

Ants from the Seoraksan National Park

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ABSTRACTS

Fifty-one species of ants in 20 genera and four subfamilies were identified from the Seoraksan National Park, Kangwon Province in Korea, based on survey from April 1991 to October 1995.

Key words: Ants, fauna, Seoraksan National Park, Korea

INTRODUCTION

Seoraksan National Park is the highest mountain of Taebaek mountain range, which consists of Naeseorak and Oiseorak in Sockcho-shi, Inje-gun, Yangyang-gun, Gosung-gun. The former includes Taecheongbong (1707,9 m), Kwanmosan (889 m), Cheonbuldong gorge, Gwongeum-seong, Biryongpokpo, Ulsanbawi, and Towangseongpokpo, while the latter includes Paekdam gorge, Suryeomdong gorge, Baekundong gorge, Gayadong gorge, Waryongpokpo, Yudalpokpo, Ssangpokpo, Daeseongpokpo, Baekdamsa, and Bongjeongam. It is located from 38° 5' N to 38° 13' N and from 128° 15' E to 128° 33' E. (Fig. 1)

It also offer abundant various trees and plants, which provide good habitats for wild animals. We have been so interested in the ant fauna of Korean Peninsular that we have tried to do that since 1990. Of course, this study may be one of them. The present studies were directed toward identification of ants in Seoraksan National Park in the hope that the result would offer distinctive informations for the ant fauna of Korea. We have tried to cove all areas to get enough samples without biased sampling, as much as possible.

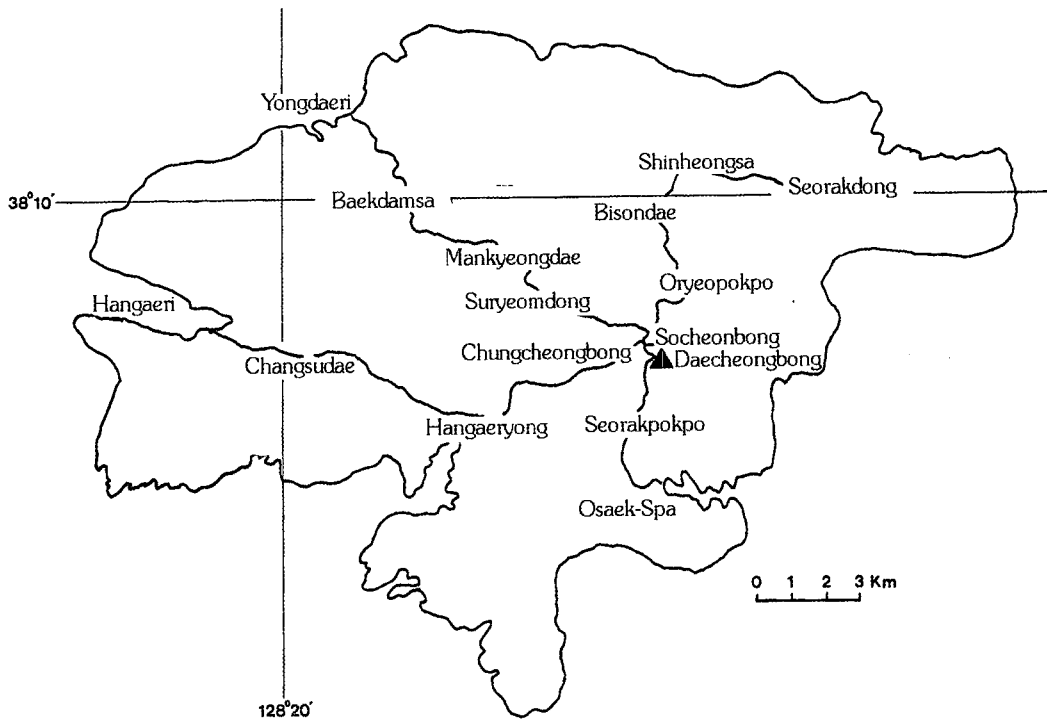


Fig. 1. Map of collecting course in Seoraksan: 1, Yongdaeri→Baekdamsa→Mankyeongdae→Suryeomdong Bongeongam→Socheonbong→Chungcheongbong→Daecheongbong, 11 July 1992, 23 July 1992, 9 Aug. 1995; 2, Seorakdong→Shinheongsa→Biseonda→Cheonbuldong→Oryeonpokpo→Socheonbong→Chungcheongbong→Daecheongbong, 5 Apr. 1991, 8 July 1991, 10 Sep. 1994; 3, Osaek-Spa→Seorakpokpo→Daecheongbong, 16 June 1994; 4, Hangaeri→Changsudae→Hangaeryeong→Chungcheongbong→Daecheongbong, 3 Sep. 1993.

MATERIALS AND METHODS

All the specimens used in this paper were collected from Seoraksan National Park. Ant nests being excavated by a spade and moved to white clothes, they were vacuumed by vacuum pump modified for ant collecting. The after they were put in Bouin's solution (80 % ethanol 150 ml, formaldehyde 15 ml, picric acid 1 g) and two or three days later moved to 95 % ethanol. Dried specimens were examined microscopically, using Wild M 8 stereozoom-microscope, and identified in comparison with voucher specimens from Elmes and Collingwood in Great Britain, Onoyama in Japan, Rigato in Italy and Wang in China. Taxonomic keys were made following the system of Collingwood (1979). The fifty one species confirmed were listed in this paper including some informations of this region.

SYSTEMATIC ACCOUNT

Subfamily 1. Ponerinae Lepeletier, 1835 침개미 아과

Tribe 1. Ponerini Lepeletier, 1835 침개미 족

Genus 1. *Pachycondyla* Smith, 1858 뚱보침개미 속

1. *Pachycondyla astuta* (Smith, 1858) 스미스침개미

Korean records. Gaeseong, Bakyon Pokpo, Bakyonsan, Jukdo, Chejudo, Dolsando, Odongdo, Songnisan, Woraksan, Chongju, Sobaeksan, Namsan, Baekryongdo, Taehuksando, Ulleungdo, Moaksan, Namhaedo.

2. *Pachycondyla chinensis* (Emery, 1894) 왕침개미

Korean records. Gyeongseong, Suwon, Songnisan, Chirisan, Sobaeksan, Busan, Hansando, Namhaedo, Saryangdo, Mireoksan, Hongdo, Geojedo, Yeokjido, Chejudo, Taehuksando, Dolsando, Taecheongdo.

3. *Pachycondyla javana* (Mayr, 1867) 일본침개미

Korean records. Gaeseong, Geumkangsan, Seokwangsa, Seoul, Suwon, Ganghwado, Seoraksan, Songnisan, Chirisan, Sobaeksan, Woraksan, Naejangsan, Hongdo, Hallasan, Geojedo, Namhaedo, Saryangdo, Moaksan, Mireoksan, Baekryongdo, Taehuksando, Dolsando, Taecheongdo.

Genus 2. *Cryptopone* Emery, 1893 장님침개미 속

4. *Cryptopone sauteri* (Wheeler, 1906) 장님침개미

Korean records. Hwasan, Seokwangsa, Suwon, Ganghwado, Woraksan, Songnisan, Namhaedo, Geryongsan, Naejangsan, Geojedo, Namsan, Chejudo, Moaksan, Mireoksan, Taehuksando, Ulleungdo, Jukdo, Taecheongdo.

Genus 3. *Ponera* Latreille, 1804 침개미 속

5. *Ponera japonica* Wheeler, 1906 침개미

Korean records. Seokwangsa, Pyeongyang, Daeseongsan (Pyeongannamdo), Woraksan, Songnisan, Ganghwado, Geryongsan, Naejangsan, Sobaeksan, Namhaedo, Hansando, Taehuksando, Namsan, Chejudo, Moaksan, Hongdo, Baekryongdo, Taecheongdo, Ulleungdo.

