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Four remarkable species of Hymenoptera (Ichneumonoidea) new to Norway

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The following four species of Hymenoptera are reported for the first time from Norway: *Schizoprymnus collaris* (Thomson, 1874) (Braconidae, Brachistinae), *Streblocera longiscapha* Westwood, 1882 (Braconidae, Euphorinae), *Ademon decrescens* (Nees, 1811) (Braconidae, Opiinae) and *Phrudus badensis* Hilpert, 1987 (Ichneumonidae, Tersilochinae). Their biology and distribution are briefly discussed.

Key words: *Schizoprymnus collaris*, *Streblocera longiscapha*, *Ademon decrescens*, *Phrudus badensis* Braconidae, Ichneumonidae, Ichneumonoidea, Hymenoptera, parasitoid, Norway

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Introduction

Hymenoptera is one of the most species rich insect orders. In an average Malaise trap sample, Hymenoptera constitutes the second largest group in number of individuals and species, next to Diptera. In Norway there are approx. 6000 species of Hymenoptera recorded, and half of these belongs to the Ichenumonidae and Braconidae (Elven & Søli 2021). During the last 15 years, several mapping projects on different groups of Hymeoptera have been performed by NINA and NTNU. These projects have accumulated a lot of material from different habitats, and there is still a lot of work to be done and new species to record. This paper reports incidental by-catches that include species within the Ichneumonoidea recorded as new to the Norwegian fauna.

Material and methods

The material was collected with the black and white Malaise trap (MT) from BugDorm and the dark net from Watkinson and Doncaster (Figure 1). The reference material is kept in the insect collections at Norwegian Institute for Nature Research (NINA) in Trondheim. The specimen images were made by several partially focused images, taken with a Nikon D850 mounted on a Nikon PB-5 bellows with a microscope objective. Images were then combined in the software program Zerene Stacker© 1.04 © (2009–2017). The coordinates for the locations are given in decimal degrees (Grid: Latitude/Longitude hddd. dddd; datum: WGS84). The faunistic division within Norway follows Endrestøl (2021) and are given in bold. The number of taxa from Norway and Sweden is given under each species to view

FIGURE 1. Malaise traps and habitat at the locations where the four species were found. **A**. Leistad, Malvik municipality in Trøndelag, locality for *Schizoprymnus collaris* (Thomson, 1874). **B**. Rønnebergdammen, Holmestrand municipality in Vestfold. Locality for *Streblocera longischapha* Westwood, 1882. **C.** Sulerud, Lillestrøm municipality in Akershus. Locality for *Ademon decrescens* (Nees, 1811). **D**. Dokken, Gol municipality in Buskerud. Locality for *Phrudus badensis* Hilpert, 1987. Photos: Arnstein Staverløkk.

the potential of new species that can be found with further studies on the groups.

Results

Schizoprymnus collaris (Thomson, 1874)

The genus *Schizoprymnus* Förster, 1862 belongs to the subfamily Brachistinae Förster, 1862 which is a large group including approximately 150 species in Europe. The Brachistinae can be distinguished from other subfamilies by the absence of the 2nd radiomedial vein, and the fusion of the first three abdominal segments into a carapace that covers the remaining tergites (Tobias *et al.* 1995). Only 16 species of Brachistinae are registered in the Norwegian species list, Nortaxa (Artsdatabanken 2025) and 62 are recorded in Sweden (SLU Artdatabanken 2025). Together with *Schizoprymnus crassiceps* (Thomson, 1892) and *Schizoprymnus obscurus* (Nees, 1816), this record adds a third species of *Schizoprymnus* in Norway. *Schizoprymnus* species are known to be koinobiont egg-larval parasitoids of weevils (Curculionidae) and seed beetles (Chrysomelidae: Bruchinae) and tumbling flower beetles (Mordellidae) (Shaw & Huddleston 1991, Belokobylskij & Maetô 2007, Güçlü & Özbek 2011). Koinobiont parasitoids means that the host continues to grow and develop after it is parasitized (Quicke 2015).

Record: NORWAY [**STY**], Malvik: Leistad [N63.42149° E10.62816°], 1♀ (Figure 2), MT 5 August–4 September 2016, leg. A.Staverløkk, coll. NINA. The trap was situated in a ravine

landscape with dense mixed forest dominated with grey alder (*Alnus incana*) (Figure 1A).

Biology: Host relations of *S. collaris* are unknown.

Distribution: *S. collaris* is recorded from France, Germany, Israel, Lithuania, The Netherlands, Sweden, and England, (Notton 2014, Yu *et al*. 2016).

***Streblocera longiscapha* Westwood, 1882**

Streblocera Westwood, 1833 is a small genus belonging to the subfamily Euphorinae Förster, 1862. In addition to the Aphidiinae, the Euphorinae are the only known Braconidae wasps attacking adult hosts. Species of Euphorinae have a wide range of strategies to parasitize hosts which are mirrored in their morphological diversity. Many species possess adaptations specifically suited for adult parasitism, such as a narrow, unusually elongated petiole that enables females to bend their abdomen forward and extend the ovipositor, as well as large eyes that enhance their ability to track host movement (Shaw 1985, Belokobilskji 1996ab, Shaw 2004)). The most used hosts are adult Coleoptera, especially of the families Chrysomelidae and Curculionidae, but adult Hymenoptera, Neuroptera, Hemiptera, Psocoptera and, rarely Orthoptera are also used (Shaw 1985). In the Norwegian list, only 80 species of Euphorinae are registered (Artsdatabanken 2025) while 122 species are recorded for Sweden (SLU Artdatabanken 2025b). The present record adds the first species of *Streblocera* in Norway, while there are six species registered in Europe (Čapek & Šnoflák 1959, Loni *et al.* 2020).

Record: NORWAY [**VE**] Holmestrand, Rønnebergdammen [N59.51312° E10.10120°] 1♀1♂ (Figure 3), MT 22 June–19 July 2021, leg. Arnstein Staverløkk, coll. NINA; [**AK**] Fet, Balnesstrand [N59.93203° E11.12441°] 2♀♀1♂, MT 25 June–5 August 2018, leg. