

The Spider Fauna of Namhai Island, Korea

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ABSTRACT

The spider fauna of Namhai Island was investigated from 21 to 25 Aug 1998. As a result, 81 species of 43 genera under 15 families were collected. Identified spiders are composed of 30.8% Palearctic, 28.4% Palearctic and Oriental, 6.1% Holarctic, 2.4% Oriental, and 3.7% Cosmopolitan species. Araneid, salticid and theridiid spiders appeared to be dominant among the spiders. Common species with Japan and China were 56 (69.1%) and 55 (67.1%) species, respectively.

Key words : spider fauna, Namhai Island, Korea

INTRODUCTION

To clarify the spider fauna of Korean islands and make sure the distribution of Korean spiders, the faunal research of Korean islands such as Chindo (Kim, 1995), Paekryeongdo (Kim, 1996), Gogeumdo (Kim, 1997) and Geojedo (Kim, 1998), has been carried out annually since 1995. The present research was conducted in Namhai island, Namhai-gun, Kyungsangnam-do. The area of this island is 205 km². Its average annual temperature and rainfall are 14.2°C, 1,452 mm, respectively.

MATERIALS AND METHODS

The spiders were collected by means of visual search & capture, sweeping net method and beating-sheet method at 19 sites (Whabangsa, Namhaidaikyo, Wangjimaetul, Hoilyong, Namsang, Suhsang, Mulgun, Mijo, Keumsan, Chunha, Changsunkyo, Daibyuk, Danhang, Koomomaetul, Yongmunsa, Danghang, Kachun, Yookoo, Pyungsan). Collected spiders were preserved in 80% ethylalcohol and identified under stereoscopic microscope in steeping condition.

RESULTS

As a consequence of this survey, 81 species of 43 genera under 15 families were identified. The results are shown in the check-list.

Family Uloboridae Thorell, 1869

Genus *Octonoba* Opell, 1979

Octonoba sp.

Material examined. S19 (2j).

Octonoba sybotides (Boesenberg et Strand, 1906)

Material examined. S11 (1♀)

Family Pholcidae C.L. Koch, 1851

Genus *Pholcus* Walckenaer, 1805

Pholcus sp.

Material examined. S1 (8♀♀), S2 (8j), S10 (1♀), S11 (1♀), S15 (4♀♀)

P. crypticolens Boesenberg et Strand, 1906

Material examined. S16 (3♀♀)

Family Theridiidae (Sundevall, 1833)

Theridiidae sp.

Material examined. S16 (1j)

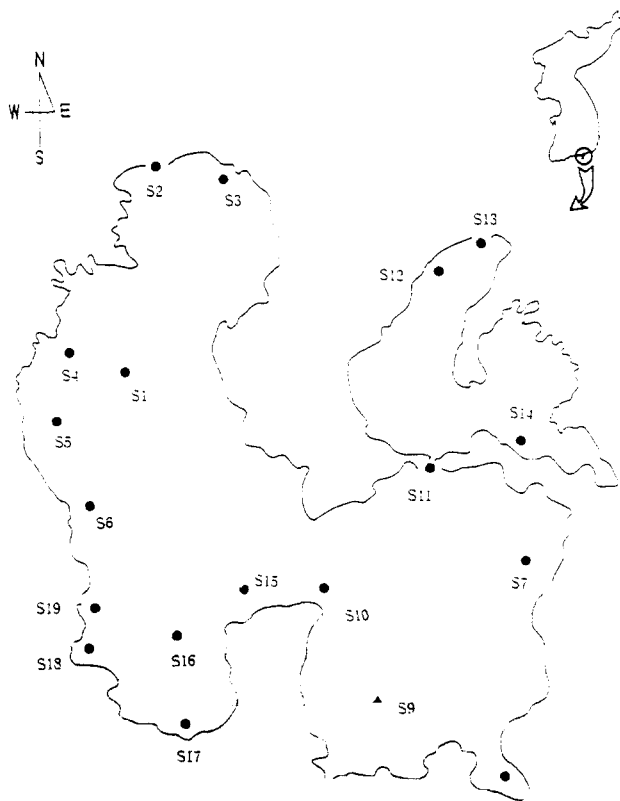


Fig. 1. Sampling localities in Namhai Island.

(S1. Whoabangsa, S2. Namhaidaikyo, S3. Wangjimaetul, S4. Hoilyong, S5. Namsang, S6. Suhsang, S7. Mulgun, S8. Mijo, S9. Keumsan, S10. Chunha, S11. Changsunkyo, S12. Daibyuk, S13. Danhang, S14. Koomomaetul, S15. Yongmunsa, S16. Danghang, S17. Kachun, S18. Yookoo, S19. Pyungsan)

Genus *Achaearanea* Strand, 1929

Achaearanea sp.

