

***Pachycondyla kipyatkovi* sp. n., a new ant species (Hymenoptera, Formicidae) of *P. wasmannii*-group from Madagascar**

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***Pachycondyla kipyatkovi* sp. n. – новый вид муравьев (Hymenoptera, Formicidae) из группы *P. wasmannii* с Мадагаскара**

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**Abstract.** A new ant species, *Pachycondyla kipyatkovi* sp. n., belonging to *P. wasmannii* species-group is described from Madagascar. This new species differs from all other species of this group by its yellow colouration and relatively small body size.

**Key words.** Formicidae, *Pachycondyla*, *P. wasmannii*-group, new species, Madagascar.

**Резюме.** Новый вид муравьев *Pachycondyla kipyatkovi* sp. n., принадлежащий к группе видов *P. wasmannii*, описывается с Мадагаскара. Этот вид отличается от всех остальных видов группы желтой окраской и сравнительно небольшими размерами тела.

**Ключевые слова.** Formicidae, *Pachycondyla*, группа видов *P. wasmannii*, новый вид, Мадагаскар.

### Introduction

The genus *Pachycondyla* Smith, 1858 includes 262 recent species which are common in tropical and subtropical areas, and 18 fossil species (Bolton, 2013). In the recent taxonomical revision of *P. wasmannii* species-group (Rakotonirina, Fisher, 2013), eight species were recorded from Malagasy region (four of them were described as new for science). In this paper a new species, *Pachycondyla kipyatkovi* sp. n., the first yellow coloured species in this group, is described and dedicated to the memory of Professor of Saint Petersburg University Vladilen E. Kipyatkov.

### Material and methods

Ants material deposited in the Finnish Museum of Natural History, Helsinki, Finland was studied, where a new species of the genus *Pachycondyla* was found.

Photographs of the holotype were taken using a stereomicroscope Altami CM0870-T and combined by using software Helicon Focus 5.3.

Morphological terminology and measurements follows Rakotonirina and Fisher (2013). All measurements are given in mm and provided with accuracy to 0.01 mm.

*Following abbreviations are used for measurements:*

HL (head length): the length of the head in full-face view, taken along a straight line from the mid-point of the anterior margin of clypeus to the mid-point of the posterior margin or to the mid-point of the transverse line that relates to the level of the posterior margins of the occipital lobes if the posterior cephalic margin is concave.

HW (head width): the maximum width of the head in frontal view excluding the eyes.

CI (cephalic index): head width divided by head length.

SL (scape length): the length of the antennal scape excluding the basal condylar articulation.

SI (scape index): scape length divided by head width.

PW (pronotum width): the maximum width of the pronotum in dorsal view.

WL (Weber's length): the maximum length of the mesosoma measured diagonally from the meeting point of the pronotum and the neck to the furthest posterior extension of the metapleuron.

NW (petiole width): the maximum width of the node in dorsal view.

NH (petiole height): the height of the node in profile, measured vertically from the level of the ventral margin of the node at which the junction with the subpetiolar process occurs to the highest point of the dorsal margin of the node.

NL (petiole length): the maximum length of the node in dorsal view, taken from the base of the anterior process to the base of the posterior portion that links to the gastral articulation.

LNI (lateral petiole index): petiole height divided by petiole length.

DNI (dorsal petiole index): petiole width divided by petiole length.

EL (eye length): Maximum length of the left eye with head in full-face view.

OI (ocular index): eye length divided by head width.

The holotype of the new species is deposited in the collection of the Finnish Museum of Natural History, Helsinki, Finland (LUOMUS).

## Taxonomic part

### *Pachycondyla kipyatkovi* sp. n.

(Figs 1–4)

*Type material.* Holotype: worker, “MD38, Madagascar, Ranomafana NP, Talatakelo, 7-9.6.2004, Ilkka Hanski leg.” (LUOMUS).

*Description.* Worker. Head elongate, its sides almost straight. Scape not reaching posterior margin of head at least on half of scape maximum diameter. Segments of flagellum enlarging towards end, apical five segments larger and wider than basal segments. Occipital margin of head noticeably concave medially, with broad rounded angles. Eyes moderately small, their diameter not exceeding basal width of scape. Anterior margin of clypeus almost straight (Fig. 1). Mandibles triangular, finely striate, with interspersed shallow piligerous pits, with four teeth and without or with one denticles. Mesosoma in lateral view with dorsal margin forming continuous convexity. Propodeal dorsum and declivity separated by distinct angle, mesopleural suture distinct (Fig. 2). Propodeum slightly compressed laterally (Fig. 3). Node of petiole in lateral view with subparallel sides. Petiole in dorsal view with node somewhat broader than long, its anterior margin broadly convex and posterior margin concave (Fig. 4).

