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**FIRST RECORD OF ANT *STICTOPONERA PERTUSA* LATTKE, 2004  
(HYMENOPTERA: FORMICIDAE, ECTATOMMINAE) IN SUMATRA  
ISLAND, WITH DESCRIPTION OF THE HITHERTO UNKNOWN  
DEALATE QUEEN**

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**Summary.** The ant *Stictoponera pertusa* Lattke, 2004 (Formicidae: Ectatomminae) is recorded for the first time from Sumatra, Indonesia. The specimens have been collected from the leaf-litter of the lowland disturbed forest in West Sumatra Province. Dealate queen is described and illustrated for the first time. This species is easily distinguished from congeners by following features: head in frontal view with swollen base of mandible; clypeal lamella translucent, with broadly convex anterior margin; petiole in lateral view with propodeal declivity sharply defined laterally by low crests; subpetiolar process subquadrate with sharp posterior angle in lateral view.

**Key words** ants, dealate gyne, description, fauna, new record, West Sumatra Province, Indonesia.

**М. Густы, Р. Джаннатан, И. Л. Э. Путри, Р. Сатрия. Первая находка муравья *Stictoponera pertusa* Lattke, 2004 (Hymenoptera: Formicidae, Ectatomminae) на острове Суматра с описанием ранее неизвестной бескрылой царицы // Дальневосточный энтомолог. 2024. N 497. С. 15-20.**

**Резюме.** Муравей *Stictoponera pertusa* Lattke, 2004 (Formicidae: Ectatomminae) впервые найден на Суматре, Индонезия. Экземпляры собраны из листового опада в низинных нарушенных лесах в провинции Западная Суматра. Впервые описана бескрылая царица. От других представителей рода этот вид отличается следующими признаками: голова спереди с вздутым основанием мандибул; клипеус полупрозрачный, с широковыпуклым передним краем; петиоле при виде сбоку с проподоальным наклоном, резко очерченным с боков низкими гребнями; субпетиолярный отросток сбоку квадратный, с острым задним углом.

## INTRODUCTION

The ant genus *Stictoponera* belongs to the subfamily Ectatomminae and also known as predatory ant that is distributed in tropical and subtropical regions (Lattke, 2004). The revision of this genus in Southeast Asia was done by Lattke (2004), and a total of 144 valid species and six fossil species are known to the world (AntWiki, 2022).

The Sumatra Island until recently has nine species of the genus *Stictoponera* (Janicki *et al.*, 2016): *S. bicolor* (Emery, 1889); *S. binghamii* (Forel, 1900); *S. coxalis* (Roger, 1860); *S. crassicornis* (Forel, 1912); *S. cribrata* (Emery, 1900); *S. gastrodeia* (Lattke, 2004); *S. laevior* (Forel, 1905); *S. menadensis* (Mayr, 1887); and *S. posteropsis* (Gregg, 1951). During our survey to study the diversity of ants in Sumatra, we collected some genera of ants (Satria *et al.*, 2015; Satria *et al.*, 2017; Satria & Yamane, 2019; Satria & Herwina, 2020; Satria & Jannatan, 2021; Musfira *et al.*, 2022; Satria *et al.*, 2022; Satria & Eguchi, 2022), including the genus *Stictoponera*. Then, in the present study, we report the first discovery of *Stictoponera pertusa* Lattke, 2004 in Sumatra Island, and described the dealate gyne of this species for the first time.

## MATERIAL AND METHODS

We conducted a survey of leaf-litter ants from September 2020 to January 2021. Few workers of *Stictoponera pertusa* Lattke, 2004 were collected by using the winkler extraction method in lowland disturbed forest near Sarasah Uwak waterfall (0°54'47.7"S 100°28'54.8"E), Padang, West Sumatra Province, Indonesia. The species determination of *Stictoponera pertusa* was done by referring to the key of the *Stictoponera* species in Southeast Asia and the original description by Lattke (Lattke, 2004).