6. *Ponera scabra* Wheeler, 1928 거치른침개미

Korean records. Daeseongsan, Pyongan, Taedonggang, Keumgangsan, Manmilsan, Kaeseong, Moaksan, Bakyonsan, Bakyon Pokpo, Naejangsan, Mireoksan, Namhaedo, Songnisan.

Subfamily 2. Dolichoderinae Forel, 1878 시베리아개미 아과

Tribe 2. Dolichoderini Teranishi, 1930 시베리아개미 족

Genus 4. *Dolichoderus* Lund, 1831 시베리아개미 속

7. *Dolichoderus sibiricus* (Emery, 1889) 시베리아개미

Korean records. Pyeongyang, Gyeongseong, Chejudo.

Subfamily 3. Myrmicinae Lepeletier, 1836 두마디개미 아과

Tribe 3. Crematogastrini Forel, 1893 꼬리치레개미 족

Genus 5. *Crematogaster* Lund, 1831 꼬리치레개미 속

8. *Crematogaster matsumurai vagula* Wheeler, 1928 등급은꼬리치레개미

Korean records. Songnisan, Taecheon, Woraksan, Sobaeksan, Mireoksan, Chejudo, Naejangsan, Dolsando, Moaksan.

Tribe 4. Pheidolini Emery, 1877 흑개미 족

Genus 6. *Aphaenogaster* Mayr, 1853 장다리개미 속

9. *Aphaenogaster famelica* (Smith, 1874) 황장다리개미

Korean records. On-Dzong (Kangwondo), Geumgangsan, Chiaksan, Chogesan, Seoul, Piagol, Gachilbong, Gayasan, Chejudo, Baekryongdo.

10. *Aphaenogaster schmidti* Karawajew, 1912 장다리개미

Korean records. Suwon.

Remark. This species seems to be questionable because it can not be found in *Aphaenogaster* according to Bolton's catalogue (1995).

11. *Aphaenogaster* (*Aphaenogaster*) *smythiesii* Forel, 1911 일본장다리개미

Korean records. Gyongseong, Seoraksan, Ganghwado, Songnisan, Moaksan, Woraksan, Sobakesan, Geryongsan, Naejangsan, Pusan, Hongdo, Baekryongdo, Taecheongdo. Hansando, Geojedo, Mireoksan, Namsan, Dolsando, Namhaedo, Songnisan, Chejudo,

Genus 7. *Messor* Forel, 1890 쌍구개미 속

12. *Messor aciculatus* (Smith, 1874) 쌍구개미

Korean records. Wonsan, Seoraksan, Ganghwado, Seoul, Woraksan, Songnisan, Geryongsan, Chirisan, Sobaeksan, Pusan, Namhaedo, Geojedo, Hansando, Odongdo, Moaksan, Chejudo, Dolsando.

Genus 8. *Pheidole* Westwood, 1839 흑개미 속

13. *Pheidole fervida* F. Smith, 1874 극동흑개미

Korean records. Gaeseong, Bakyon Pokpo, Sagampo, Geumgangsan, Pyeongyang, Seokwangsa, Ganghwado, Seoraksan, Geojedo, Seoul, Songnisan, Woraksan, Geryongsan, Chirisan, Namhaedo, Naejangsan, Namsan, Odongdo, Yokchido, Hansnado, Hongdo, Moaksan, Dolsando, Chejudo, Tahuksando, Ulleungdo, Jukdo, Baekryongdo, Taecheongdo.

14. *Pheidole noda* F. Smith, 1874 흑개미

Korean records. Seoraksan, Seoul, Songnisan, Woraksan, Geryongsan, Naejangsan, Chirisan, Seonamsa, Odongdo, Baekyangsa, Gayasan, Yudalsan, Chungmu, Ulleungdo, Namhaedo, Geojedo, Odongdo, Taehuksando. Yokchido, Hansnado, Bigeomdo, Moaksan, Chiaksan, Chejudo.

Tribe 5. Formicoxenii Forel, 1893 이방개미 족

Genus 9. *Leptothorax* Mayr, 1855 호리가슴개미 속

15. *Leptothorax acervorum* (Fabricius, 1793) 북방호리가슴개미

Korean records. Chann Pay Plateau (Ryanggangdo), Seoraksan, Chejudo.

16. *Leptothorax spinosior* Forel, 1901 긴바늘집호리가슴개미

Korean records. Seokwangsa, Ganghwado, Seoraksan, Songnisan, Woraksan, Geryongsan, Chirisan, Sobaeksan, Naejangsan, Namhaedo, Yokchido, Geojedo, Hongdo, Namsan, Taeheuksando, Chejudo.

Tribe 6. Solenopsidini Forel, 1893 마디개미 족

Genus 10. *Monomorium* Mayr, 1855 집개미 속

17. *Monomorium chinense* Santschi, 1925 중국집개미

Korean records. Geumgangsan, Seorkasan, Woraksan, Naejangsan, Baekyangsa, Pusan, Chinhae, Chungmu, Odongdo, Hansando, Saryangdo, Moaksan, Chejudo, Hongdo, Dolsando, Namhaedo, Ulleungdo.

18. *Monomorium monomorium* Bolton, 1987 꼬마개미

Korean records. Geumgangsan, Cheju, Dolsando, Odongdo, Chongju, Woraksan, Seorkasan.

Genus 7. *Solenopsis* Westwood, 1840 열마디개미 속

19. *Solenopsis fugax* Latreille, 1798 마디개미

Korean records. Seokwangsa, Geumgangsan, Seoul, Suwon, Hwasan, Chunseonggun Yulmunri, Gwangjugun Bungsanri, Yangjugun Kyohyeonri.

20. *Solenopsis japonica* Wheeler, 1928 일본열마디개미

Korean records. Geumgangsan, Gaeseong, Bakyonsan, Seoraksan, Choonseonggun Sinbukmyon, Ganghwado, Seoul, Woraksan, Songnisan, Geryongsan, Naejangsan, Sobakaesan, Odongdo, Namhaedo, Sarangdo, Hansando, Hongdo, Geojedo, Chejudo, Ulleungdo, Moaksan, Mireoksan, Taehuksando, Jukdo, Dokdo, Namsan.

Tribe 7. Myrmecini Ashmead, 1905 가시방패개미 족

Genus 12. *Pristomyrmex* Mayr, 1866 그물등개미 속

21. *Pristomyrmex pungens* Mayr, 1866 그물등개미

Korean records. Geumgangsan, Seoraksan, Seoul, Suwon, Yangjugun Gyohyeonri, Gwangjugun, Bungsanri, Chiaksan Guryongsa, Naejangsan, Chirisan, Cheogsanri, Chejudo, Moaksan, Mireoksan, Taehuksando, Songnisan, Ulleungdo, Namsan, Baekryongdo, Taecheongdo, Hongdo, Dolsando, Namhaedo.

Tribe 8. Myrmecini Emery 1877 빨개미 족

Genus 13. *Myrmica* Latreille, 1804 빨개미 속

22. *Myrmica kotokui* Forel, 1911 코토쿠빨개미

Korean records. Chann-Pay Plateau (Ryanggang), Samziyan (1500 m), Chiaksan.

23. *Myrmica kurokii* Forel, 1907 쿠로키빨개미

Korean records. Ryanggang Baekdusan (1900 m), Seoraksan, Gebangsan, Mireoksan, Sobaeksan, Naejangsan.

24. *Myrmica lobicornis* Nylander, 1846 곰빨개미

Korean records. Hallasan, Songnisan.

25. *Myrmica ruginodis* Nylander, 1846 빛개미

Korean records. Chann-Pay Plateau (Ryanggang), Samziyan (1700 m), Seoraksan, Ganghwado,

Woraksan, Songnisan, Sobaeksan, Chirisan, Chejudo.