Material examined. S1 (1j), S2 (7j), S7 (2j), S9 (3)

A. angulithorax (Boesenberg et Strand, 1906)

Material examined. S2 (4 ♀♀), S11 (3 ♀♀), S15 (1 ♀), S16 (2 ♀♀, 1 ♂)

A. culicivora (Boesenberg et Strand, 1906)

Material examined. S1 (3 ♀♀), S2 (18 ♀♀), S7 (4 ♀♀), S10 (7 ♀♀), S11 (4 ♀♀), S14 (3 ♀♀), S16 (2 ♀♀), S18 (3 ♀♀), S19 (3 ♀♀)

A. tabulata Levi, 1980

Material examined. S16 (♀)

A. tepidariorum (C.L. Koch, 1841)

Material examined. S1 (10 ♀♀, 3 ♂♂), S2 (23 ♀♀, 6 ♂♂), S3 (6 ♀♀), S5 (2j), S7 (2 ♀♀), S9 (7 ♀♀), S10 (12 ♀♀), S11 (6 ♀♀, 2 ♂♂), S17 (2 ♀♀), S19 (2j, 1 ♀)

Genus *Anelosimus* Simon, 1891

Anelosimus crassipes (Boesenberg et Strand, 1906)

Material examined. S6 (1 ♂)

Genus *Coleosoma* O.P. Cambridge, 1882

Coleosoma octomaculatum Boesenberg et Strand, 1906

Material examined. S12 (1j)

Genus *Dipoena* Thorell, 1869

Dipoena mustelina (Simon, 1888)

Material examined. S15 (1 ♀)

Genus *Theridion* Walckenaer, 1805

Theridion sterninotatum Boesenberg et Strand, 1906

Material examined. S1 (1 ♀)

Family Linyphiidae Blackwall, 1859

Linyphiidae sp.

Material examined. S7 (2j), S10 (5j), S13 (1j), S19 (1 ♀)

Subfamily Linyphiinae (Simon, 1894)

Genus *Neriene* Blackwell, 1833

Neriene oidedicata (Helsdingen, 1969)

Material examined. S1 (1 ♀)

Subfamily Erigoninae Emerton, 1882

Genus *Gnathonarium* Karsch, 1881

Gnathonarium gibberum Oi, 1960

Material examined. S15 (1 ♀)

Family Araneidae Dahl, 1912

Araneidae sp.

Material examined. S8 (1j)

Genus *Araneus* Clerck, 1757

Araneus sp.

Material examined. S12 (1j)

A. ejusmodi Boesenberg et Strand, 1906

Material examined. S7 (6j)

A. cornutus (Clerck, 1757)

Material examined. S11 (2j), S13 (3j), S14 (1 ♀), S18 (1 ♀)

A. ventricosus (L. Koch, 1878)

Material examined. S1 (1 ♀), S2 (2 ♀♀), S3 (2 ♀♀), S5 (1 ♀), S6 (1 ♀), S8 (4 ♀♀), S14 (1j), S15 (2j), S16 (1 ♂), S19 (1 ♀)

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Genus *Argiope* Audouin, 1827

Argiope bruennichii (Scopoli, 1772)

Material examined. S2 (1 ♀), S4 (7 ♀ ♀, 1 ♂), S7 (1 ♀), S8 (4 ♀ ♀, 3 ♂ ♂), S9 (10 ♀ ♀, 2 ♂ ♂), S10 (4 ♀ ♀, 2 ♂ ♂), S11 (1 ♀), S13 (1 ♀), S18 (2 ♀ ♀), S19 (1 ♀)

A. minuta Karsh, 1879

Material examined. S2 (7 ♀ ♀), S3 (1 ♀), S10 (3 ♀ ♀), S11 (2 ♀ ♀), S15 (4 ♀ ♀)

Genus *Cyclosa* Menge, 1866

Cyclosa sp.

Material examined. S1 (1j), S2 (1j), S16 (1j)

C. argenteoalba Boesenberg et strand, 1906

Material examined. S2 (2 ♀ ♀), S3 (4 ♀ ♀),

C. ginnaga Yaginuma, 1959

Material examined. S2 (1 ♀),

C. japonica Boesenberg et Strand, 1906

Material examined. S15 (2 ♀ ♀)

C. octotuberculata Karsch, 1879

Material examined. S1 (2j), S8 (1j), S9 (8j), S16 (1j)

Genus *Larinia* Simon, 1874

Larinia argiopiformis Boesenberg et Strand, 1906

Material examined. S4 (1j), S6 (1j), S9 (4j), S16(1j)

Genus *Neoscona* Simon, 1864

Neoscona adiantum (Walckenaer, 1802)