Multi-focused montage images were produced using Helicon Focus Pro. (Helicon Soft Ltd., <http://www.heliconsoft.com/>) from a series of source images taken by a Canon EOS KissX5 digital camera attached to a Nikon SMZ1270 stereomicroscope. Artifacts/ghosts and unnecessary parts (unfocused appendages, insect pin, etc.) surrounding or covering target objects were erased and cleaned up using the retouching function of Helicon Focus Pro, and the color balance, contrast, and sharpness were adjusted using Adobe Photoshop CS6.

The following parts of the bodies were measured using ImageJ 1.49m (National Institute of mental Health, USA, available at <http://imagej.nih.gov/ij/>) based on the photographs taken using a Canon EOS KissX5 digital camera attached to Nikon SMZ1270 stereo microscope. Morphological terminology, measurements and indices are modified from Lattke (Lattke, 2004). HL = Head Length, midline length of the cephalic capsule, measured in full-face (dorsal) view, from the anterior margin of the clypeus to the midpoint of a line drawn across the occipital margin (including occipital lobes if present); HW = maximum width of head, measured in the same plane as HL, excluding the eyes; ED = Eye Diameter, diameter of the compound eye, measured along its long axis in lateral view; SL = Scape Length, length of the first antennal segment, excluding the neck and basal condyle; ML = Mandible Length, straight-line length of a mandible, measured from the base at the insertion into the head capsule, to the apex. Measured in the same plane as HL; WL = Weber's Length of the mesosoma, diagonal length, measured in lateral view from the anterior margin of the pronotum (excluding the collar) to the posterior extremity of the metapleural lobe; CI = Cepalic Index, HW/HLx100; SI = Scape Index, SL/HWx100; MI = Mandibular Index, ML/PNWx100; OI = Ocular Index, ED/HWx100.

## RESULTS AND DISCUSSION

### *Stictoponera pertusa* Lattke, 2004

Figs 1, 2

*Gnamptogenys pertusa* Lattke, 2004: 209 (worker; type locality: Sabah, Borneo, Malaysia).

*Stictoponera pertusa*: Camacho *et al.* 2022: 12.

MATERIAL EXAMINED. **Indonesia**: West Sumatra, Padang, Pauh, Limau Manis, Sarasah Uwak Waterfall, 0°54'47.7"S, 100°28'54.8"E, 6.II 2021, ca. 380 m asl., 2 workers (individual code: SEMUT10iv22A; SEMUT10iv22B), leg. R. Satria; same locality, 2.III 2021, colony code: SU-2iii23A, 1 queen (individual code: SEMUT2iii23A), 2 workers (individual code: SEMUT2iii23B, SEMUT2iii23C), leg. R. Satria.

DIAGNOSIS. The head in frontal view with base of mandible is swollen; clypeal lamella translucent, with broadly convex anterior margin. The petiole in lateral view with propodeal declivity sharply defined laterally by low crests; subpetiolar process subquadrate with sharp posterior angle in lateral view.

MEASUREMENTS of dealate queen (n= 1). HL 0.88 mm, HW 0.63 mm, ED 0.2 mm, SL= 0.53 mm, ML 0.27 mm, WL 1.31 mm, CI 0.71, SI 0.84, MI 0.17, OI 0.31.

DESCRIPTION OF DEALATE QUEEN (hitherto unknown). In general, appearance queen is similar to worker, for worker description see Lattke (2004). Head with subparallel sides in dorsal view; foveolae on frons with intervening spaces broad or broader than average diameter of foveolae; clypeus with anteromedian smooth to undulated area, laterally with longitudinal strigulae, lamella translucent with background lighting, anterior margin convex; mandible with convex bulging base; dorsally rugulose-punctate, apically mostly smooth; very small, broadly separated denticles present on chewing border; head with evenly convex occipital lamella in lateral view; posterodorsal mandibular margin with brief, mostly straight margin, then with pronounced convexity in lateral view.