26. *Myrmica scabrinodis* Nylander, 1846

Korean records. Odaesan, Bukhansan, Teokyusan

27. *Myrmica sulcinodis* Nylander, 1846 어리빨개미

Korean records. Geumkangsan, Odaesan, Tobongsan, Bukhansan, Gyeongbongsan, Teokyusan, Chuncheon, Kimpo, Sobaeksan,

28. *Myrmica* sp.

29. *Myrmica yessensis* Forel, 1901 북방빨개미

Korean records. Chann-Pay Plateau, Samjiyan (1700 m) (Ryanggang), Seoraksan, Ganghwado, Woraksan, Songnisan, Sobaeksan, Chejudo, Chiaksan.

Remark. This species seems to be questionable because it is not found in *Myrmica* according to Bolton's catalogue (1995).

30. *Myrmica yoshiokai* Weber, 1947 요시오카빨개미

Korean records. Kangwondo On-Dzong, Geumgangsan.

Tribe 9. Tetramorini Emery, 1895 주름개미 족

Genus 14. *Tetramorium* Mayr, 1855 주름개미 속

31. *Tetramorium caespitum* (Linnaeus, 1758) 주름개미

Korean records. Pyeongyangsi, Neungrado, Bakyonsan, Bakyon Pokpo, Wonsan, Sanchontong, Sisungho, Geumgangsan, Chann-Pay Plateau, Samjiyan, Naejangsan, Seoraksan, Hongdo, Hoingseonggun Gapcheonmyeon, Hongcheon, Chuncheon, Chiaksan, Seoul, Taehuksando, Suwon, Woraksan, Songnisan, Geryongsan, Moaksan, Chirisan, Gayasan, Suncheonsi, Chokyesean, Odongdo, Tokdo, Chejudo, Mungapdo, Namhaedo, Moaksan, Mireoksan, Dolsando, Taecheongdo, Baeryongdo, Taehuksando, Ulleungdo, Jukdo, Namsan.

Genus 15. *Strongylognathus* Mayr, 1853 이빨개미 속

32. *Strongylognathus koreanus* Pisarski, 1966 이빨개미

Korean records. Myohyangsan, Saryangdo.

Tribe 10. Metaponini Forel, 1911 메타폰개미 족

Genus 16. *Vollenhovia* Mayr, 1865 에메리개미 속

33. *Vollenhovia emeryi chosenica* Wheeler, 1928 에메리개미

Korean records. Ganghwado, Woraksan, Songnisan, Geryongsan, Chirisan, Naejangsan, Namsan, Namhaedo, Hansando, Dolsando, Geojedo, Chejudo, Moaksan, Ulleungdo, Taecheongdo, Taehuksando, Mireoksan.

Subfamily 4. Formicicinae Latreille, 1809 불개미 아과

Tribe 11. Camponotini Forel, 1878 왕개미 족

Genus 17. *Camponotus* Mayr, 1861 왕개미 속

34. *Camponotus atrox* Emery, 1925 홍가슴개미

Korean records. Gaeseong, Bakyonsan Bakyonpoppo, Seoraksan, Geryongsan, Sobaeksan, Woraksan, Songnisan, Naejangsan, Chejudo.

Remark. This species has been misidentified as *Camponotus ligniperda* Mayr, 1879.

35. *Camponotus japonicus* Mayr, 1866 일본왕개미

Korean records. Desangsan, Lyongaksan, Sagam, Changlyongsan, Pyeongyang, Neongrado, Bongwari, Zamosan, Nampo, Bakyonsan, Guksangbong mountain [Pyeongannamdo], Bakyon Pokpo, Seoraksan, Ganghwado, Suwon, Taechon, Songnisan, Woraksan, Geryongsan, Naejangsan, Sobaeksan, Pusan, Chinhae, Chungmu, Namhaedo, Geojedo, Saryangdo, Yokjido, Maemuldo, Odongdo, Moaksan, Mireoksan, Chiaksan, Dolsando, Baekryongdo, Ulleungdo, Jukdo, Namsan, Taechongdo, Chejudo Hallasan.

