



NEW RECORDS OF CICADAS (HEMIPTERA: CICADIDAE) FROM PAKISTAN

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ABSTRACT

Three new species are reported for the first time from Pakistan viz., *Chloropsalta ochreata* (Melichar, 1902), *Klapperichicen turbatus* (Melichar, 1902) and *Tanna thalia* (Walker, 1850). Taxonomic note, distribution and illustrations are also given.

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INTRODUCTION

Cicada belongs to the family Cicadidae which are easily recognised by their loud noise. They are found mostly in tropical areas. In Pakistan, first attempt to explore cicada was undertaken by; Ahmed and Sanborn, 2010; Wei *et al.*, 2010; Ahmed *et al.*, 2010, 2012. From Pakistan, family Cicadidae is confined to three subfamilies; Cicadinae, Tibicininae and Cicadettinae and most of the species are known from Cicadinae. Three species recorded here for the first from Pakistan including; *Chloropsalta ochreata* (Melichar, 1902); *Klapperichicen turbatus* (Melichar, 1902) and *Tanna thalia* (Walker, 1850) belong to two subfamilies, Tibicininae and Cicadinae. Old description of these species is described only with general characters, therefore, the habitus and illustrations are provided here.

MATERIALS AND METHODS

Specimens were collected from Balochistan and Punjab through hand net and hand picking. Several specimens of *Klapperichicen turbatus* were collected on *Tamarix* plant from Panjgur. *Chloropsalta ochreata* were collected from cultivated field in Naushki. The species *Tanna thalia* were

collected from small shrubs of murree hills. Pictures were taken with Nikon Coolpix model P7000. For identification pertinent literature was followed, specimens were further confirmed by foreign experts of this group.

RESULTS AND DISCUSSION

Family **Cicadidae** Latreille, 1802.

Subfamily **Tibicininae** Distant

Tribe **Tibicinini**

Genus ***Klapperichicen*** Dlabola, 1957.

Klapperichicen turbatus (Melichar, 1902) (Figs. 1-6) **New record.**

Tibicen turbatus Melichar, 1902., Type locality: Iran

Taxonomic note

Body robust, pronotum black with two median and two lateral ochraceous fasciae, mesonotum with two elongate median and lateral ochraceous fasciae, fore wings with bases of 2nd and 3rd apical cells infuscated, extends to 4th apical cell and apex of 1st apical cell, abdomen slightly keeled dorso-medially, opercula narrow, oriented to right angle, timbal with

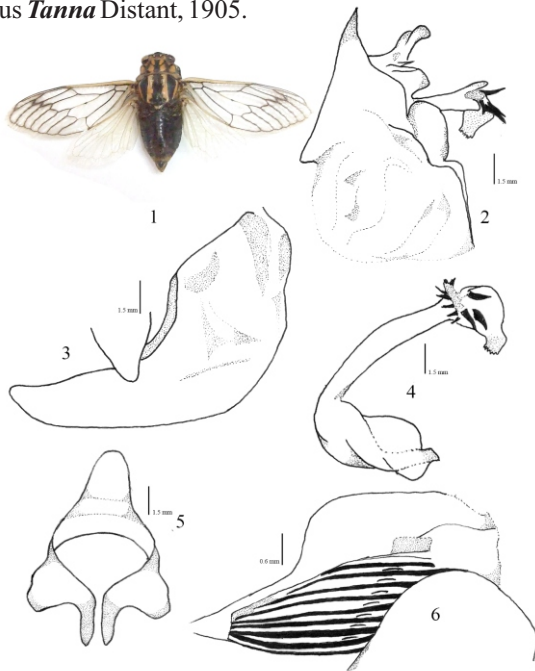
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9 long and 8 intercalary ribs, aedeagus with claspers straight.

Remarks

The species is known only from Iran (Metcalf, 1963b; Dlabola, 1981; Duffels and Van der Laan, 1985; Mirzayans, 1995; Schedl, 2003). This species is reported as pest (nymphal feeding and female oviposition) of *Tamarix* sp. in Iran (Abaii, 2000). The species *K. turbatus* is closely related to *K. acoloratus* (Dlabola, 1960) by sculpture on mesonotum and colouration but *K. turbatus* is most robust, dark infuscation on fore wings, aedeagus with more than four spines with small, broad chitinized serrated flap while in *K. acoloratus*, aedeagus with four spines only, elongate chitinized spines. The species *K. turbatus* was observed in a fair number on *Tamarix indica* during a hot day (40 °C). Several small trees of *Tamarix indica* were present across the Sorap Dam, one killometer away from Panjgur city.

Subfamily **Cicadinae**
 Tribe **Cicadini** Latreille, 1802
 Genus **Tanna** Distant, 1905.