Pronotum laterally foveolate along dorsal half, mostly smooth on ventral half, strigulae present along posterior edge; anepisternum rhomboid, smooth with some punctae; katepisternum mostly smooth, with shallow strigulae along anterodorsal corner; metapleuron and propodeum mostly smooth, longitudinal strigulae present along ventral area of metapleuron; propodeum foveolate, propodeal declivity sharply defined laterally by low crests. Dorsum of mesosoma and petiole sparsely foveolate, mostly smooth especially along longitudinal median strip; petiole with ventral process anteriorly convex in lateral view, ending in a posterior angle; postpetiole laterally with close and deep foveolae anterad, posteriorly becoming shallow and sparse; postpetiolar dorsum mostly smooth with sparse, shallow, piligerous punctae; fore coxa transversely strigulose along posterior half, smooth anterad. Dorsum of thorax and abdominal segments 1–4 with scattered erect to subdecumbent hairs. Body dark brown; legs, antennae, and mandibles ferruginous brown.

The head in frontal view; the mandible shorter and with little or almost no hair, more deep sculpture in the head than workers, cephalic dorsum is wrinkled and narrow. The petiole in lateral view; propodeal without declivity sharply but curved, head and alitrunk swollen.

REMARKS. The species *Stictoponera pertusa* is recorded on Sumatra Island for the first time. We collected this species from the leaf-litter in the lowland disturbed forest at altitude ca. 380 m. The holotype that described by Lattke in 2004 was also collected from the lowland area in Sandakan, Sabah, Malaysia (Borneo) at an altitude ca. 10 m. So far, we assume this species inhabits in lowland forests.

DISTRIBUTION. Indonesia: Sumatra (new record); Malaysia: Sabah.

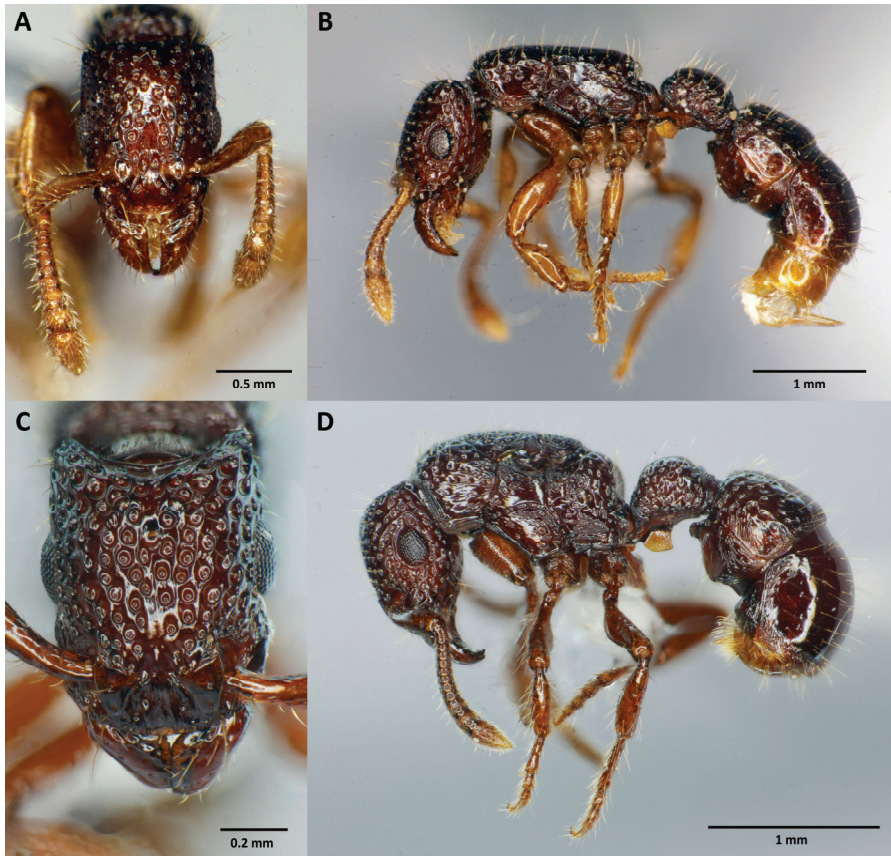


Fig. 1. *Gnamptogenys pertusa* Latke, 2004: A, B – worker (individual code: SEMUT10iv22A); C, D – dealate queen (colony code: SU-2iii23A, individual code: SEMUT2iii23A); A, C – head in frontal view; B, D – profile in lateral view.

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