



## Two species of supranivale insects new for Kampinos National Park

Przemysław TROJAN

Museum and Institute of Zoology, Polish Academy of Sciences, Wilcza 64, 00–679 Warszawa, Poland;  
e-mail: trojan@miz.waw.pl

**Abstract:** *Chionea (Niphadobata) lutescens* Lundstr. and *Boreus westwoodi* Hagen were caught in Moericke's trap during a snowy December in the year 2004 in Kampinos National Park.

**Key words:** *Chionea lutescens*, *Boreus westwoodi*, Kampinos National Park.

### INTRODUCTION

The imagoes of some “wingless” insects appear only in winter (Soszyńska, 2004). They are representatives of the genera *Boreus* Latreille (*Mecoptera, Boreidae*) and *Chionea* Dalman (*Diptera, Limoniidae*). In the check-list of Polish *Boreidae* (Czechowska 2007), two species of *Boreus* Latr. are listed as occurring over the entire Polish territory, both entries being accompanied with question marks. In the check-list of *Limoniidae* (Wiedeńska 2007), no information is given concerning the distribution of the species. More information on the occurrence of the species can be found in papers of Krzemiński (1978, 1982 and 1984). They concern to the occurrence in South Poland. Sznabl (1881) and Demska (1989), in their papers on *Diptera*, give no information on the occurrence of *Nematoocera* in the Mazovian Lowland. The species *Boreus westwoodi* Hagen (Meinander 1962, Mayer 1938) and *Chionea lutescens* Lundström (Krzemiński 1984) are known from Europe.

### STUDY AREA, MATERIAL AND METHODS

During the snowy winter of 2004/2005, Moericke's traps were placed on the ground in two types of habitats in the Kampinos National Park. The first was a rye-grass meadow association (*Arrhenatheretum medioeuropaeum*), the second was a fresh pine forest (*Peucedano-Pinetum*). The traps were exposed from November 14, 2004, to March 16, 2005. Five yellow plastic bowls were disposed in both sampling areas, filled with a preserving solution consisting of ethylene with glycol. The samples were taken in the surroundings of Nowe Grochale.

### RESULTS

The insects caught on the ground of the meadow and pine forest included five specimens of the “wingless” insects. The species of *Chionea* Dalman were determined according to Krzemiński (1978, 1982) and the species of *Boreus* Latreille were identified in accordance with the papers of Dorochova & Martynova (1987) and Martynova (1954). They seem new for Mazovian Lowland.

*Chionea (Niphadobata) lutescens* Lundström, 1907. 2 ♀♀, 1 ♂ 2 – 8. 12. 2004; and 1 ♀ 18 – 26. 12. 2004. All these specimens were caught on the rye-grass meadow (*Arrhenatheretum medioeuropaeum*).

*Boreus westwoodi* Hagen, 1866. 1 ♀ 2 – 18. 12. 2004 fresh pine forest (*Peucedano-Pinetum*).



Fig. Fresh pine forest (*Peucedano-Pinetum*) in Kampinos National Park. (photo E. Wegner)

#### REFERENCES

- CZECHOWSKA W. 2007. Boreidae. In: BOGDANOWICZ W., CHUDZICKA E., PILIPIUK I. & SKIBIŃSKA E. (eds), Fauna of Poland – characteristics and checklist of species. Vol. 2, pp. 269–272. Muzeum i Instytut Zoologii PAN, Warszawa. 506 pp.
- DEMSKA L. 1989. *Nematocera* (Diptera) of moist meadows on the Mazovian Lowland. *Memorabilia Zoologica* 43: 303–313.
- DOROCHOVA G. I. & MARTYNOVA O. M. 1987. 26. Riad Mecoptera – Skorpionoye muchi. In: MEDVEDEV G. S. Opredelitel Nasekomych Evropejskoj Czasti SSSR 4: 97–106.
- KRZEMIŃSKI W. 1978. Rodzaje *Chionea* Dalm. i *Niphidobata* Ender. (Diptera, Limoniidae) z terenu Polski. *Zeszyty Naukowe Uniwersytetu Jagiellońskiego, Prace Zoologiczne*, Kraków, 24: 109–127.
- KRZEMIŃSKI W. 1982. Contributions to the taxonomy of the European species of *Chionea* Dalman (Diptera: Limoniidae). *Entomologica Scandinavica* 13: 193–200.
- KRZEMIŃSKI W. 1984. *Limoniidae* of Poland (Diptera, Nematocera). Part I: subfamily *Eriopterinae*. *Acta Zoologica Cracoviensis* 27 (20): 437–518.
- MARTYNOVA O. M. 1954. Skorpionnicy (Mecoptera) fauny SSSR. I. *Trudy Zoologičeskogo Instituta Akademii Nauk SSSR*, 15: 54–66.
- MEINANDER M. 1962. The Neuroptera and Mecoptera of eastern Fennoscandia. *Fauna Fennica* 13: 1–96.
- MAYER K. 1938. Rod *Boreus* (Panorpata – Boreidae) v Československu. *Folia entomologica*: 129–140.
- SOSZYŃSKA A. 2004. The influence of atmospheric factors on supranivean activity of flies (Diptera) in Central Poland. *European Journal of Entomology* 103(3): 481–490.
- SZNABL J. 1881. Spis owadów dwuskrzydłych zebranych w Królestwie Polskiem i Gubernii Mińskiej. *Pamiętnik Fizyograficzny*, 1: 357–390.
- WIEDEŃSKA J. 2007. Limoniidae. In: BOGDANOWICZ W., CHUDZICKA E., PILIPIUK I. & SKIBIŃSKA E. (eds), Fauna of Poland – characteristics and checklist of species. Vol. 2, pp. 74–77. Muzeum i Instytut Zoologii PAN, Warszawa. 506 pp.

#### STRESZCZENIE

#### [Dwa nowe gatunki naśnieżnych owadów w Kampinoskim Parku Narodowym]

W trakcie badań fauny naśnieżnej podczas zimy 2004 roku złowiono w pułapki Moericke okazy *Chionea (Niphidobata) lutescens* Lundstr. oraz *Boreus westwoodi* Hagen. Obydwa gatunki nowe dla Kampinoskiego Parku Narodowego i prawdopodobnie Mazowsza. Obydwa gatunki zostały złowione w Polsce, brakuje jednak informacji w najnowszym piśmiennictwie o ich występowaniu na Mazowszu.

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