E	880 masl	Sunny Day Open bush near forest trail	12:44 PM	19.v.2019	1
Sarangkot, Pokhara (Fig 5)	Kaski	28°13'04.1"N 83°57'42.0"E	850 masl	Sunny Day Open bush near forest trail	10:08 AM	01.v.2019	Many
Sarangkot, Pokhara (Fig 6)	Kaski	28°13'04.5"N 83°57'41.9"E	858 masl	Sunny Day Open bush near forest trail	10:16 AM	01.v.2019	Many

*Danaus chrysippus chrysippus* form *alcippoides* (Linnaeus, 1758) had been recorded from Nepal in the past way back in 1883 by Moore. No other photographs of this form have been taken, or even seems to be recorded in recent past. However, in the observed specimen, the lower discal spot on the red area between the middle and lower medians (like in Moore's specimen: Fig 7) is not apparent. So there could still be some variations in this form.

### Conclusion

Butterflies of Nepal is a well-researched field of entomology. However, further extensive studies could excavate more mysteries that are hidden in several nooks and crannies of the country.

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### References

1. Burton JF. The apparent influence of climatic change on recent changes of range by European insects (Lepidoptera, Orthoptera). Proceedings 13th international colloquium European Invertebrate Survey, 2001. 2003, 13-21.

- Moore FA. Monograph on the Limnaina and Euploeina, two groups of diurnal Lepidoptera belonging to the subfamily Euploeinae, with descriptions of new genera and species. Proceedings of the Zoological Society of London, 1883; 1883:201-324.
- Owen DF, Chanter DO. Population biology of tropical African butterflies. Sex ratio and polymorphism in *Danaus chrysippus* L. Revues Zoologiques et Botaniques Africaines, 1968; 78:81-97.
- Smith, DAS, Gordon IJ, Depew LA, Owen DF. Genetics of the butterfly *Danaus chrysippus* L. in a broad hybrid zone, with special reference to sex ratio, polymorphism and intragenomic conflict.–Biological Journal of the Linnean Society. 1998; 65:1-40.
- Smith, David AS, Lushai Gugs, Allen, John A. A classification of *Danaus* butterflies (Lepidoptera: Nymphalidae) based upon data from morphology and DNA. Zool J Linn. Soc. (2005); 144(2):191-212. doi:10.1111/j.1096-3642.2005.00169.x (HTML abstract)
- Talbot G. Revisional notes on the genus *Danaus* Kluk (Lep, Rhop Danaidae). Transactions of the Royal Entomological Society. 1943; 93:115-148.