A new species of the genus *Nesticus* (Araneae: Nestcidae) from Miyagi Prefecture, Japan

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**Abstract** — A new species of the genus *Nesticus* is described as *Nesticus utatsuensis* using specimens obtained from Miyagi Prefecture, Japan.

**Key words** — taxonomy, systematics, *Nesticus utatsuensis*

The genus *Nesticus* comprises 129 species, among which 44 species have been described from Japan (Platnick 2013). These species have been found in various parts of Japan (Yaginuma 1979 etc.), but there have been few studies in the Tohoku District, the northern part of Honshu Island (Yoshida 1989). No *Nesticus* species have been recorded in Miyagi Prefecture, which is located in the district (Shinkai et al. 2012). However, several specimens of an undescribed species of the genus have recently been found during a survey of spider fauna in Minami-sanriku-cho, Miyagi Prefecture. This species is as new described in this paper.

The specimens were preserved in 75% ethanol at room temperature. The morphological characters were examined under stereoscopic microscope M3Z (Wild Heerbrugg AG, Heerbrugg, Switzerland), photographs were taken by EOS D60 (Canon Inc., Tokyo, Japan) attached to stereoscopic microscope. All measurements are given in mm. The terminology used in this paper is the same as the manner used in the description of *Nesticus abukumanus* in Yaginuma (1979). [The terminology may not be same as the manner employed in fig. 2 in the same article by Yaginuma (1979)]. The type series designated in this study are deposited in the collection of the Department of Zoology, National Museum of Nature and Science, Tokyo (NSMT).

*Nesticus utatsuensis* n. sp.  
[Japanese name: Utatsu-hora-himegumo]  
(Figs. 1–3)

**Type series.** All the specimens were collected from Utatsu, Minamisanriku-cho, Motoyoshi-gun, Miyagi Pref., Japan, by A. Yawata unless noted otherwise. Holotype: $\delta$, near Kumo-taki Falls (38.746185N, 141.479872E), 20-VII-2013 (NSMT-Ar 12431). Paratypes: 1$\delta$, Isatomae (38.722693N, 141.519312E), 30-VII-2013 (NSMT-Ar 12432). 1$\delta$, Fudo-do Hall (38.737816N, 141.486427E), 30-VII-2013 (NSMT-Ar 12433). 2$\varphi$, 20-VII-2013 (NSMT-Ar 12434-12435), 2$\varphi$, 30-VII-2013, (NSMT-Ar 12436-12439), near Kumo-taki Falls. 1$\varphi$, near top of Mt. Tatsugane-san (38.747841N, 141.468562E), 21-VII-2013, M. Sadamoto leg. (NSMT-Ar 12440).

**Other specimens examined.** 1$\varphi$, Fudo-do Hall, 30-VII-2013. 2$\varphi$, 20-VII-2013, 1$\delta$, 30-VII-2013, near Kumo-taki Falls. 1$\varphi$, near top of Mt. Tatsugane-san, 21-VII-2013, M. Sadamoto leg.

**Etymology.** The specific name is derived from the type locality. The type locality of this species is in the Tohoku District, the northern part of Honshu Island, where many people died or suffered major damage from the strong earthquake and huge tsunami that occurred on March 11, 2011. We hope that the children in this area will take pride in their community based on the rich natural environment and that they will continue to revive their home region, with inspiration from the discovery of this new species that is named after their region.

**Diagnosis.** The new species resembles *Nesticus abukumanus* Yaginuma 1979, that occurs in Fukushima and Ibaraki Prefectures (southern part of Tohoku District and northern part of Kanto District), but the two can be distinguished each other by the shape of the male palpal paracymbium (Fig. 2; Yaginuma 1979, pl. 1, fig. 13) and the length of the scape of the epigyne (Fig. 3; Yaginuma 1979, pl. 1, fig. 17). Projection a (Pa) of the paracymbium is longer and more strongly curved in *N. utatsuensis* compared to that in *N. abukumanus*; Pd is serrated in *N. utatsuensis*, but *N. abukumanus* does not have this feature; and the shape of Pb also differs between the two species. The scape of the epigyne of *N. utatsuensis* is shorter than that of *N. abukumanus*.

**Description.** Based on the holotype $\delta$ and paratype 1$\varphi$ (NSMT-Ar 12435). Coloration and markings. Male and female: carapace yellowish brown, along midline and both sides darker, dorsum of abdomen whitish yellow, with black markings (Fig. 1).

Measurements. $\delta/\varphi$, measurements in parentheses indicate the range among type series. Body 4.63 (4.00–4.63) / 4.75 (4.31–5.00) long. Carapace 2.00 (1.88–2.15) / 2.03 (1.90–2.03) long; 1.76 (1.58–1.85) / 1.66 (1.63–1.73) wide. Length of legs [tarsus + metatarsus + tibia + patella + femur = total]: I, 1.59 + 4.66 + 4.63 + 0.94 + 4.47 =
Figs. 1–3. Nesticus utatsuensis n. sp. 1, male, dorsal view (holotype); 2, male left palp, ventral view (holotype); 3, epigyne, ventral view (paratype: NSMT-Ar12435). Scales = 1 mm (1); 0.25 mm (2–3). a-d denote projections a-d of paracymbium of male palp. Naming of the projections follows the manner used in the description of N. abukumanus [p. 263 & pl. 1, fig. 13 in Yaginuma (1979)].

16.29 / 1.34 + 3.44 + 3.66 + 0.94 + 3.69 = 13.07; II, 1.25 + 3.44 + 3.25 + 0.88 + 3.56 = 12.38 / 1.13 + 2.56 + 2.56 + 0.88 + 2.97 = 10.10; III, 1.00 + 2.44 + 2.13 + 0.69 + 2.81 = 9.07 / 0.91 + 1.84 + 1.63 + 0.69 + 2.38 = 7.45; IV, 1.22 + 3.59 + 3.38 + 0.81 + 4.09 = 13.09 / 1.06 + 2.69 + 2.69 + 0.88 + 3.50 = 10.82. Abdomen 2.64 (2.13–2.64) / 2.80 (2.76–3.20) long; 1.60 (1.38–1.60) / 1.92 (1.72–2.38) wide.

Male and female. Carapace longer than wide [length divided by width 1.13 (1.13–1.19) / 1.22 (1.17–1.22)]. Median ocular area wider than long [length divided by width 0.90 (0.85–0.93) / 0.97 (0.83–0.97)]; wider behind than in front [anterior width divided by posterior width 0.70 (0.70–0.75) / 0.73 (0.60–0.76)]. Labium wider than long [length divided by width 0.73 (0.50–0.73) / 0.67 (0.56–0.67)]. Sternum slightly longer than wide [length divided by width 1.09 (1.05–1.10) / 1.05 (1.05–1.15)]. Length of leg I divided by length of carapace 8.15 (7.66–8.20) / 6.44 (6.09–6.55). Male palp (Fig. 2): median apophysis small; projection of paracymbium, a, long and curved, b, large and flattened, c, sharpened, d, long, thin, and serrated. Abdomen longer than wide [length divided by width 1.65 (1.49–1.83) / 1.46 (1.24–1.61). Scape of epigyne short (Fig. 3).

Distribution. Japan (northeastern part of Miyagi Prefecture).

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References


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