

## On a Species in the Genus *Pararoncus* (Pseudoscorpionida : Neobisiidae) from Korea

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### 한국산 두줄앞은뱅이과 미기록속 *Pararoncus*의 1종

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#### ABSTRACT

We report herein *Pararoncus japonicus* (Ellingsen, 1907), Neobisiidae with a redescription of both adult and nymphal stages for the first time from Korea.

**Key words** : Taxonomy, Pseudoscorpionida, Neobisiidae, Korea

#### INTRODUCTION

The Korean Neobisiidae reported so far includes 3 genera, i.e. *Microbisium* (Lee, 1981), *Microcreagris* (Lee, 1981), and *Parobisium* (Morikawa, 1970). *Pararoncus japonicus* of the family Neobisiidae, unknown to Korea until now has been collected from the leaf litter and is described herein. The genus *Pararoncus* typically has an apical projection with 2 long and sharp setae.

#### DESCRIPTION

Family Neobisiidae Chamberlin, 1930

Genus *Pararoncus* Chamberlin, 1938

*Pararoncus japonicus* (Ellingsen, 1907) 긴팔  
앞은뱅이(신칭) (Fig. 1)

*Obisium* (*Roncus*) *japonicum* Ellingsen, 1907, p.  
10.

*Roncus* (*Roncus*) *japonicum* (Ellingsen): Beier,  
1932, p. 129.

*Pararoncus histrionicus* Chamberlin, 1938, p. 261.

*Roncus* (*Roncus*) *japonicus* (Ellingsen) :  
Morikawa, 1957, p. 360; Morikawa, 1960, p. 117.

*Roncus japonicus* (Ellingsen) : Sato, 1979, p. 94;  
Sato, 1983, p. 16.

*Pararoncus japonicus* (Ellingsen) : Harvey, 1990,  
p. 393.

**Description** (based on 5 males and 4 females).  
Male and female similar, though female slightly  
bigger. Body and palps light brown in color; body  
length of males 2.60-3.26 mm, and of females  
3.02-3.46 mm.

17 : 501-519  
Yano, M. 1911. A new slave-making ant from  
Japan. *Psyche* 18 : 110-112.

Zetterstedt, J. W. 1838. *Insecta Lapponica*. Sectio  
secunda. Hymenoptera : 317-475. Lipsiae.

(1996년 11월 18일 접수)

Carapace. A little longer than broad; with 2 small developed eyes situated at the anterior carapacial margin; with an epistomal process; carapacial chaetotaxy 4-6:30 (4-7:33).

Abdomen. Tergal chaetotaxy 10(8)-15(14)-17(10)-18(14)-19(17)-19(15)-20(14)-16(15)-16(14)-17-4(2). Maxilla with only two acute setae on apical margin.

Chelicera. Palm with 7 setae; fixed finger with 15-23 teeth, movable finger with 15-21 teeth.

Pedipalp. Slender in shape; femur 3.45-5.26, tibia 2.50-3.19, and chela 3.47-5.03 times as long as broad; hand 1.38-2.50 times as long as deep; movable finger 1.02-1.62 times as long as hand. Fixed finger with marginal row of 63-81 small teeth; movable finger with 55-68 similar marginal teeth. Movable finger with accessory teeth and lobe-like sensorium near seta *T*.

Leg. Entire femur of leg IV 3.17-3.87 and tibia 5.67-6.77 times as long as deep.

**Measurements (mm).** Body length 2.60-3.46. Carapace length 0.74-0.94. Chelicera 0.45-0.61 long. Palpal trochanter 0.43-0.55 by 0.22-0.32; femur 0.77-1.05 by 0.20-0.23; tibia 0.67-0.93 by 0.27-0.31; chela 1.35-1.73 by 0.27-0.45; hand 0.55-0.74 by 0.27-0.45; movable finger 0.68-1.02 long. Leg IV; entire femur 0.62-0.89 by 0.18-0.27; tibia 0.60-0.83 by 0.08-0.12; basitarsus 0.22-0.28 by 0.08-0.10; telotarsus 0.36-0.45 by 0.08-0.09.

