

FORMICIDARUM JAPONICARUM SPECIES NOVAE
VEL. MINUS COGNITAE

auctore Prof. Tokutaro Ito, Tokio

(1914)

Subfamily MYRMICINÆ LEP.

Strumigenys japonica sp. nov.

♀ 2 1/2 mill. long.

Mandibles less than 1/3 the length of the head, triangular, the shaft thickened at the middle, curved inward, and armed with many sharp teeth. Head large, subcordate, narrowed anteriorly, snout-like, much thickened posteriorly; sides rather straight; vertex very convex; posterior angles rounded, with a marginal line; posterior margin deeply concave. Clypeus large, convex, nearly subcarinate, subrhombic, gradually tapering anteriorly. Eyes small, situated laterally a little behind the middle of the head. Antennae slender, the scapes long but not reaching the posterior corner of the head; funiculus 1 1/2 longer than the scapes, funicular joints 1-3 short, fourth joint longer than the second and third joints taken together, terminal joints two times longer than the fourth, and forming a rather thin club. Frontal carinae long; antennal grooves lateral, long, reaching the posterior angles of the head. Thorax very thin, narrower than the posterior part of the head, forming dorsal ridges on both sides; pronotum longer and broader than mesonotum, the anterior part being slender, curved, and shortly pedunculate, forming a neck, but the middle part being rounded on both sides; in profile pronotum and mesonotum being slightly convex, meso-epinotal constriction slightly impressed; epinotum high, the basal surface slightly ascending posteriorly, with 2 spines at the posterior angles, the declivity being rather abrupt and concave. Epinotal spines shorter than the basal surface, without membrane or spongy substance, straight, acute, directed upward and a little backward. Petiole longer than the epinotum, the anterior half becoming a peduncle, while the posterior part being formed into a node, which in profile being high and rounded, and slightly convex at the posterior declivity. Postpetiole shorter than the petiole; node in profile being thickened dorsally. Gaster longer than the pedicel but a little shorter and thicker than the head, ovoid, very convex ventrally, acute at the extremity. Legs moderately long, slender.

Head reticulate; antennal grooves foveolate. Thorax rugose. Head, thorax, and peduncle punctate. Gaster smooth and shiny.

Erect hairs are wanting on the antennae and legs; short but not clavate hairs on the thorax and abdomen. Pubescence on the head being thick, silvery and long clavate; while, that on the rest of the body being thin; on the whole, pubescence being very distinct and rather long. The posterior part of the postpetiole are covered with a spongy substance.

Reddish yellow or yellowish brown, being of the same colour with *St. Godeffroyi* MAYR var. *Lewisii* (CAMERON); head and gaster darker. Abdomen and legs yellow or reddish yellow.

Hab.: Japan: prov. Nagato in the Island of Honshû (Y. NAWA). 4 ♀.

This species belongs to the *Bauduerei* group; it also seems to resemble *St. membranifera* EMERY, from which it differs by the head being more produced and become narrowed anteriorly, by the antennal scapes being longer, more slender, and not thickened, by its more slender thorax and pedicel, and by the legs being longer.

Solenopsis fugax LATR.

♀ 1 1/2-2 mill. long.

Hab.: Japan: Tokio, in my garden in Koishikawa (T. Iro). 19 ♀.

This is, I believe, a very interesting rediscovery, since the first record of this species made by Mons. ERNEST ANDRÉ in 1903, absolutely nothing was known with regards to its occurrence in Japan.

In Japan this species is associated with *Pheidole ferrida* FR. SMITH, whose colour it so closely resembles. It makes very narrow side tunnels near or along the nests of *Pheidole ferrida*, so narrow that the latter species seems to be quite unable to enter them.

Cre mastogaster Auberti EMERY var. **Nawai** nov. var.

♀. 3-3 1/2 mill. long.

Similis *Cr. Auberti* EMERY typico, differt vertice capitis, thorace, gastereque, segmento basilari incluso, sparse sed distincte piloso; gastere supra, præter segmento basilari, non adpresse pubescenti; atque leviter et pallide fusco.

Head subquadrangular, excluding the mandibles as long as broad, sides convex, posterior border concave, strongly convex in front. Mandibles strong and thick, curved inward, the masticatory margin with 4 teeth. Clypeus broad, triangular, convex, its anterior margin nearly straight, narrow behind with round posterior margin. Frontal area rather obscure. Frontal carinae short, but prominent.

Eyes large, ovate-elliptical, convex, lateral, in the middle of the head. Antennae stout; scapes reaching the posterior corners of the head, slightly curved and gradually thickened above; funiculus 1 $\frac{1}{4}$ times longer than the scapes, first funicular joint 2 times as long as broad, joints 2-7 nearly as long as broad, joints 8-10 forming a club, each joint longer than broad, joint 9 a little longer as well as broader than joint 8, the terminal joint as long as the two preceding joints together. Thorax rather narrow, anteriorly about half as broad, but 1-1-2 as long as the head. Pronotum high, very convex anteriorly, with the lateral angles very prominent. Promesonotal suture indistinct. Mesonotum high, a little narrower than the pronotum, broader than long, narrowed posteriorly. Mesopinotal depression very well-marked. Epinotum with a short convex basal surface, the declivity abrupt, oblique, concave, about 2 times longer than the basal surface. Epinotal spines stout, straight, acute, about $\frac{1}{3}$ the length of the basal surface, directed outward, backward, and upward. Petiole obcordate, about as broad as the epinotum, a little longer than broad, convex posteriorly. Postpetiole about half as long as the petiole, a little broader than long, with 2 small tubercles situated above in a pair and marked with a median longitudinal depression between them, very shortly pedunculate posteriorly. Gaster ovate, very convex dorso-ventrally, nearly as long as the head and thorax together, but a little broader than the head, acute at the extremity. Legs moderate, rather stout.

Mandibles and clypeus shiny, the former being striated. Head shiny, finely punctuate; cheeks striate. Thorax and the first segment of the gaster with coarse, scattered, piligerous punctures. Gaster smooth and shiny.

Head, thorax, and abdomen sparsely but distinctly pilose; clypeus with long testaceous hairs; while scapes and tibiae being destitute of erect hairs. Head, thorax, and the basal joint of gaster minutely pubescent with appressed hairs; also the scapes and tibiae are pubescent.

Greyish brown or pale brown; head, postpetiole, the posterior part of the gaster, upper part of the antennae, femora, and tibiae darker or dark brown. Mandibles yellowish red.

Hab. : Japan : the Island of Hondō (Y. NAWA).

Nearly allied to *Cr. subnuda* MAYR and to *Cr. laboriosa* FR. SMITH var. *Matsumurai* FOREL, but differs from the former by its more arched thorax, and from the latter by its longer antennal scapes, by the longer, thinner and sharply pointed epinotal spines, by the form of the petiole, and by its lighter colour; from the European *Cr. scutellaris* OLIV., the present species may at once be distin-

guished by its smaller size, by the colour of the head and of other parts of the body, and by other characters; and from all of them by erect hairs being deficient on the tibiae and scapes.

Dr. FÖRDL, who kindly sent us a specimen of the European *Cr. Auberti* for comparison, considers the Japanese form a variety of that species.

Described from several ♀ collected at Obata in the Island of Honshū by Mr. YASUSHI NAWA, a well-known Japanese entomologist, with whom we have much pleasure in associating the name of this new variety.

Subfamily CAMPONOTINÆ FÖRDL.

Prenolepis (*Nylanderia*) *Sakuræ* sp. nov.

♀ 1-1.7 mill. long.

Mandibles $1/2$ as long as the head, the upper part incurved, the masticatory margin broad, with 5 unequal, viz. 3 large and 2 minute, teeth. Head, excluding the mandibles, longer than broad, sides slightly convex; posterior angles rounded, posterior border nearly straight, the front prominent, and the vertex rounded. Eyes moderately large. Clypeus transverse, convex, arched, not carinate, its anterior border rounded but not excised. Frontal area broader than long, distinct from the clypeus. Frontal carinae high. Antennal foveae distinct. Antennae slender; the scapes exceeding about $1/4$ of their length beyond the posterior corners of the head, thicker towards the apex, slightly curved; the first funicular joint longer than broad; joints 2-6 broader than long; joints 7-8 nearly as long

