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Faunistic investigations conducted in North Korea by researchers from the Institute of Zoology Polish Academy of Sciences¹ from 1959 to 1990

Abstract. Review of zoological expedition organized by Institute of Zoology PAS to North Korea and list of papers based on the material collected in Korean Peninsula are presented.

Key words: zoological expedition, collection of invertebrate fauna, North Korea,

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INTRODUCTION

Studies of the fauna of the northern part of the Korean Peninsula carried out by the Institute of Zoology PAS have a relatively long tradition. The first expedition after World War II was organized in the late 1950s. So far, the zoologists from Warsaw have organized 6 scientific expeditions to North Korea.

1. The first expedition, organized in 1959, has been the longest to date, lasting 8 weeks. The participants were B. Pisarski working on the taxonomy of *Formicidae* and J. Prószyński (*Aranei*). They collected about 19 000 specimens of insects and arachnids during the field work (July–September).

2. The next expedition was organized in 1965, in accordance with an official international scientific exchange contract between the Korean and Polish Academies of Sciences. During a 6-week stay (May–June), M. Mroczkowski (*Coleoptera*) and A. Riedel (*Mollusca*) collected about 23 000 specimens of invertebrates, mostly insects, arachnids and snails.

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3. The third expedition of two researchers from the Institute of Zoology: C. Dziadosz (*Myriapoda*) and H. Szelegiewicz (*Homoptera, Aphidodea*), was organized a year later (1966). During six weeks' fieldwork (August-September) they collected more than 16 000 specimens of invertebrates.

4. The next expedition took place in 1970. R. Bielawski and M. Mroczkowski (*Coleoptera*) collected 13 000 specimens of invertebrates, mostly insects, during a 4-week stay (August-September).

5. After a long pause, the Institute of Zoology renewed the scientific cooperation with North Korea, and three entomologists (H. Garbarczyk, E. Kierych and J. Sawoniewicz) went on an expedition to Korea in 1987. During a 4-week stay they collected about 20 000 specimens of insects.

6. The last expedition so far took place in 1990, with E. Chudzicka (*Homoptera-Auchenorrhyncha*), R. Pisarska (*Diptera*) and E. Kierych (*Hymenoptera*). Four weeks of field work in June yielded over 40 000 specimens of invertebrates.

AREAS OF STUDY AND COLLECTION METHODS

Nearly all of the expeditions organized so far explored the same area determined by the Korean side. This was probably dictated both by the safety reasons and by the availability of accommodation in the area. Every expedition was accompanied by a guide. Transport to the area of the study was also ensured. The areas studied by each expedition are marked on the map (Fig. 1), and these include the six main districts of North Korea.

- a) Pyongyang. All expedition teams collected materials in parks and recreation areas of Pyongyang. Several hours' trips by car to suburban areas were also organized.
- b) Myohang Mountains. Most teams were able to collect materials in the Myohang Mountains and in the Chongchon River valley.
- c) Chongjin area. The next stage of an expedition was the North Hamyong province, Chongjin area, from where trips were made to Kyongsong, Puryong and even as far as the Kwanmo-Peak Massif.
- d) Kesong. Some expeditions made trips to Kaesong, close to the border with South Korea. Specimens were collected in the Chonma-San Mountains and the areas surrounding them. The trips also included a visit to the Tomb of King Kongmin.
- e) Wonsan. Most expeditions were directed to the town of Wonsan on the Japanese Sea in the Kangwon province, and then to the Diamond Mountains - Kumgang-san.
- f) Hamgyong Province. Some teams carried out field research in the Hamhung and Hwangon areas in the Hamgyong Province.

The total number of specimens collected in North Korea by the 6 expeditions amounts to 130 000 invertebrates.

A large part of the zoological material was sent to specialists various Polish and foreign.

At present the outcome of the expeditions includes 58 faunistic and taxonomic papers. These latter either describe species from the territory of Korea new to science or provide revisions of the taxonomy of certain genera or families, in the Palearctic or the whole world, including the materials collected in Korea. The Warsaw zoological collections of *Mollusca* have been described by

RIEDEL (1966), UMIŃSKI (1962), *Diplopoda* – JĘDRYCKZKOWSKI (1982), *Chilopoda* – MATIĆ (1970, 1972) and *Isopoda* – FLASAROVÁ (1972), *Nematoda* – BRZESKI (1992, 1993, 1996), *Salticidae* – WESOŁOWSKA (1981), *Opiliones* – STARĘGA (1964, 1965), *Plecoptera* – ZWICK (1973), *Trichoptera* – BOTOSĂNEANU (1970).

