

First report of the genus *Tettigonia* Linnaeus (Orthoptera: Tettigoniidae: Tettigoniinae) and record of *Tettigonia caudata caudata* (Charpentier, 1842) from India

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The genus *Tettigonia* Linnaeus (Tettigoniidae; Tettigoniinae) with the type species, *Gryllus* (*Tettigonia*) *viridissima* Linnaeus, 1758 belongs to the tribe Tettigoniini, which is represented by 15 genera and 27 species worldwide (Cigliano *et al.*, 2017). According to the annotated checklist, the subfamily Tettigoniinae includes the only tribe Platycleidini Brunner von Wattenwyl, 1893 with 2 genera and 3 species as reported from India by Shishodia *et al.* (2010). In a review of Orthoptera from the Eastern Palearctic region, the genus *Tettigonia* Linnaeus was reported by Storozhenko (1994); additionally, some new species of *Tettigonia* have been described by Ogawa (2003), Greenwalt and Rust (2014), Chobanov *et al.* (2014), Sultan *et al.* (2015) and Storozhenko *et al.* (2015). The sub-family Tettigoniinae is represented by many species endemic to the Asian part of the Palearctic region. In 1971, Kaltenbach studied the Decticinae of the Palearctic, a subfamily now considered part of Tettigoniinae, comprising 65 genera with 407 species; later, Rentz and Colless (1990) estimated 500 species for Tettigoniinae. Further, Rentz (1985) clarified that these species do not occur in tropical rainforests, but are found in grassland and mixed heath habitats. The shape of pronotum, with a distinct angulated shoulder incision, with the clarities and locations of its transversal sulci, and its short, compressed and depressed structure happens to be a common character for the members of the tribe Tettigoniini. The type genus *Tettigonia* is long winged; however, considerable variability in the wing length has been reported. Nevertheless, the short tegmina reaching to the end of hind knee is a character often used to separate *T. caudata* and *T. viridissima* from *T. cantans* and *T. hispina* (Haz, 1969).

Material and methods

The specimens studied were field collected during survey trips in India under the ICAR Network Project on Insect Biosystematics, Department of Entomology, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur, Rajasthan. Collections were made during night at light using a sweep net from undisturbed areas adjacent to the crop fields. The species described was collected from the province of Rajasthan at Swami Keshwanand Rajasthan Agricultural University campus, Bikaner during November, 2014. Digital photographs of specimens and their body parts were taken with the help of Stemi 2000 C Stereozoom Binoculars (Carl Zeiss). The software used for linear measurements was Axio Vision L.E. 4.8 and the graph paper method was also employed.

The genitalia were dissected using the standard procedure advocated by Dirsh (1956) and Rattan Lal and Baldev Prasad (1959) for the study of male genitalia. The abdomen was detached with a micro-scissors, the abdomen was transferred to a test tube containing 10 per cent KOH, then slightly heated and later transferred to a glass cavity block with water. The digested soft tissues were removed, followed by repeated washings with water and finally placed in a glass cavity with some glycerine. Subsequently, the muscular tissues were also removed gently and the genitalia examined. The parts dissected out were preserved in a glass vial containing a few drops of glycerin and labeled. The criteria adopted for linear measurements of the specimens were as:

Body length—the distance from apex of fastigium of vertex to posterior margin of genitalia; pronotum—the distance from anterior margin to posterior margin; all legs- trochanter base to tip of tarsus; all femora-the distance from base of post femur to apex of genicular lobe.

Diagnosis of the tribe Tettigoniini: This tribe includes the Palearctic genera *Tettigonia* Linnaeus, 1758, *Amphiestris* Fieber, 1853, *Kansua* Uvarov, 1933 and *Farsodecticus* Mirzayan, 1991. The key characters include: