

The Spider Fauna in Anmyun-do Island from Korea

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Abstract – The spider fauna in Anmyun-do Island was investigated from 20 th to 24 th Aug. 1999. As a result, 94 species of 66 genera under 18 families were collected. Identified spiders were composed of Palaearctic (6%), Holarctic (7%), Oriental (0.8%), Cosmopolitan (0.8%) species. Araneid, salticid and theridiid spiders were dominant among the spiders. Common species with Japan and China were 93 (72%) and 90 (70%) species, respectively.

Key words : spider fauna, Anmyun-do Island, Korea

Introduction

To clarify the spider fauna of Korean Islands and make sure the distribution of Korean spiders, the faunal researches of Korean Islands, Chin-do (1995), Paiklyeong-do (1996), Gogeum-do (1997), Geoje-do (1998), and Namhae-do (1999) have been carried out annually since 1995. The present research was conducted in Anmyun-do Island, the sixth largest Island in the Korea. The area of this Island is 87.96 km² and the coast line is 120 km. The length of east-west and north-south is each 5.5 km and 24 km as shown in Fig. 1.

Materials and Methods

The spiders were collected by means of visual search

and capture, pitfall-trap, sweeping net method, and beating-sheet method at 16 sites (Fig. 1). Collected spiders were preserved in 80% ethyl alcohol and identified under stereoscopic microscope (Leica MZ Apo) in steeping condition.

Results

As a result, total 2174 individuals of 94 species under 18 families were identified (Table 1). Among the collected families, Araneid, Salticid and Theridiid spiders were dominant families, and Ctenidae, Liocranidae, Uroctidae were rare families in Anmyun-do Island (Table 2). This survey was conducted by various methods to estimate the diverse spider species according to their ecological riches or behaviors. salticid, lycosid and pisaurid spiders were mostly collected by pit-fall traps and araneid, theridiid and linyphid spiders were exclusive caught by visual search and capture, because of their wearing behavior.

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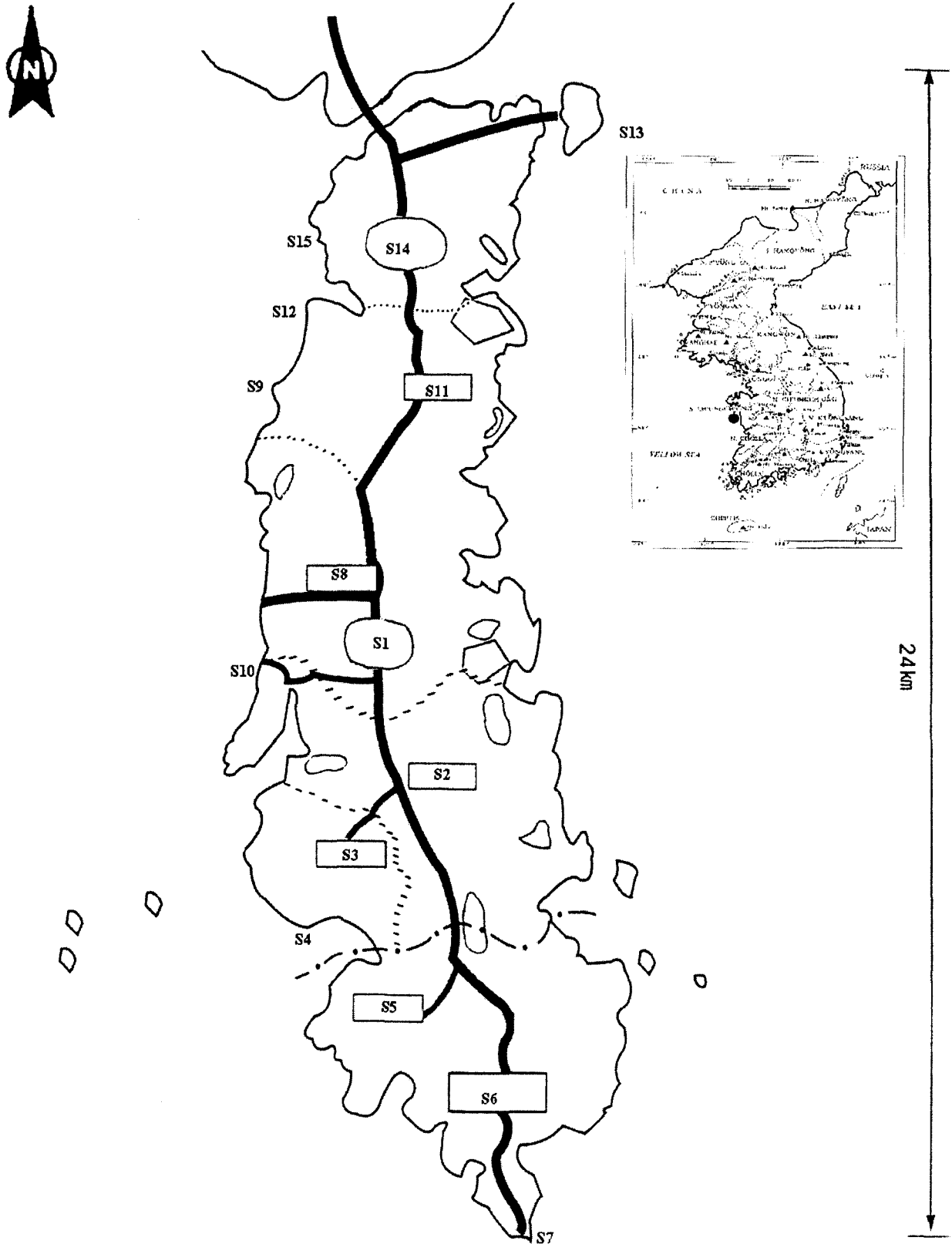