36. *Camponotus kiusuensis* Santschi, 1937 갈색발왕개미

Korean records. Songnisan, Geryongsan, Woraksan, Hongdo, Chejudo, Songnisan, Naejangsan, Ulleungdo, Namhaedo, Baekyangsa, Geomundo, Chiaksan, Moaksan

37. *Camponotus (Myrmamblys) nipponensis* Santschi, 1937 털왕개미

Korean records. Seoraksan, Yongmunsan, Songnisan, Geryongsan, Chejudo, Sobaeksan, Moaksan, Gayasan.

38. *Camponotus obscuripes* Mayr, 1879 홍가슴개미

Korean records. Yongmunsan, Gayasan, Chejudo, Chiaksan.

Remark. This species seems to be misidentification of other species or varieties by Terayama et al. (1992)

39. *Camponotus quadrinotatus* Forel, 1886 네눈개미

Korean records. Byeongannamdo Zamosan, Gaesong Bakyonsan, Bakyon Pokpo, Naejangsan, Moaksan, Chejudo, Dolsando, Ulleungdo, Songnisan.

Tribe 12. Formicini Latreille, 1809 불개미 족

Genus 18. *Formica* Linnaeus 1758 불개미 속

40. *Formica fusca* Linnaeus, 1758 흑개미

Korean records. Gachilbong, Byungchang, Jeumbongsan, Gyebangsan, Gwanaksan, Teukjeukdo, Ganghwado, Wangbansan, Sobaeksan, Chuwangsan, Chinju, Teokyusan, Chirisan, Chinan, Hwaemosan, Chejudo.

41. *Formica japonica* Motschulsky, 1856 곰개미

Korean records. Mangyongdae, Desangsan, Nampo, Lyongaksan, Zamosan, Chann-pay Blateau, Samziyan, Bakyonsan, Bakyon Pokpo, Geumgangsan, Seoraksan, Ganghwado, Hongchon, Seoul, Daechon, Woraksan, Songnisan, Geryongsan, Chirisan, Paekyangsa, Naejangsan, Sobaeksan, Chinhae, Pusan, Chungmu, Saryangdo, Geomundo, Yokjido, Hansando, Namhaedo, Maemuldo, Chejudo, Chiaksan, Moaksan, Mireoksan, Namsan, Dolsando, Geojedo, Baekryongdo.

42. *Formica (Serviformica) lemani* Bondroit, 1917 레만개미

Korean records. Baekdusan, Chann-pay Blateau (Pyeongannamdo), Sokebangsan, Seoraksan, Cheonmasan, Chejudo.

43. *Formica lugubris* Zetterstedt, 1838 얼룩개미

Korean records. Maisan, Naejangsan, Moaksan.

44. *Formica sanguinea* Latreille, 1798 분개미

Korean records. Baekdusan, Sokyebangsan, Gangreung, Taebaesan, Cheonmasan, Incheo

Sobaeksan, Chejudo.

45. *Formica yessensis* Forel, 1901 불개미

Korean records. Bakyonsan, Bakyon Pokpo, Hwasan, Gyeongseong, Seoraksan, Saryangdo, Geojedo, Hansando, Namhaedo, Hongcheon, Woraksan, Songnisan, Chirisan, Sobaeksan.

Tribe 13. Lasiini Ashmead, 1905 풀잎개미 족

Genus 19. *Lasius* Fabricius, 1804 풀잎개미 속

46. *Lasius alienus* (Förster, 1850) 누운털개미

Korean records. Sagam, Pyongyang, Bakyonsan [Pyongannamdo], Gaeseong, Bakyon Pokpo, Moaksan, Mireoksan, Chiaksan, Baekryongdo, Taecheongdo, Namhaedo, Hallasan, Geojedo, Ulleungdo, Namsan, Jukdo, Songnisan.

47. *Lasius brunneus* (Latreille, 1798) 황색풀개미

Korean records. Seoraksan, Ganghwado, Baekryongdo, Taecheongdo, Ulleungdo, Namsan.

48. *Lasius (Chthonolasius) flavus* (Fabricius, 1782) 황개미

Korean records. Hyesan, Zedongsan (Rygang), Ondzong, Geumgangsán, Pyeongchanggun, Ulleungdo, Songnisan, Namhaedo, Gechonri, Baekryongdo, Taecheongdo, Taehuksando.

49. *Lasius fuliginosus* Latreille, 1798 풀개미

Korean records. Suwon, Pusan, Jeombosan, Seoul, Wangbangsan, Cheonmasan, Daedunsan, Sobaeksan, Ulleungdo.

50. *Lasius hayashi* Yamauchi & Hayashida, 1970 하야시털개미

Korean records. Pyeongyang Hotel garden, Gugsanbong, Desangsan, Geumgangsán, Zamosan [Pyongannamdo], Gaeseong, Bakyonsan, Hyesan Hotel garden. Seoraksan, Woraksan, Songnisan, Chirisan, Moaksan.

51. *Lasius niger* Linnaneus, 1758 고동털개미

Korean records. Rygang, Gangwon-Gaesong Provinces, Chejudo, Hongdo, Dolsando, Namsan, Baekyangsa, Sangwangbong, Songnisan, Chiaksan, Mireoksan, Namhaedo, Baekryongdo, Geojedo, Taecheongdo.

52. *Lasius (Dendrolasius) spathepus* Wheeler, 1910 민범새개미

Korean records. Baekyangsa, Naejangsan, Geumgangsán, Seokwangsa, Seoraksan, Ganghwado, Sobaeksan, Woraksan, Geryongsan, Songnisan, Chirisan, Suwon, Namhaedo, Maemuldo, Hongdo, Moaksan, Chejudo.

53. *Lasius (Dendrolasius) teranishii* Wheeler, 1928 테라니시털개미

Korean records. Gaesong Province, Songnisan.

Genus 20. *Paratrechina* Motschulsky, 1863 사쿠라개미 속

54. *Paratrechina (Nylanderia) flavipes* (Smith, 1874) 스미드개미

Korean records. Parks Hotel garden (Pyongyang), Gaesong, Bakyonsan, Sanchontong, Bakyon Pokpo, Geumgangsán Hotel garden, Seoraksan, Seoul, Hongcheon, Ganghwado, Suwon, Woraksan, Songnisan, Taecheon, Geryongsan, Chirisan, Sobaeksan, Pusan, Chungmu, Chindong, Ulleungdo, Hongdo, Saryangdo, Odongdo, Dolsando, Chejudo, Chiaksan, Moaksan, Baekryongdo, Taecheongdo, Taehuksando, Namhaedo, Geojedo, Ulleungdo, Tokdo, Jukdo, Namsan.

55. *Paratrechina sakurae* (Ito, 1914) 사쿠라개미

Table 1. Species composition of ants in Mt. Seoraksan.

Scientific Name	1	2	3	4	Reference
Subfamily Ponerinae					
<i>Pachycondyla astuta</i>					●
<i>Pachycondyla chinensis</i>	●				
<i>Pachycondyla java</i>	●	●	●		
<i>Cryptopone sauteri</i>		●			
<i>Ponera japonica</i>	●		●	●	
<i>Ponera scabra</i>	●				
Subfamily Dolichoderinae					
<i>Dolichoderus sibiricus</i>				●	
Subfamily Myrmicinae					
<i>Crematogaster matsumurai vagula</i>	●	●			
<i>Aphaenogaster famelica</i>					●
<i>Aphaenogaster schmidti</i>					●
<i>Aphaenogaster smythysii</i>	●	●		●	
<i>Messor aciculatus</i>		●	●		
<i>Pheidole fervida</i>	●	●	●	●	
<i>Pheidole noda</i>					●
<i>Leptothorax acevorum</i>		●			
<i>Leptothorax spinosior</i>	●	●	●	●	
<i>Monomorium chinense</i>		●	●		
<i>Monomorium monomorium</i>					●
<i>Solenopsis fugax</i>					●
<i>Solenopsis japonica</i>	●	●	●	●	
<i>Pristomyrmex pungens</i>	●	●	●	●	
<i>Myrmica kotokui</i>	●		●	●	
<i>Myrmica kurokii</i>	●	●			
<i>Myrmica lobicornis</i>					●
<i>Myrmica ruginodis</i>					●
<i>Myrmica scabrinodis</i>				●	
<i>Myrmica sulcinodis</i>				●	
<i>Myrmica</i> sp					●
<i>Myrmica yessensis</i>		●			
<i>Myrmica yoshiokai</i>					●
<i>Tetramorium caespitum</i>	●	●	●	●	
<i>Strongylognathus koreanus</i>					●
<i>Vollenhovia emeryi</i>	●				
Subfamily Formicinae					
<i>Camponotus atrox</i>					●
<i>Camponotus japonicus</i>	●	●	●	●	

Table 1. Continued.

Scientific Name	1	2	3	4	Reference
<i>Camponotus kiusuensis</i>	●			●	
<i>Camponotus nipponensis</i>					●
<i>Camponotus obscuripes</i>	●	●			
<i>Camponotus quadrinotatus</i>		●			
<i>Formica fusca</i>	●				
<i>Formica japonica</i>	●	●	●	●	
<i>Formica lemani</i>					●
<i>Formica lugubris</i>		●			
<i>Formica sanguinae</i>					
<i>Formica yessensis</i>					●
<i>Lasius alienus</i>	●		●		
<i>Lasius brunneus</i>		●			
<i>Lasius flavus</i>	●		●		
<i>Lasius fuliginosus</i>	●				
<i>Lasius hayashi</i>			●	●	
<i>Lasius niger</i>	●	●		●	
<i>Lasius spathepus</i>				●	
<i>Lasius teranishii</i>					●
<i>Paratrechina flavipes</i>	●	●	●	●	
<i>Paratrechina sakurae</i>			●		
Total	25	22	17	18	16

Table 2. Comparison of distribution in subfamilies.

Subfamily	Ponerinae	Dolichoderinae	Myrmicinae	Formicinae
No. of species (%)	6 (10.9)	1 (1.8)	26 (47.3)	22 (40)

Korean records. Pyeongyang, Gaesong Province, Bakyonsan, Sanchondong, Geumgangsán, Bakyon Pokpo, Seoraksan, Seoul, Jukdo, Suwon, Woraksan, Songnisan, Geryongsan, Sobaeksan, Pusan, Dolsando, Yokjido, Hansando, Geojedo, Chejudo, Moaksan, Hongdo, Baekryongdo, Taechongdo, Ulleungdo, Tokdo.

DISCUSSION

The species structure of ant over each surveyed course from Seoraksan National Park was a total of four subfamilies, 20 genera, 55 species; six species of three genera under subfamily Ponerinae

(10.9%), one species of one genera under subfamily Dolichoderinae (1.8%), 26 species of 12 genera under subfamily Myrmicinae (47.3%), 22 species four genera under subfamily Formicinae (40%) (Table 1, 2). It was unveiled that the dominant ant species were seven species; *Pheidole feruida*, *Solenopsis japonica*, *Pristimyrme pungens*, *Tetramorium caespitum*, *Camponotus japonicus*, *Formica japonica* and *Lasius niger*. On the other hand also the rare ant species were 5five species; *Cryptopone sauteri*, *Ponera scabra*, *Vollenhovia emeryi*, *Lasius brunneus* and *Lasius fuliginosus*.

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설악산 국립공원의 개미

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요 약

설악산 개미류의 분포 조사는 Choi (1986)에 의한 4아과 15속 29종이 처음 보고 되었으나, 이후 체계적인 보고는 없었다. 1991년 4월부터 1997년 9월까지 개미류를 채집하여 동정한 결과 5속 26종을 추가 보고하며, 이로서 설악산에는 총 4아과 20속 55종이 서식하는 것으로 확인되었다.