Material examined. S2 (1j, 9 ♀ ♀, 4 ♂ ♂), S4 (7 ♀ ♀), S6 (2j), S9 (5 ♀ ♀, 1 ♂), S11 (1j), S12 (1 ♀), S16 (1j), S18 (1 ♀), S19 (1 ♀)

N. melloteei (Simon, 1895)

Material examined. S8 (1 ♀)

N. nautica (L. Koch, 1875)

Material examined. S2 (7 ♀ ♀), S3 (5 ♀ ♀), S5 (2 ♀ ♀), S6 (1j), S7 (13 ♀ ♀, 1 ♂), S8 (1 ♀), S9 (1 ♀), S10 (4 ♀ ♀), S11 (2 ♀ ♀), S12 (1 ♂, 1 ♀), S13 (2j, 3 ♀ ♀), S18 (14 ♀ ♀), S19 (26 ♀ ♀, 1 ♂)

N. scylla (Karsch, 1879)

Material examined. S1 (10 ♀ ♀, 1 ♂), S2 (1 ♀), S13 (2 ♀ ♀), S18 (1 ♀)

N. scylloides (Boesenberg et Strand, 1906)

Material examined. S13 (1 ♀)

Genus *Yaginumia* Archer, 1960

Yaginumia sia (Strand, 1906)

Material examined. S2 (1 ♀, 1 ♂), S16 (1j, 1 ♂)

Family Tetragnathidae Menge, 1866

Genus *Leucauge* White, 1841

Leucauge blanda (L. Koch, 1878)

Material examined. S8 (4 ♀ ♀, 1 ♂), S17 (1 ♀)

L. magnifica Yaginuma, 1954

Material examined. S1 (2 ♀ ♀)

L. subblanda Boesenberg et Strand, 1906

Material examined. S1 (1 ♀)

L. subgemmea Boesenberg et Strand, 1906

Material examined. S16 (1 ♂)

Genus *Nephila* Leach, 1815

Nephila clavata L. Koch, 1878

Material examined. S1 (3 ♀ ♀), S2 (1 ♀), S3 (1 ♀), S4 (2 ♀ ♀), S6 (4 ♀ ♀), S7 (1 ♀), S8 (6 ♀ ♀, 2 ♂ ♂), S9 (2 ♀ ♀), S10 (18 ♀ ♀), S11 (3 ♀ ♀), S13 (2 ♀ ♀), S17 (2 ♀ ♀), S18 (1j)

Genus *Tetragnatha* Latreille, 1804

Tetragnatha sp.

Material examined. S2 (1j), S4 (1j), S6 (1j), S17 (1j), S18 (6j), S19 (1j)

T. extensa (Linnaeus, 1758)

Material examined. S10 (1 ♀), S11 (2 ♀ ♀, 1 ♂), S12 (1 ♀)

T. maxillosa Thorell, 1895

Material examined. S13 (5 ♀ ♀), S14 (3 ♀ ♀)

Family Urocteidae (Thorell, 1869)

Genus *Uroctea* Dufour, 1820

Uroctea compactilis L. Koch, 1878

Material examined. S2 (8 ♀ ♀), S4 (23 ♀ ♀), S7 (16 ♀ ♀), S11 (1 ♀), S18 (11 ♀ ♀), S19 (2j)

Family Agelenidae C.L. Koch, 1937

Agelenidae sp.

Material examined. S1 (1j), S2 (3j), S10 (2j), S11 (2j), S13 (7j), S16 (5j)

Genus *Agelena* Walckenaer, 1805

Agelena sp.

Material examined. S1 (3j), S4 (2j), S9 (1j), S19 (2j)

A. difficilis Fox, 1936

Material examined. S4 (1 ♂), S11 (1 ♂), S17 (2 ♂ ♂)

A. labyrinthica (Clerck, 1757)

Material examined. S4 (1 ♀)

A. limbata Thorell, 1897

Material examined. S1 (3 ♀ ♀, 1 ♂), S3 (1 ♀), S11 (1 ♀),

S15 (2 ♀ ♀)

A. opulenta L. Koch, 1878

Material examined. S7 (1 ♀)

Genus *Tegenaria* Latreille, 1804

Tegenaria domestica (Clerck, 1757)

Material examined. S7 (1 ♀)

Family Pisauridae Simon, 1980

Pisauridae sp.

Material examined. S1 (10j), S2 (1j), S4 (4j), S6 (1j), S10 (2j), S16 (1j), S17 (1j), S19 (1j)

Family Lycosidae Sundevall, 1833

Lycosidae sp.

Material examined. S18 (1j)

Genus *Pardosa* C.L. Koch, 1848

Pardosa astrigera L. Koch, 1878

Material examined. S1 (1 ♂), S6 (1 ♀), S8 (1 ♀), S9 (1 ♂), S10 (1 ♀), S14 (4j, 2 ♀ ♀, 1 ♂), S18 (1j, 3 ♀ ♀, 2 ♂ ♂), S19 (1j)

Family Oxypidae Thorell, 1869

Genus *Oxyopes* Latreille, 1804

Oxyopes sp.

