



First report of *Amegilla dizona* Engel and *Ceratina dentipes* Friese (Hymenoptera: Apidae) from Kerala, India

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ABSTRACT: Two bees from family Apidae, *Amegilla (Dizonamegilla) dizona* Engel, 2009 and *Ceratina (Neoceratina) dentipes* Friese, 1914 are reported for the first time from Kerala along with their current geographical distribution. © 2022 Association for Advancement of Entomology

KEY WORDS: *Amegilla dizona*, *Ceratina dentipes*, geographical distribution

Apidae is one of the most diverse bee families in the world with three subfamilies, Apinae, Nomadinae and Xylocopinae (Michener, 2007). According to Ascher and Pickering (2022), Apidae contains 5950 described species around the world. In Kerala, 37 species under eight genera were reported so far (Prakash *et al.*, 2020). Apidae comprises social bees, solitary bees and also cleptoparasitic bees. *Amegilla (Dizonamegilla) dizona* and *Ceratina (Neoceratina) dentipes* are solitary bees. They belong to subfamily Apinae and Xylocopinae respectively. Both the bee species were collected from Kole wetland ecosystems of Kerala, which is globally acknowledged as Ramsar sites (Islam and Rahmani, 2008).

The genus *Amegilla* Friese is a diverse group with 19 species reported from India (Ascher and Pickering, 2022). Bees of the subgenera *Zonamegilla* Popov and *Notomegilla* Brooks of the genus *Amegilla* are commonly known as blue-banded bees, even though some of them lack blue bands (Leijs *et al.*, 2017). The subgenus *Dizonamegilla* Brooks got its name from the

presence of two white apical hair bands in the abdomen (T3 and T4) (Brooks, 1988). *A. dizona* possesses white bands instead of blue. It is an Indian species and the replacement name for this species is given by Engel (2009). *A. dizona* specimens were identified with the help of key and description provided by Bingham (1897).

The genus *Ceratina* Latreille of India consists of 21 reported species (Ascher and Pickering, 2022) and are commonly known as small carpenter bees. The subgenus *Neoceratina* Perkins consists of small, black or feebly metallic bees, widely distributed in Australian, oriental and Palearctic regions (Michener, 2007). Detailed description and key provided by Prashantha (2017) was helpful in confirming the identity of *C. dentipes*.

***Amegilla (Dizonamegilla) dizona* Engel, 2009**

Specimens examined: 2 ♀♀, 04.ix.2021, Srayilkadavu, Malappuram district (10°42' 4.32" N; 76° 1' 38.64" E), Coll. Anju Sara Prakash, sweep net, host plant: *Leucas aspera* (Willd.) Link, family Lamiaceae.

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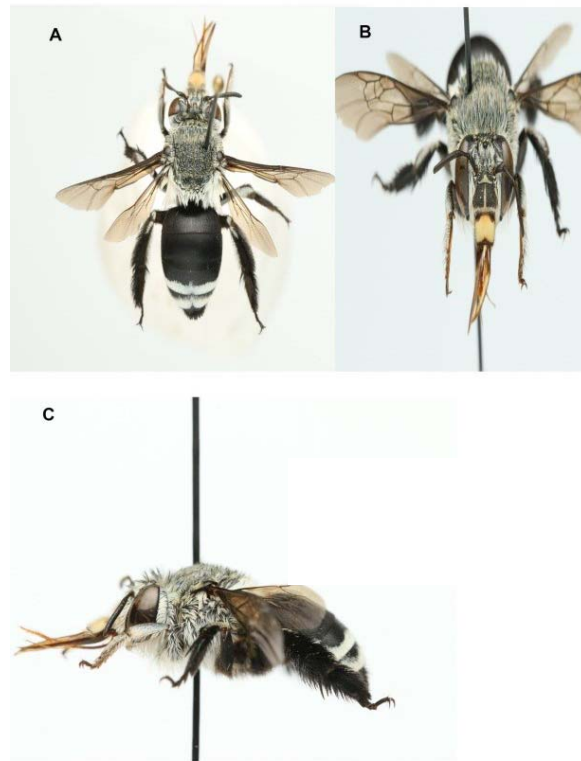