Fig. 1. The map of Anmyun-do Island (S1. Recreation Forest, S2. Jungjang, S3. Shinya, S4. Hwangae, S5. Jangok, S6. Gonam, S7. Yeongmok, S8. Seungeon, S9. Batgae, S10. Kochji, S11. Jeongdang, S12. Gaetgae, S13. Hwangdo, S14. Changi, S15. Sambong).

Table 1. A Check List of Spiders from Anmyun-do Island

<p>Family 1. Agelenidae C. L. Koch, 1937 Genus 1. <i>Agelena</i> Walckenaer, 1805 <i>A. difficilis</i> Fox, 1937 <i>A. limbata</i> Thorell, 1879 <i>A. opulenta</i> L. Koch, 1878</p>	<p>Genus 3. <i>Hylyphantes</i> Simon, 1884 <i>H. graminicola</i> (Sundevall, 1829) Subfamily 2. Linyphiinae (Simon, 1894) Genus 1. <i>Neriene</i> Blackwell, 1833 <i>N. oidedicata</i> (Helsdingen, 1969)</p>
<p>Family 2. Araneidae Dahl, 1912 Genus 1. <i>Argiope</i> Audouin, 1826 <i>A. amoena</i> L. Koch, 1878 <i>A. bruennichii</i> (Scopoli, 1772) <i>A. minuta</i> Karsch, 1879 Genus 2. <i>Araneus</i> Clerck, 1758 <i>A. mitificus</i> (Simon, 1886) <i>A. ventricosus</i> (L. Koch, 1878) Genus 3. <i>Chorizopes</i> O. P. -Cambridge, 1870 <i>C. Yaginuma</i>, 1963 Genus 4. <i>Cyclosa</i> Menge, 1866 <i>C. atrata</i> Boesenberg et Strand, 1906 <i>C. japonica</i> Boesenberg et Strand, 1906 <i>C. laticauda</i> Boesenberg et Strand, 1906 <i>C. monticola</i> Boesenberg et Strand, 1906 Genus 5. <i>Larinia</i> Simon, 1874 <i>L. argiopiformis</i> Boesenberg et Strand, 1906 Genus 6. <i>Larinioides</i> Caporiacco, 1934 <i>L. cornutus</i> (Clerck, 1757) Genus 7. <i>Neoscona</i> Simon, 1864 <i>N. adiantum</i> (Walckenaer, 1802) <i>N. mellooteei</i> (Simon, 1895) <i>N. nautica</i> (L. Koch, 1875) <i>N. scylla</i> (Karsch, 1879) <i>N. scylloides</i> (Boesenberg et Strand, 1906) <i>N. subpullata</i> (Boesenberg et Strand, 1906) Genus 8. <i>Yaginumia</i> Archer, 1960 <i>Y. sia</i> (Strand, 1906)</p>	<p>Family 8. Liocranidae (Simon, 1897) Genus 1. <i>Itatsina</i> Kishida, 1930 <i>I. praticola</i> (Boesenberg et Strand, 1906)</p> <p>Family 9. Lycosidae Sundevall, 1833 Genus 1. <i>Pardosa</i> C. L. Koch, 1847 <i>P. astrigera</i> L. Koch, 1878 <i>P. hedinii</i> Schenkel, 1937 <i>P. laura</i> Karsch, 1879 Genus 2. <i>Pirata</i> Sundevall, 1833 <i>P. subpiraticus</i> (Boesenberg et Strand, 1906)</p>
<p>Family 3. Clubionidae Wanger, 1888 Genus 1. <i>Clubiona</i> Latreille, 1804 <i>C. jucunda</i> (Karsch, 1879) <i>C. kurilensis</i> Boesenberg et Strand, 1906</p>	<p>Family 10. Oxypidae Thorell, 1869 Genus 1. <i>Oxyopes</i> Latreille, 1804 <i>O. koreanus</i> Paik, 1969</p>
<p>Family 4. Ctenidae Keyserling, 1877 Genus 1. <i>Anahita</i> Karsch, 1879 <i>A. fauna</i> Karsch, 1879</p>	<p>Family 11. Philodromidae O. P. -Cambridge, 1871 Genus 1. <i>Tibellus</i> Simon, 1875 <i>T. tenellus</i> (L. Koch, 1876)</p>
<p>Family 5. Dictynidae O. P. -Cambridge, 1871 Genus 1. <i>Dictyna</i> Sundevall, 1833 <i>D. felis</i> Boesenberg et Strand, 1906</p>	<p>Family 12. Pisauridae Simon, 1980 Genus 1. <i>Dolomedes</i> Latreille, 1804 <i>D. sulfureus</i> L. Koch, 1978 Genus 2. <i>Pisaura</i> Simon, 1885 <i>P. lama</i> Boesenberg et Strand, 1906</p>
<p>Family 6. Gnaphosidae Pocock, 1898 Genus 1. <i>Gnaphosa</i> Latreille, 1804 <i>G. potanini</i> Simon, 1895</p>	<p>Family 13. Salticidae Blackwall, 1841 Genus 1. <i>Asianellus</i> Logunov et Heciak, 1996 <i>A. festivus</i> (C.L. Koch, 1834) Genus 2. <i>Euophrys</i> C. L. Koch, 1834 <i>E. frontalis</i> (Walckenaer, 1802) Genus 3. <i>Evarcha</i> Simon, 1902 <i>E. albaria</i> (L. Koch, 1878) Genus 4. <i>Harmochirus</i> Simon, 1885 <i>H. brachiatus</i> (Thorell, 1877) <i>H. pullus</i> (Boesenberg et Strand, 1906) Genus 5. <i>Heliophanus</i> C. L. Koch, 1833 <i>H. ussuricus</i> Kulczynski, 1895 Genus 6. <i>Phintella</i> Strand, 1906 <i>P. bifurcilinea</i> (Boesenberg et Strand, 1906) <i>P. lineata</i> (Karsch, 1879) <i>P. mellooteei</i> (Simon, 1888) Genus 7. <i>Marpissa</i> C. L. Koch, 1846 <i>M. elongata</i> (Karsch, 1879) Genus 8. <i>Myrmarachne</i> Macleay, 1839 <i>M. formicaria</i> (De Geer, 1778) Genus 9. <i>Plexippus</i> C. L. Koch, 1846 <i>P. setipes</i> Karsch, 1879 Genus 10. <i>Pseudicius</i> Simon, 1885 <i>P. himeshimensis</i> (Doenitz et Strand., 1906) Genus 11. <i>Rhene</i> Thorell, 1869 <i>R. atrata</i> (C. L. Koch, 1881)</p>
<p>Family 7. Linyphiidae Blackwall, 1859 Subfamily 1. Erigoninae Emerton, 1882 Genus 1. <i>Hylyphantes</i> Simon, 1884 <i>H. graminicola</i> (Sundevall, 1829) Genus 2. <i>Gnathonarium</i> Karsch, 1881 <i>G. gibberum</i> Oi, 1960</p>	

