

SHORT COMMUNICATION

A newly recorded exotic ant *Pheidole punctatissima* Mayr (Hymenoptera: Formicidae) to Britain. – The Neotropical *Pheidole punctatissima* Mayr is recorded from one indoor site in Stevenage, Hertfordshire. Specimen photographs were uploaded to the UK Bees, Wasps and Ants Facebook group by Daniel Blyton with individuals differing from any native species. Both major and minor worker specimens were therefore sent to me by Daniel Blyton and determined as *P. punctatissima* using both minor and major keys and morphometrics provided by Sarnat *et al.*, (2015) and Longino & Cox (2009). *Pheidole punctatissima* is a member of the Neotropical *punctatissima* clade that includes *P. anastasioi* Emery, *P. bilimeki* Mayr and *P. jamaicensis* Wheeler of which only *P. bilimeki* (*Pheidole anastasioi* var. *cellarum* Forel [=bilimeki]) has been recorded in Britain from Kew gardens previously (Donisthorpe, 1915; Brangham, 1938). *Pheidole punctatissima* has been formerly recorded outside the Neotropics in Europe from The Netherlands, Denmark and Norway (Birkemoe & Aak, 2008; Boer & Vierbergen, 2008; Nielsen, 2011). This is the first time *P. punctatissima* has been recorded in the UK (Mike Fox, pers. comm.).

Specimens examined

1 × Major worker, UK, Hertfordshire, VC20, TL 22, (51.865683, –0.25862124), Stevenage, 15.iii.2021, Gen Coll D. Blyton, det M. Hamer, MTHENT1949 2 × Minor worker, UK, Hertfordshire, VC20, TL22 (51.865683, –0.25862124), Stevenage, 08.ii.2021, Gen Coll D. Blyton, det M. Hamer, MTHENT1933-1934.

Morphometrics

The critical morphological measurements in millimetres to three significant figures used in identification are summarized in Table 1 below. Measurements were taken using a Brunel BMDZ stereo-microscope with measuring eye piece calibrated at ×45. Full measurement details can be found within Sarnat *et al.* (2015).

Pheidole punctatissima is readily distinguished from congeneric species in the major (soldier) caste by the distinctly bicoloured head with anterior black and posterior light yellow (Figure 1a–d). Other characters in the major caste include an often entirely foveolate head, a domed pro-mesonotum in profile that is entirely foveolate dorsally. The postpetiole is distinctly twice the width of the petiole in dorsal view and at least the anterior third of the first tergite is matte. Identification of the minor caste is considerably more challenging due to the lack of the distinctive bicoloured head of the major caste and close similarity to congenics, overlapping in

Table 1. Comparison of the Stevenage specimens of *P. punctatissima* with species range values given in Sarnat *et al.* (2015).

Measurement & Indices	Minor worker (n = 2)	Major worker (n = 1)	Sarnat <i>et al.</i> (2015)	
			Minor worker (n = 14)	Major worker (n = 9)
Head Width	0.50–0.51	0.99	0.44–0.50	0.86–1.06
Head Length	0.59	1.07	0.54–0.59	0.94–1.13
Scape Length	0.59–0.60	0.61	0.55–0.58	0.56–0.63
Scape Index	116–119	92.9	114–125	92–97
Cephalic Index	85.2–87.0	61.5	79–85	57–68

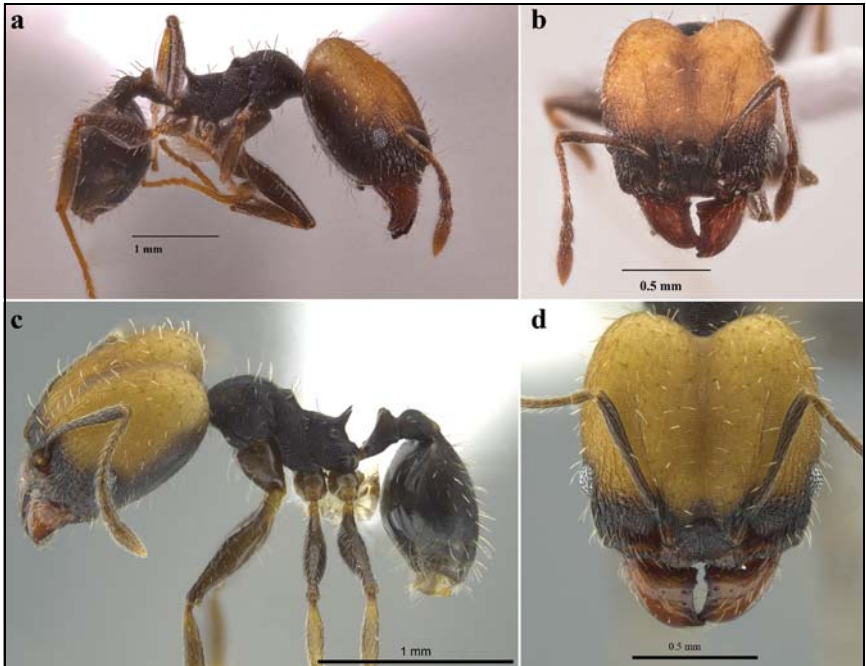


Fig. 1. *Pheidole punctatissima* major specimen (MTHENT1949) compared to AntWeb specimen. a: MTHENT1949 in profile. b: MTHENT1949 full face view. c: CASENT0619681 in profile d: CASENT0619681 in full face view. AntWeb images by Jeremy Pillow. Images available from www.antweb.org

both morphometric and morphological characters. However, the scapes are usually longer in *P. punctatissima*, characteristic of more arboreal ants. Here the morphometrics for the two minor workers slightly exceed the values given in Sarnet *et al.*, (2015), particularly the scape length. However, morphological characters match those of *P. punctatissima* and the distinctive major caste provides the more reliable separation from relatives within the *punctatissima* clade. See Longino & Cox (2009) and Sarnet *et al.* (2015) for more details on identification.

Sarnat *et al.* (2015) describe *P. punctatissima* as preferring open, disturbed habitats, partially arboreal and nesting within dead wood both above and on the ground, where it can be especially common (Longino & Cox, 2009). Examined specimens were collected from an office work place with individuals particularly prominent in and around indoor plants (of unknown origin) corresponding with ecological observations within Longino & Cox (2009) as well as Sarnat *et al.* (2015). Unfortunately, a nest was never found. Where the species has been recorded outside of its natural range colonies have established themselves within nursing homes and a hospital, and as such the ant is considered a 'nuisance pest' (Sarnat *et al.*, 2015). The infestation will therefore be eradicated (D. Blyton, pers. comm.) and the Non-Native Species Secretariat informed.

The *Pheidole* genus is notorious for the number of introduced species established outside of their home ranges, almost certainly mediated by human commerce (Sarnet

et al., 2015). Rarely do ant introductions result in outdoor establishment here in Britain, particularly those of tropical and subtropical origin and thus are restricted to heated infrastructure. Nevertheless, it is of importance that new introductions of exotic origin are reported due to their potential as economically important pests within such structures. It is likely that the same plants from which workers were collected have been sold elsewhere raising the possibilities of further infestations across the UK. – MATTHEW T. HAMER, 57 Watts Lane, Eastbourne, East Sussex BN21 2LL. matt.hamer@hotmail.co.uk

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