Material examined. S2 (1j), S6 (6j), S10 (2j), S16 (1j), S17 (3j)

Family Clubionidae Wanger, 1888

Genus *Cheiracanthium* C.L. Koch, 1839

Cheiracanthium sp.

Material examined. S9 (2j)

Genus *Clubiona* Latreille, 1804

Clubiona sp.

Material examined. S4 (1j)

Family Thomisidae Sundevall, 1833

Genus *Heriaeus* Simon, 1875

Heriaeus mellottei Simon, 1886

Material examined. S6 (3 ♀ ♀)

Genus *Misumenops* F.O.P.-Cambridge, 1900

Misumenops tricuspidatus (Fabricius, 1775)

Material examined. S2 (35j), S4 (13j), S5 (3 ♀ ♀), S6 (7j), S7 (2 ♀ ♀), S8 (4j), S10 (6j), S12 (1j), S16 (7j, 1 ♂), S17

(1j), S18 (3 ♀ ♀), S19 (8j, 2 ♀ ♀)

Genus *Oxyptila* L. Koch

Oxyptila striatipes L. Koch, 1878

Material examined. S2 (6j), S3 (1 ♀), S16 (4j)

Genus *Runcinia* Simon, 1864

Runcinia albostrigata Boesenberg et Strand, 1906

Material examined. S6 (1 ♀)

Genus *Synema* Simon, 1864

Synema globosum (Fabricius, 1775)

Material examined. S2 (1j), S4 (1j)

Genus *Tmarus* Simon, 1875

Tmarus sp.

Material examined. S19 (1j)

Genus *Xysticus* C.L. Koch, 1875

Xysticus sp.

Material examined. S2 (4j), S4 (3j), S6 (14j), S7 (1j), S8 (1j), S9 (1j), S10 (2j), S11 (3j), S16 (2j)

Family Philodromidae O.P.-Cambridge, 1871

Genus *Philodromus* Walckenaer, 1826

Philodromus sp.

Material examined. S2 (2j), S9 (1j)

P. cespitum (Walckenaer, 1802)

Material examined. S2 (1j)

Family Salticidae Blackwall, 1841

Salticidae sp.

Material examined. S2 (1j), S7 (2j), S10 (26j), S13 (2 ♀ ♀), S14 (2j), S17 (1j), S18 (1j)

Genus *Evarcha* Simon, 1902

Evarcha albaria (L. Koch, 1878)

Material examined. S1 (1 ♂), S2 (1j), S4 (1 ♂), S10 (1j), S14 (1 ♂), S15 (1j), S16 (1 ♀), S19 (2 ♂ ♂)

Genus *Heliophanus* C.L. Koch, 1833

Heliophanus sp.

Material examined. S2 (1j)

Genus *Marpissa* C.L. Koch, 1883

Marpissa sp.

Material examined. S10 (2j)

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M. magister

Material examined. S5 (1 ♀)

Genus *Menemerus* Simon, 1968

Menemerus fulvus (L. Koch, 1877)

Material examined. S2 (1j, 2 ♀ ♀), S7 (5 ♀ ♀), S9 (1j, 1 ♂), S10 (3j, 4 ♀ ♀), S11 (2 ♀ ♀), S16 (1j, 1 ♀)

Genus *Phlegra* Simon, 1876

Phlegra festiva (C.L. Koch, 1834)

Material examined. S19 (6j, 3 ♂ ♂)

Genus *Phintella* Strand, 1906

Phintella sp.

Material examined. S2 (1j), S6 (3j)

P. lineata (Karsch, 1879)

Material examined. S1 (1 ♀)

Genus *Plexippus* C.L. Koch, 1846

Plexippus sp.

Material examined. S18 (1j)

P. setipes Karsch, 1879

Material examined. S4 (1 ♂), S11 (2j, 1 ♀), S17 (1 ♂)

Genus *Pseudicius* Simon, 1885

Pseudicius himeshimensis (Doenitzi et Strand, 1906)

Material examined. S5 (2j, 4 ♀ ♀, 2 ♂ ♂), S7 (1 ♀), S8 (4j), S9 (2j, 3 ♀ ♀), S10 (2j), S11 (6 ♀ ♀, 2 ♂ ♂), S14 (52 ♀ ♀, 15 ♂ ♂)

Genus *Sitticus* Simon, 1988

Sitticus albolineatus (Kulczynsky, 1985)

Material examined. S16 (1 ♂)

S. avocator (O.P.-Cambridge, 1885)

Material examined. S7 (1 ♀, 1 ♂)

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