

First Report A New Host for Plain Tiger Butterfly *Danaus chrysippus* Linnaeus in Thar Desert

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Abstract: The aim of our investigation was too localized, described and find out the host range of plain tiger butterfly (*Danaus chrysippus* L.) in thar desert. Our results show, that total two host plants were found infected by the larvae of respective species: *Leptadenia pyrotechnica* (family Apocynaceae) and *Glossonema varians* (family Apocynaceae) are the first reported host plants in thar desert. It was reported in the later mansoon season.

Keywords: Thar desert, new host, Mansoon, *Danaus chrysippus*

INTRODUCTION:

The desert of thar is famous for tourism and also for huge varieties of different kind of flora and fauna. It extended in Jaisalmer and Barmer districts. In thar deserts different kind of butterfly are found and migrated here from different part of world. Plain tiger butterfly (*Danaus chrysippus* L.) is migrated butterfly. It's belonging to Danainae (subfamily Nymphalidae) and its distribution ranges from Africa to southern Europe, Saudi Arabia, Iran, tropical Asia, Australia and New Zealand. The plain tiger butterfly is generally found in rocky places, bushy, and habitually near cultivated areas and gardens (Perkovid, 2006) and its larvae found and feed the leaves and causes damage on the host plant. Generally larva attacks on young shrubs and causes refuse and death at last (Abaii, 1999). Larva and butterfly are reported from different areas of worlds. Wiltshire reported this butterfly on *Asclepias curassavica* Iraq in 1944. Khalaf(1959), Heydemann et al.(1963) and Hussain(1963) also reported this butterfly from Iraq. Beside all reports nor reports are found in thar desert. Our results show, that total two host plants were found infected by the larvae of respective species: *Leptadenia pyrotechnica* (family Apocynaceae) and *Glossonema varians* (family Apocynaceae) are the first reported host plants in thar desert.

MATERIAL AND METHODS

The observation was done in the later mansoon season in 2022 in near Amar sagar and Gajroop sagar of Jaisalmer district of thar desert. The mature larvae were collected from the both plants *Leptadenia pyrotechnica* (Gajroop sagar) and *Glossonema varians* (Amar sagar) by the forceps and transferred to container to pupated, after the emergence, adults was transferred to larger cylindrical containers of 10×30 cm with honey solution. The Laboratory conditions were maintained at room temperature to obtain the adults. The adults emerged were identified by the Shyam Sunder Meena a author in this paper and identification of host plants were identified by the Dr. Dheeren Panwar, assistant professor government college Osian.

RESULTS AND DISCUSSION

Our results show, that total two host plants were found infected by the larvae of respective species: *Leptadenia pyrotechnica* (family Apocynaceae) and *Glossonema varians* (family Apocynaceae) are the first reported host plants in thar desert. It was reported in the later mansoon season. Highest population were found on *Glossonema varians* and lowest found on *Leptadenia pyrotechnica*. On both plant species larvae successfully completed their life cycle. Our result agrees with the corollary of Vane-Wright and De Jong (2003), they reported genus *Periploca* as food plant for *Danaus chrysippus*. Brandes (2005) also recorded the similar result within the genus *Caralluma*.

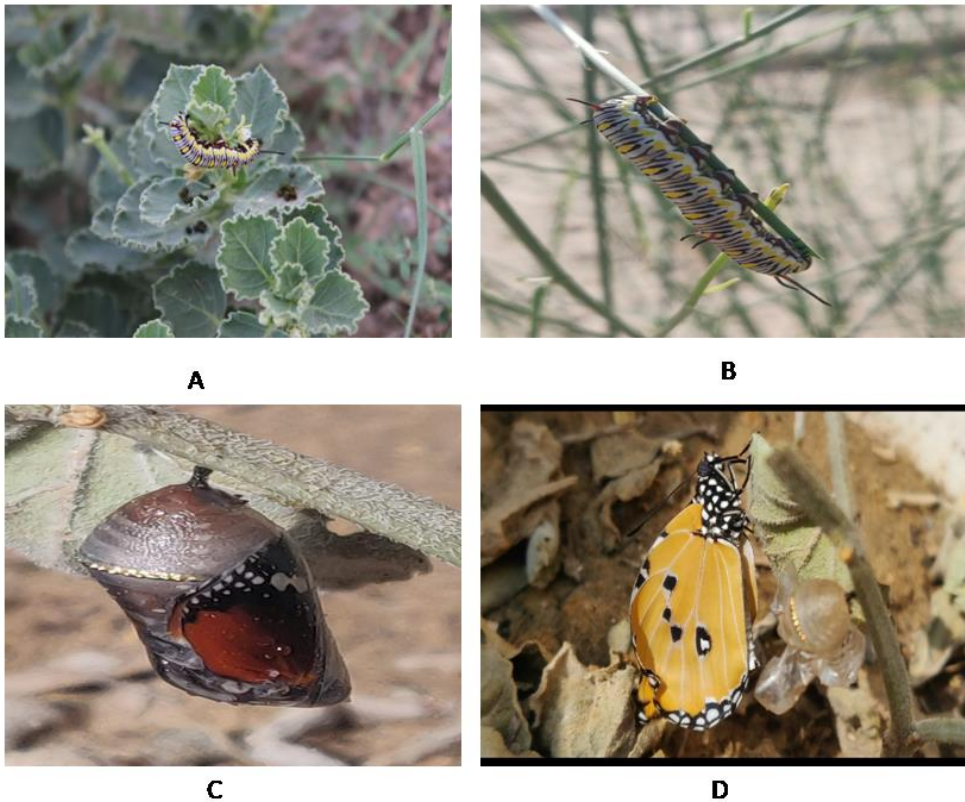


Figure:1

- (A) Larval stage of plain tiger butterfly on host plant *Glossonema varians*.
 (B) Larval stage of plain tiger butterfly on host plant *Leptadenia pyrotechnica*.
 (C) Pupa stage of plain tiger butterfly.
 (D) Adult stage of plain tiger butterfly.

REFERENCES:

1. **Perkovid D. 2006.** *Danaus chrysippus* (Linnaeus, 1758) (Lepidoptera, Nymphalidae, Danainae), a new species in the fauna of Croatia. *Nat. Croat. Zagreb.*, 15: 61-64.
2. **Abaii M. 1999.** The Forest pests of trees & shrubs in Iran. The Research & Education organization of Agriculture (Keshavarzi) Ministry. 178 pp.
3. **Wiltshire EP. 1944.** The (Lepidoptera) of Iraq. D.G. Agri. , Baghdad , Bull . 30.
4. **Khalaf KT . 1959.** A collection of Insects from Iraq . Iraq Natural History Museum. 17: 17 – 26.
5. **Heydemann F, Schulte A and Remane R. 1963.** Beitrag zur Macrolepidoptera fauna de Irak. *Mitt. Munch. Ent. Ges., Munich*, 53 : 80-107.
6. **Hussain AA. 1963.** Provisional list of Insect pests and Bibliography of Insect fauna of Iraq. *Bull. coll. Sice. , Baghdad*, 7: 43 – 83.
7. **Vane-Wright RI and De Jong R. 2003.** The butterflies of Sulawesi: annotated checklist for a critical island fauna. *Zool. Verh. Leiden*, 343: 221-223
8. **Brandes D. 2005** *Calotropis procera* on Fuerteventura. Technical University Braunschweig, Germany, pp. 7 <http://www.biblio.tubs.de/geobot/fuerte.htm>