**Tritonymph** (based on 3 individuals).

Body 2.66 mm in length.

Carapace. With 2 weakly developed eyes; small epistomal process present; carapacial chaetotaxy 4-6:28 (4-5:27, 4-7:32).

Abdomen. Tergal chaetotaxy 11(12)-16(15)-16(18)-17(16)-16(17)-16(19)-17(16)-16(15)-16(16)-12(16)-4(2). Maxilla with two acute setae on apical margin.

Chelicera. Palm with 6 setae; fixed finger with 17-21 teeth, movable finger with 16-19 teeth.

Pedipalp. Femur 2.93-3.54, tibia 2.29-2.36, and chela 3.42-3.67 times as long as broad; hand

1.40-1.59 times as long as deep; movable finger 1.24-1.45 times as long as hand. Fixed finger with 44-51 small dull teeth; movable finger with 38-50 marginal teeth.

Leg. Entire femur of leg IV 3.00 and tibia 5.30 times as long as deep.

**Measurements (mm).** Body length 2.66. Carapace length 0.56-0.67. Chelicera 0.35-0.38 long. Palpal trochanter 0.30-0.32 by 0.15-0.19; femur 0.49-0.56 by 0.16-0.17; tibia 0.43-0.51 by 0.19-0.22; chela 0.89-0.98 by 0.24-0.28; hand 0.37-0.47 by 0.24-0.28; movable finger 0.52-0.58 long. Leg IV; entire femur 0.49 by 0.16; tibia 0.43 by 0.08; basitarsus 0.15 by 0.07; telotarsus 0.26 by 0.07.

**Deutonymph** (based on 2 individuals).

Body 1.66 mm in length.

Carapace. No eyes; epistomal process barely present; carapacial chaetotaxy 4-6:25 (4-6:26).

Abdomen. Tergal chaetotaxy 6-9-11-11-12-12-12-12-10-9-4(2).

Chelicera. Palm with 5 setae; fixed finger with 13-16 teeth, movable finger with 10-11 teeth; flagellum with 4-5 pinnate setae.

Pedipalp. Femur 3.13, and chela 3.47 times as long as broad; hand 1.37 times as long as deep; movable finger 1.54 times as long as hand. Fixed finger with marginal row of 31-34 small teeth; movable finger with 29-31 marginal teeth.

**Measurements (mm).** Body length 1.66. Carapace length 0.37. Chelicera 0.22 long. Palpal trochanter 0.17 by 0.09; femur 0.32 by 0.10; tibia 0.25; chela 0.54 by 0.15; hand 0.21 by 0.15; movable finger 0.32 long.

**Material examined.** 1 ♀, Chöllabuk-do, Chinan-gun, Söngsu-myön (Taedusan), 25 Jan. 1995; 1 trito, Chöllabuk-do, Kunsan-shi, Noraesö m, 5 June 1994; 1 ♂, Chöllabuk-do, Namwon-gun, Mt. Chiri (Söngsamjae), 28 Mar. 1992; 2 ♀ ♀, 2 ♂ ♂, 1 trito, 1 deuto, Chöllabuk-do, Namwon-gun, Mt. Chiri (Paemsagol), 12 Mar. 1995; 4 ♀ ♀, 3 ♂ ♂, 1 trito, 2 deuto, Chöllabuk-do,