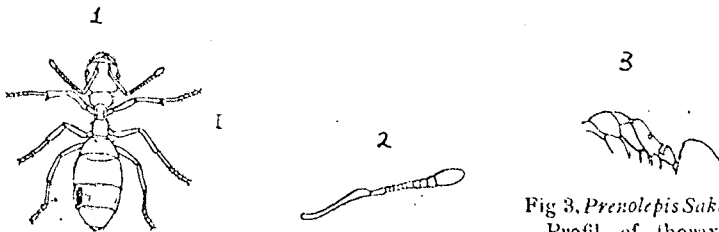


Fig. 1. *Prenolepis Sakuræ* ♀. Fig. 2. Antenna of same. Fig. 3. *Prenolepis Sakuræ* ♀. Profil of thorax and petiole.

as broad, joints 9-10 a little longer than broad, the terminal joint as long as joints 8-10 together and forming a club. Thorax distinctly longer than the head, in front about $2/3$ as broad as the latter, both pronotum and mesonotum being high: pronotum broader than long, the upper surface convex, rounded on the sides: mesonotum as long as broad, the upper surface slightly convex: pro mesonotal

suture marked. Epinotum with very short basal surface, a little higher than the mesonotum and passes into the long declivity: the declivity more than four times longer than the base, very oblique, straight or feebly concave, with a pair of minute protuberances at the posterior corner. Meso-epinotal depression not wide but distinct. Petiole low; node in profile inclined forward, with nearly straight anterior, acute upper, and convex ventral, surfaces: from behind about 1.3 as broad as the epinotum, the upper margin concave. Gaster longer than broad, longer and broader than the head, about three times broader than the epinotum, convex above, gibbous in front. Legs moderately long, rather stout.

Body subopaque, head, thorax, and abdomen finely punctuated.

Erect hairs thin, yellowish, growing on the mandibles, clypeus, and gaster, more sparsely on the head and thorax, but wanting on the tibiae and scapes. Pubescence grayish, distinctly on the head, antennæ, and legs; almost imperceptibly on the thorax and gaster.

Light yellowish brown; head and antennal scapes brown; gaster dark brown. Mandibular teeth reddish brown.

Hab. : Tokio, in my garden in Koishikawa (T. and SAKURA ITO).

The workers are frequently to be seen running on the ground in summer. Their paces are rather fast, but not rapid. They make their nests in the earth. The entrance of the nest is circular and small, less than 1 mill. in diameter.

Allied to *P. flavipes* (FR. SMITH), but differs by its smaller size, by its pubescence, especially that on the head, by its light brown colour, by its being subopaque, and by the shorter appendages.

Lasius niger LINN. var. *alieno-niger* FOREL.

♂ 2 1/2-3 1/2 mill. long.

Hab. : Japan : Tokio, in my garden in Koishikawa (T. ITO).

Lasius umbratus NYL. var. *micto-umbratus* FOREL.

♂ 3-3 1/2 mill. long.

Hab. : Japan : Tokio (T. and KEIHIKO ITO).

Camponotus fallax NYL. var. **Nawai** var. nov.

♂ major 5 1/2-7 mill. long. ♀ minor 4-5 mill. long.

Simillimus *C. fallaci* var. *quadrimaculato* FOREL, sed differt genis breve et valde pilosis, cum impressione media in fronte clypei, atque sculptura validiore.

Hab. : Japan : Miho in the province of Suruga in Hondô (Y. NAWA).

Pronotum yellow, stained with dark spots; the two yellow spots on the first gastric segment are confluent, as is often the case with *C. fallax* NYL. var. *quadrinotatus* FOREL.

Camponotus [Colobopsis] truncatus (SPINOLA).

♀ 3 1/2-4 mill. long. ♂ 4 1/2-5 1/2 mill. long.

Hab. : Japan : Chôfu in the province of Nagato in Hondô (Y. NAWA).

In comparing the Japanese specimens with those of the typical *C. truncatus* of Europe, we find in the former the following trivial characters deviating from the latter, viz. the head red or dark red and not black posteriorly, antennæ entirely yellow and not darkened at the upper part, both the upper and the lower surfaces of the head glabrous or nearly glabrous and not hairy, and the pale spots on the gaster wanting.

Dr. FOREL, however, writes us that « die Farbenunterschiede sind fast wertlos und die Farbe variiert sehr bei der europäischen Art ».

We wish to tender our hearty thanks to Professor Dr. A. FOREL, of Yverne, Switzerland, not only for his unfailing kindness and courtesy in examining and identifying species for us, but also for his generosity in giving us many important suggestions.