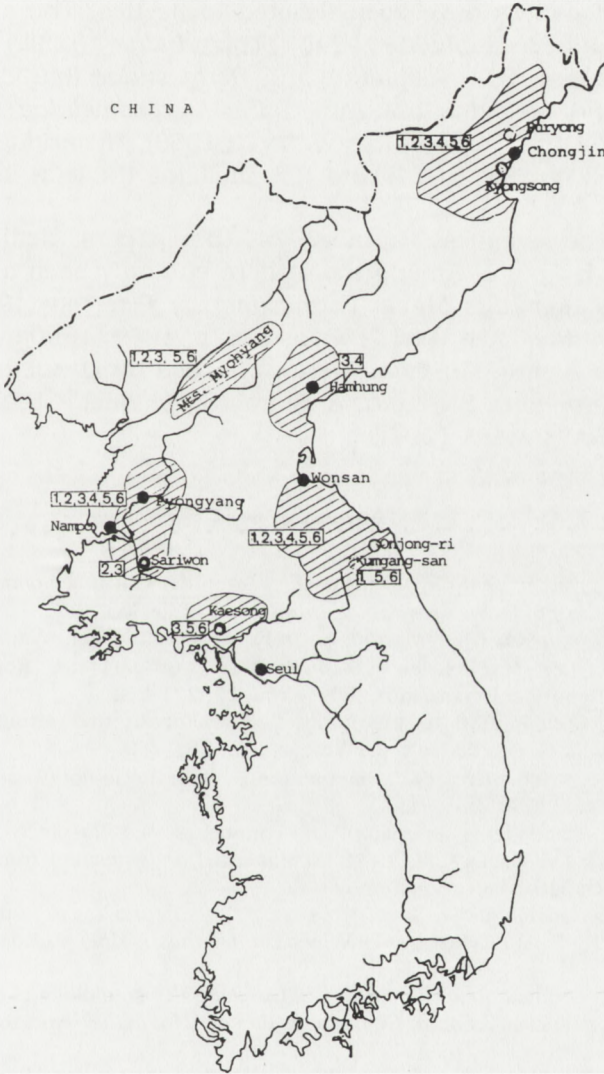


Fig. 1. The explored area in north Korea by Warsaw zoological expeditions. 1 – expeditions in 1959, 2 – 1965, 3 – 1966, 4 – 1970, 5 – 1987, 6 – 1990.

However, the largest number of papers dealt with insects, which constituted the main bulk of the material. *Heteroptera* have been described by JOSIFOV & KERZHNER (1972, 1978), *Heteroptera, Aquatica* – JACZEWSKI (1963),

WRÓBLEWSKI (1963). The *Homoptera* and *Auchenorrhyncha* materials have been explored in a number of papers on taxonomy (DWORAKOWSKA 1968, 1969, 1970, 1971, 1972, 1973) as have *Homoptera*, *Psyllodea* (KLIMASZEWSKI 1963a, 1963b, 1968a, 1968b) or *Homoptera*, *Aphididae* (SZEŁĘGIEWICZ 1974, 1980, 1981).

11 number of papers have been devoted to beetles. The authors covered such families as *Pselaphidae* and *Scaphidiidae* (LÖBL 1968, 1973), *Staphylinidae* (PUTHZ 1974), *Silphidae* and *Dermestidae* (MROCZKOWSKI 1966), *Tenebrionidae* and *Meloidae* (KASZAB 1968), *Chrysomelidae* (WARCHAŁOWSKI 1969), *Malachidae* and *Cantharidae* (WITTMER 1969), *Histeridae* (MAZUR 1970), *Cerambycidae* (HEYROVSKY 1974) and *Coccinellidae* (FURSCH 1965, BIELAWSKI 1980).

Regretfully, the smallest number of the papers deal with Korean *Hymenoptera* and *Diptera*. Among them there has only been a small study of the genus *Strongylognatus* MAYR (*Formicidae*) by PISARSKI (1965) and a few papers on *Braconidae* (PAPP 1985, 1987a, 1987b, 1989, 1990a, 1990b). Within the order *Diptera* Asiatic *Muscinae* were published by DRABER-MOŃKO (1966), the genus *Sphaerophoria* St. FARG. & SERV. (*Syrphidae*) – BAŃKOWSKA (1964) and *Conopidae* (BAŃKOWSKA 1997).

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STRESZCZENIE

[Tytuł: Badania prowadzone przez pracowników Instytutu Zoologii PAN w Korei Północnej w latach 1959–1990].

W opracowaniu omówiono przebieg 6 ekspedycji terenowych zorganizowanych w latach 1959–1990 przez Instytut Zoologii PAN w Warszawie do Korei Północnej (Fig. 1). Podano liczbę okazów bezkręgowców przywiezionych przez ekspedycje, skład osobowy ekspedycji oraz stan opracowania zebranych kolekcji.