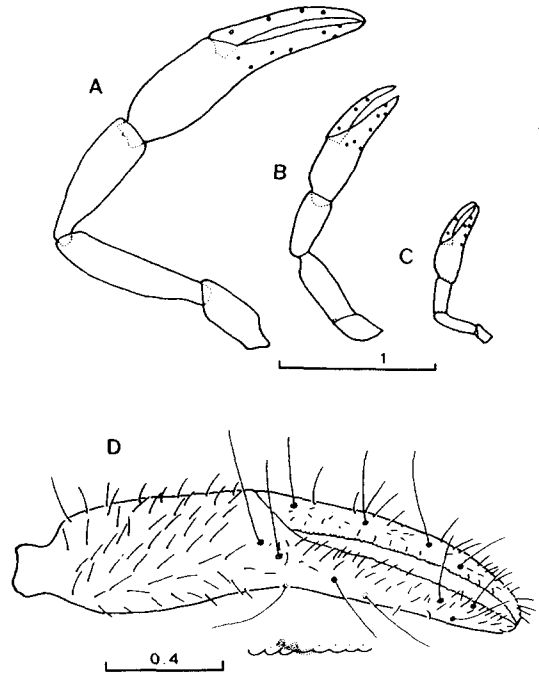
Puan-gun, Wi-do, 21 Feb. 1995: 2♀♀, 4♂♂, 5 trito, 2 deuto, Chōllabuk-do, Puan-gun, Sik-do, 22 Feb. 1995: 2♀♀, 2 trito, Chōllanam-do, Kwangju-shi, Mt. Mudūng, 5 Mar. 1995: Chōllanam-do, Kurye-gun, Mt. Chiri (P'iajol)- 4♀♀, 7♂♂, 2 trito, 19 Mar. 1993: 1♀, 1♂, 1 trito, 18 Apr. 1993: 5♀♀, 11♂♂, 6 trito, 14 Nov. 1993: 5♀♀, 12♂♂, 2 trito, 19 Dec. 1993: 4♀♀, 7♂♂, 3 trito, 9 Jan. 1994: 7♀♀, 6♂♂, 1 trito, 6 Feb. 1994: 3♀♀, 6♂♂, 4 trito, 19 Mar. 1994: 1♂, 1 deuto, 10 Apr. 1994: 4♀♀, 15♂♂, 7 trito, 5 deuto, 6 Nov. 1994: 12♀♀, 20♂♂, 7 trito, 10 Dec. 1994: 5♀♀, 2♂♂, 14 Jan. 1995: 3♀♀, 1♂, 1 trito, 5 Feb. 1995: 5♀♀, 1♂, 3 trito, 2 deuto, Chōllanam-do, Sūngju-gun, Mt. Chogye, 5 Mar. 1995.

**Distribution.** Korea and Japan.

**Remarks.** This species resembles *Roncus* (*Roncus*) *japonicus*, but differs in apical projection having 2 long and sharp setae. Deutonymphs, tritonymphs, and adults occurred simultaneously at the same site. No individuals of protonymphs were found. Individuals of the species were only collected in the leaf litter from October to May.

**Table 1. Measurements (mm) of various structures in *Pararoncus japonicus* (L : length, B : breadth)**

	Adult	Tritonymph	Deutonymph
Body	2.60-3.46	2.66	1.66
Carapace	0.74-0.94	0.56-0.67	0.37
Chelicera	0.45-0.61	0.35-0.38	0.22
Pedipalp			
Trochanter L	0.43-0.55	0.30-0.32	0.17
B	0.22-0.32	0.15-0.19	0.09
Femur L	0.77-1.05	0.49-0.56	0.32
B	0.20-0.23	0.16-0.17	0.10
Tibia L	0.67-0.93	0.43-0.51	0.25
B	0.27-0.31	0.19-0.22	
Chela L	1.35-1.73	0.89-0.98	0.54
B	0.27-0.45	0.24-0.28	0.15
Hand L	0.55-0.74	0.37-0.47	0.21
B	0.27-0.45	0.24-0.28	0.15
Movable finger	0.68-1.02	0.52-0.58	0.32
Leg IV			
Entire femur	0.62-0.89	0.49	
Tibia	0.60-0.83	0.43	
Basitarsus	0.22-0.28	0.15	
Telotarsus	0.36-0.45	0.26	



**Fig. 1. *Pararoncus japonicus*: A, pedipalp of adult; B, pedipalp of tritonymph; C, pedipalp of deutonymph; D, chela: scales in mm.**

**적 요**

Neobisiidae(머리없는뱅이과)에 속하는 *Pararoncus* (긴팔없는뱅이속: 신칭)는 우리나라에서 처음 보고되는 속으로 *Pararoncus japonicus* (긴팔없는뱅이: 신칭)의 기재와 발생단계별로 주요 부분에 대한 측정과 기재를 하였다.

검색어 : 분류, 앓은뱅이목, 머리없는뱅이과

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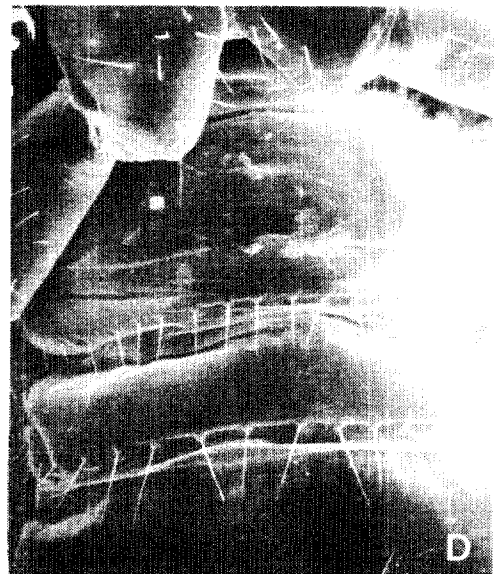
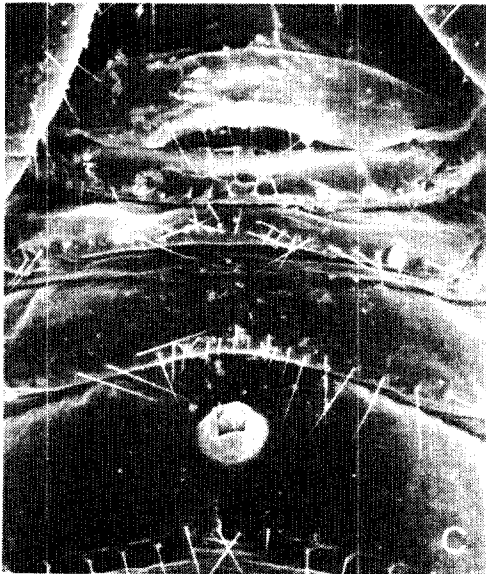
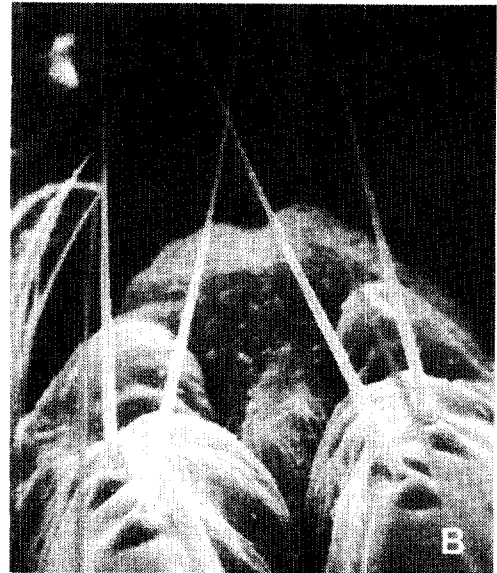
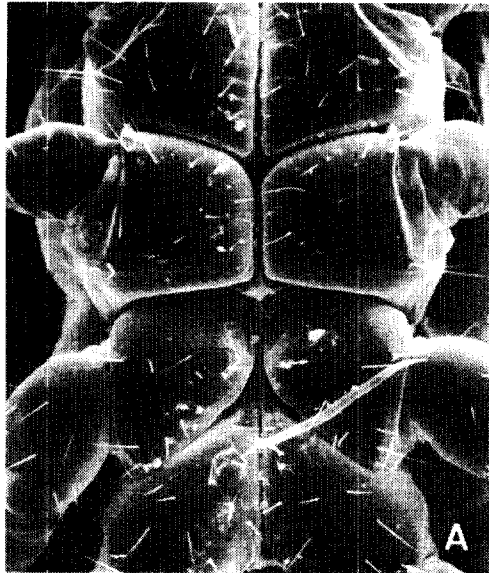
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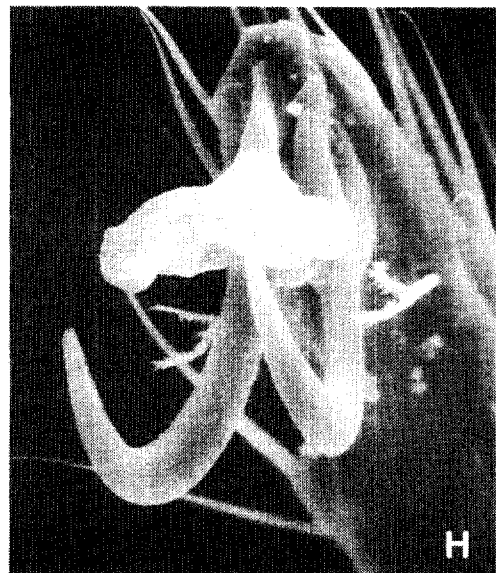
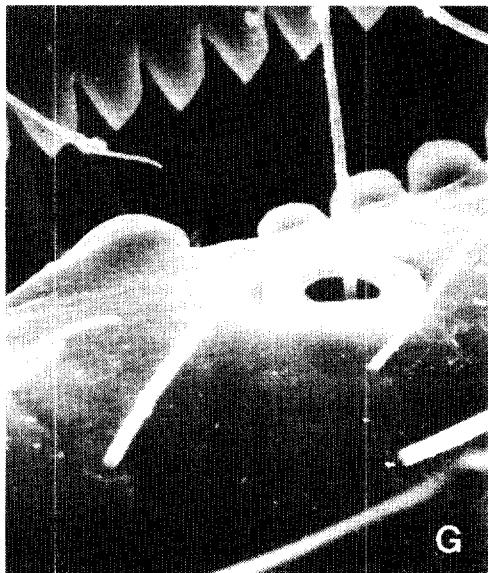
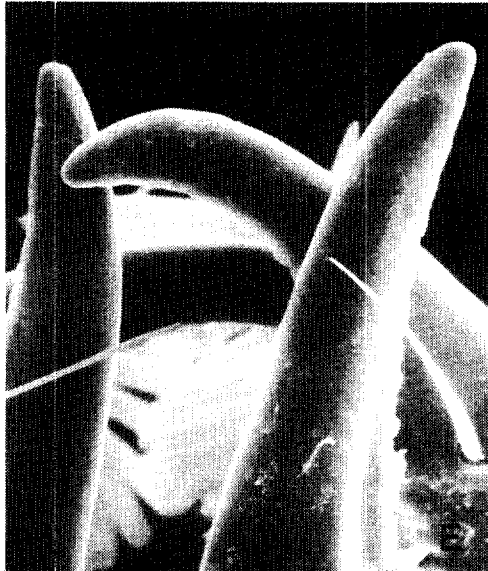
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## PLATE 1



Figs. A D, *Pararoncus japonicus*: A, coxal area (X 120): B, seta at apical margin (X 600): C, male genitalia (X 130): D, female genitalia (X 130).

PLATE 2



Figs. E-H, *Pararoncus japonicus*: E, galea(X 700); F, flagellum (X 600); G, accessory teeth (X 1,300); H, claws (X 1,000)