Head densely and finely punctate. Dorsum of mesosoma covered with dense and coarse pits. Sides of mesosoma finely rugulose, without coarse pits. Sides and dorsal surface of petiole covered with closely spaced, large and shallow pits. First and second gastral tergites with dense, fine and shallow punctures which become sparser and irregularly scattered on posterior tergites (Fig. 4).

Dorsum of body with pilosity, setae becoming longer on petiole dorsum and gaster (Fig. 2). Whole body densely pubescent.

Body and appendages yellow. Mandibles brown.

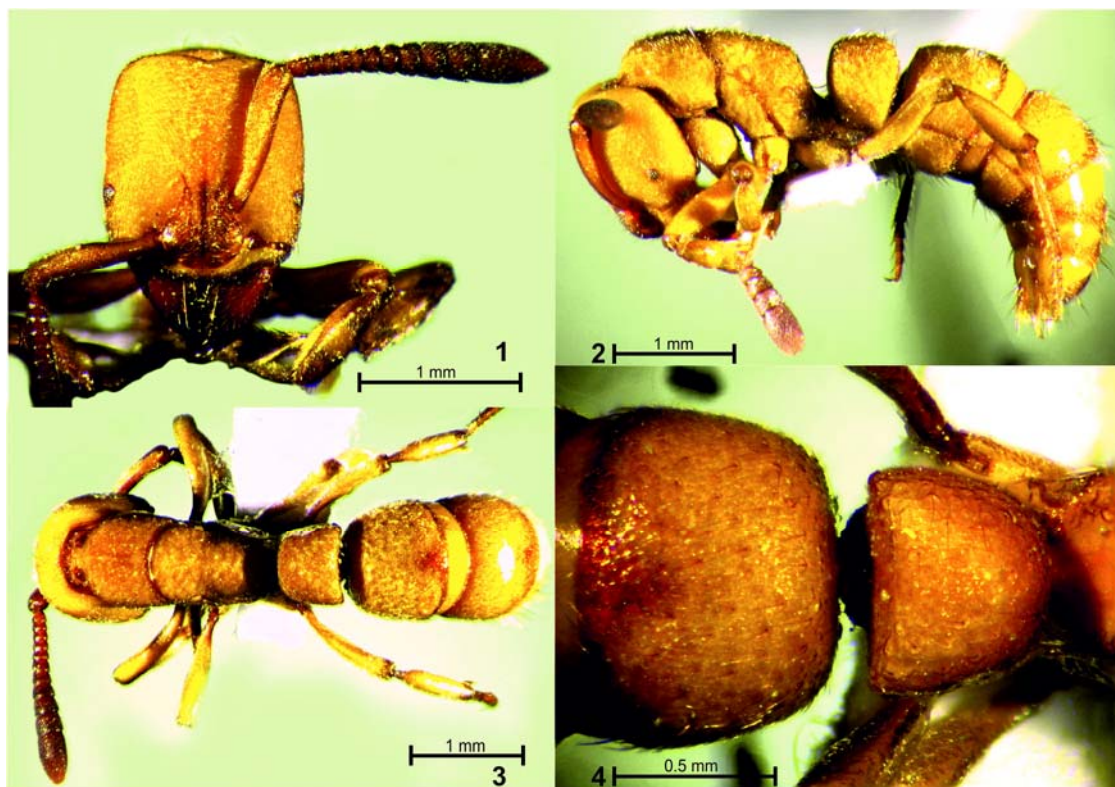
Worker (holotype) measurements: HL – 1.50; HW – 1.28; CI – 0.86; SL – 1.00; SI – 0.78; PW – 0.92; WL – 2.00; NW – 0.80; NH – 0.88; NL – 0.67; LNI – 1.33; DNI – 1.20; EL – 0.13; OI – 0.10.

Female and male. Unknown.

*Etymology.* This species is named after the late Prof. Vladilen Evgenievich Kipyatkov, my supervisor during student time, well-known Russian expert in ants and other social insects.

*Distribution.* Madagascar.

*Discussion.* The new species differs from all known species of the *P. wasmannii*-group by its extensive yellow colouration and relatively small size of body.



**Figs 1–4.** *Pachycondyla kipyatkovi* **sp. n.** (holotype, worker). 1 – head, front view; 2 – habitus, lateral view; 3 – habitus, dorsal view; 4 – petiole node and first gastral tergite, dorsal view.

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### References

- Bolton B. 2013. *An online catalog of the ants of the world*. Available from <http://antcat.org> (accessed 1 January 2013).  
 Rakotonirina J.C., Fisher B.L. 2013. Revision of the *Pachycondyla wasmannii*-group (Hymenoptera: Formicidae) from the Malagasy region. *Zootaxa*, **3609**(2): 101–141.