## Host-plants of *Aglais* (=Vanessa) cashmirensis Kollar (Indian Tortoiseshell) (Lepidoptera: Nymphalidae) with some new records from Kashmir Valley (India)

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## ABSTRACT

Field observations conducted for the first time in 10 administrative districts from April 2004 to November 2007 revealed that the Indian Tortoise shell, *Aglais cashmirensis* Kollar (Lepidoptera: Nymphalidae) is commonly distributed in diverse habitats in Kashmir Valley. It was on the wing from March to November. Besides previously known host-plants of both adults and larvae, 10 new adult host-plants distributed in seven plant families namely Asteraceae (*Achillea millefolium, Carduus edelbergi, Cersium wattutus*), Caryophyllaceae (*Cerastium cerastoides*), Euphorbiaceae (*Euphorbia helioscopia*), Fabaceae (*Medicago polymorpha, Trifolium repens*), Geraniaceae (*Erodium cicutarium*), Lamiaceae (*Mentha longifolia*) and <u>Plantaginaceae</u> (*Digitalis purpurea*) are being reported for the first time from the region.

**Key words:** *Aglais cashmirensis*, Kashmir Valley, field observations, host-plants, new records.

The Indian Tortoise Shell, *Aglais* cashmirensis Kollar, family nymphalidae is a common Himalayan species distributed in many parts of India including Kashmir and has also been reported from Afghanistan, Bhutan, China, Nepal, Pakistan, and Tibet<sup>1,2,4,5,7-14</sup>. The

earlier reported host-plants for this species include Asteraceae (*Taraxacum officinale*, *Gaillardia pulchella*), Compositae (*Aster sikkimensis*, *Chrysanthemum indica*, *C. frutescens*, *Tagetus erecta*, *T. minuta*, *T. Patula*), Gentianaceae (*Gentiana carinata*), Primulaceae

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(Primula denticulate), Rosaceae (Prunus bokharensis), Urticaceae (Urtica dioicia, Girardinia heterophylla), Verbenaceae (Lantana camara, Verbena bonariensis)<sup>3</sup>, <sup>4,6,14</sup>. During the field surveys conducted from April 2004 to November 2007, this nymphalid was seen commonly distributed in diverse habitats like forests, public gardens, parks, open roads, hilly areas, etc of all the 10 administrative districts viz. Anantnag, Bandippora, Baramulla, Budgam, Ganderbal, Kulgam, Kupwara, Pulwama, Shopian and Srinagar from April to November. The authors during present field surveys recorded a total of 13 host-plants (12 adult & 1 larval), distributed in 8 families out of which ten are new records. The host-plants along with the localities are as under: (Abbreviations: \* new record; ^ Larval food plant; m- meter above sea level):

Achillea millefolium\* (Asteraceae): Pahalgam, 2500m, 28-vi-2004, dense forest; Carduus edelbergi\* (Asteraceae): Dodpathri, 2700m, 07-ix-2007, forest; Tangmarg, 2220m, 25-v-2005, forest along general road; Cersium wattutus\* (Asteraceae): Uri, 1400m, 05-vii-2007, forest and mountainous area; Cerastium cerastoides\* (Caryophyllaceae): Handwara, 1680m, 11-viii-2007, orchids near forest; Digitalis purpurea\* (Plantaginaceae): Baramulla, 1600m, 10-v-2004, forest; Erodium cicutarium\*, (Geraniaceae): Dodpathri, 2700m, 07-ix-2007, forest; Euphorbia helioscopia\* (Euphorbiaceae): Ganderbal, 2084m, 11-iv-2004, mixed vegetation along road; Medicago polymopha\* (Fabaceae): Bandipora, 1582m, 28-vi-2005, hilly area with mixed vegetation; Mentha longifolia\* (Lamiaceae): Dachigam National Park, 1670m, 29-vii-2007, mixed dense vegetation; Tagetus patula (Asteraceae): Jawahar Tunnel, 2858m, 29-vi-2004, high mountain area; Qazigund, 1900m, 29-vi-2004, forest near agricultural land; Taraxacum officinale (Asteraceae), Cheshmashahi, 1667m, 21-vii-2007, mountainous area with dense vegetation, Trifolium repens\* (Fabaceae): Pulwama, 1690m, 08-ix-2007, open field; ^Urtica dioicia (Urticaceae): Dodhpathri, 2700m, 07-ix-2007, forest; Salamabad, 1290m, 05-vii-2007, hilly and mountainous area.

With the present findings based on authors own work & previous records, a total of 25 host-plants (24 adult and 1 larval) distributed in 13 families which include 10 new records of adult host-plants reported here for the first time have been added to this species. For nectar sucking, the adults were highest seen visiting *Tagetus patula*.

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