Table 2. Continued.

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16
<i>Oxytate striatipes</i>	•		•		•	•		•	•	•	•	•	•		•	
<i>Pachygnatha clercki</i>				•					•							
<i>Pardosa astrigera</i>		•	•	•	•	•	•	•	•	•		•	•		•	
<i>Pardosa hedinii</i>						•										
<i>Pardosa laura</i>									•							•
<i>Pardosa T-insignita</i>											•					
<i>Phene atrata</i>						•										
<i>Phintella bifurcilinea</i>	•			•	•											
<i>Phintella linea</i>	•															
<i>Phlegra testiva</i>				•												
<i>Pisaura lama</i>	•	•	•		•			•	•	•	•	•			•	
<i>Pisaura subpiraticus</i>		•														
<i>Pistius undulatus</i>			•								•			•		
<i>Plexippus setipes</i>						•										
<i>Pseudicius himeshimensis</i>				•												
<i>Runcinia albostrigata</i>	•			•	•											
<i>Silerella vittata</i>												•				
<i>Sitticus fasciger</i>					•											
<i>Synaema globosum</i>			•		•					•	•		•			
<i>Telamonia vlijmi</i>	•															
<i>Tetragnatha extensa</i>								•								
<i>Tetragnatha praedonia</i>																•
<i>Theridion japonicum</i>			•													
<i>Theridion sterninotatum</i>	•			•	•					•	•	•	•			
<i>Theridion subpallens</i>				•	•				•							
<i>Thomisus labefactus</i>			•				•	•		•		•				
<i>Tibellus tenellus</i>											•					
<i>Tmarus rimosus</i>														•		
<i>Uroctea compactilis</i>	•	•	•							•						
<i>Xysticus bitidus</i>										•						
<i>Xysticus ephippiatus</i>	•				•	•		•		•		•				
<i>Yaginumia sia</i>			•													

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