Fig. 1 *Amegilla (Dizonamegilla) dizona*:
(A) Habitus (dorsal view), (B) Head (frontal view), (c) Habitus (lateral view)

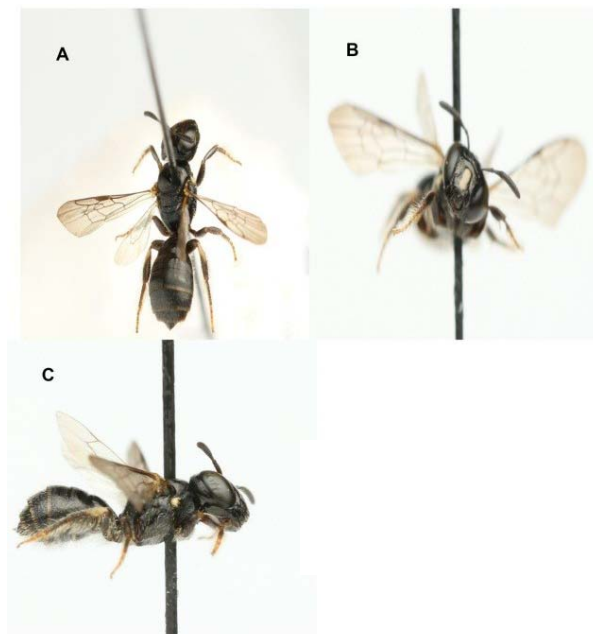


Fig. 2 *Ceratina (Neoceratina) dentipes*:
(A) Habitus (dorsal view), (B) Head (frontal view), (c) Habitus (lateral view)

Diagnosis (Fig. 1 A-C): Body length 13 mm; integument black; labrum and base of mandibles pale white; medial line, triangular mark above medial line and transverse sub-marginal line of clypeus pale white; vertex and dorsal part of thorax mixed with pale white and black pubescence; lateral and posterior margin of thorax with long white hairs; T3 and T4 with white apical hair bands; T2 with lateral white pubescent spot.

Remarks: According to Bingham (1897), the abdominal segment 4 and 5 has white apical hair bands. But by observing the specimens collected and following the terminology of Michener (2007), the pubescent bands are found in the 3rd and 4th abdominal segments.

Distribution: India: Kerala (new report), Puducherry, Odisha, Jammu and Kashmir (Ascher and Pickering, 2022), Tamil Nadu, Karnataka, Gujarat (Saini *et al.*, 2020), Rajasthan (Saini *et al.*, 2016), Allahabad (Uttar Pradesh), Kolkata (Bingham, 1897).

***Ceratina (Neoceratina) dentipes* Friese, 1914**

Specimens examined: 2 ♀♀, 04.ix.2021 and 18.ii.2022, Srayilkadavu, Malappuram district (10°42' 4.32" N; 76° 1' 38.64" E), Coll. Anju Sara Prakash, sweep net, host plant: *Aniseia martinicensis* (Jacq.) Choisy, 2 ♀♀, 16.ii.2022, Thommana, Thrissur district (10° 20' 46.68"; N 76° 15' 14.76" E), pan trap collection.

Diagnosis (Fig. 2 A-C): length 4.63mm; Integument black, shiny; pale white or yellowish white markings on clypeus, pronotal tubercles, fore tibia and hind tibia; scape of antenna rectangular and flat; anterior and posterior margins of scutum finely punctate, middle portion impunctate; scutellum finely punctate; propodeal dorsum finely granulate; T1 without punctures; T2-T3 finely punctate; T4-T6 strongly punctate.

Distribution: India: Kerala (new report), Karnataka (Prashantha, 2017, Saini *et al.*, 2020), Nepal, Thailand, Vietnam, China, Singapore, Philippines, Indonesia, Papua New Guinea, Solomon Islands, Vanuatu, Fiji, Samoa, Cook Islands, French

Polynesia, USA, Mauritania (Ascher and Pickering, 2022).

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