Figs.1-6
Klapperchicen turbatus: 1. Habitus 2. Pygofer 3. Opercula 4. Aedeagus

5. Claspers 6. Timbal

Tanna thalia (Walker, 1850) (Figs: 7-14) **New record.**

Taxonomic note

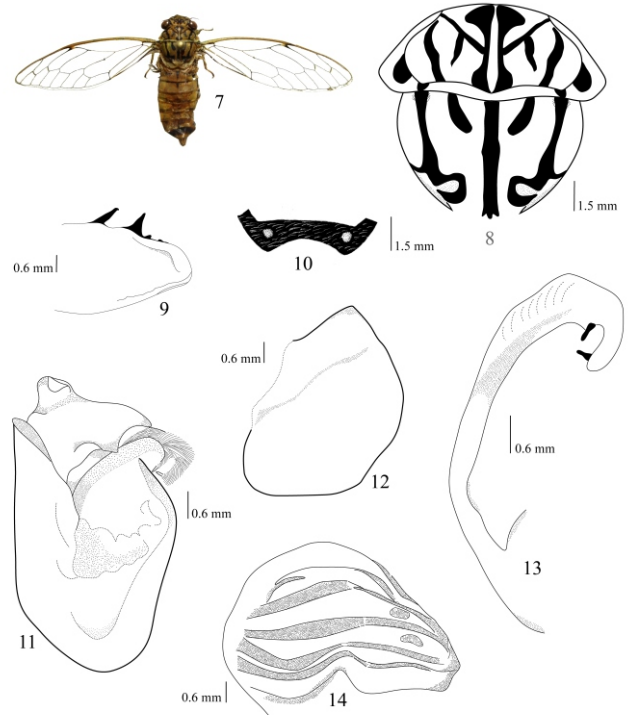
Body slender, pronotum piceous with two median longitudinal ochraceous lines, and irregular fissures, mesonotum with a elongate median complete fascia, two black short scarcely curved fasciae medially, and two lateral ochraceous fasciae, fore wings with bases of 2nd and 3rd apical cells narrowly infuscated, abdomen slightly depressed dorso-ventrally, opercula sub-oblong with irregular sides, timbal with 4 long, light long ribs and 2 broad, short intercalary ribs,

aedeagus with apex bifurcate at two pointed ends.

Remarks

This species is reported from Tibet, Japan and China (Duffels & van der Laan 1985). *Tanna thalia* is recorded for the first time from Pakistan, collected on small shrubs from mountain of Murree in day time. This species is very close to *Tanna minor* but larger than *T. minor*, pygofer with wider apex and thicker, lobe shorter, aedeagus bifurcate but both terminals spiny in *T. thalia* while thicker and truncate in *T. minor*.

Tribe **Gaeanini**
 Genus **Chloropsalta** Haupt, 1920



Figs. 7-14
Tanna thalia: 7. Habitus 8. Sculpture of pronotum and mesonotum 9. Fore femoral with spines 10. First abdominal sternite 11. Pygofer 12. Opercula 13. Aedeagus, 14. Timbal

Chloropsalta ochreata (Melichar, 1902) (Figs: 15-18) **New record.**

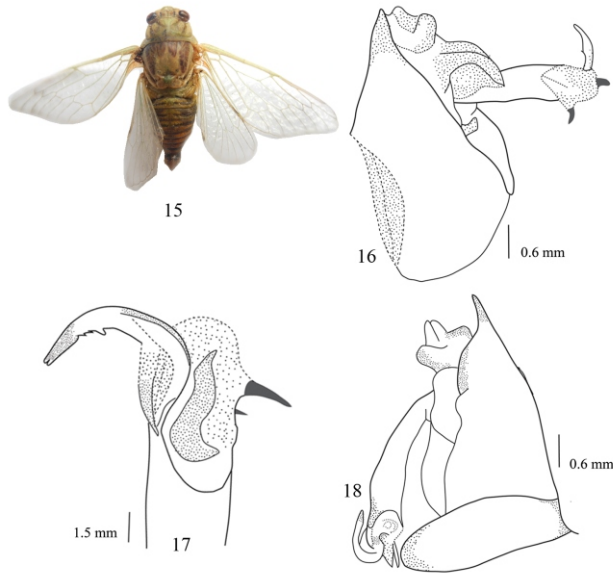
Cicadatra ochreata Melichar, 1902: 80. Type locality: Persia and Afghanistan.

Taxonomic note

Body robust, posteriorly slender, pronotum olive green with dark brown fissures, mesonotum with two short median sigilla and two elongate lateral sigilla pale to olive, fore wings without infuscation, transparent, abdomen slightly narrowing posteriorly, timbal with 12 long ribs and 11 intercalary ribs, aedeagus with an elongate process with scarcely serrated and notched anteriorly and two spines.

Remarks

This species is reported from Iran, Afghanistan, Turkey, Turkestan, and USSR (Metcalf 1963a; Duffels and van der Laan 1985; Kartal, 1988; Mozaffarian and Sanborn, 2010). *C. ochreata* is recorded for the first time from Pakistan. The species *C. ochreata* close to *C. Smaragdula* by olivaceous colour of the body and mesonotum sculpture but differ by aedeagus with right angles spines, one long chitinized flap narrow, less serrated and slightly notch at apex medially in *C. ochreata*. This species is found on *Tamarix articulata* which grow naturally in Naushki and Chagai. This plant is used as a fodder for camels and the fruit is used for dyeing cloths which also gives sweet gum.



Figs. 15-18

Chloropsalta ochreata: 15. Habitus 16. Pygofer, 17. Aedeagus 18. Pygofer with lateral angle

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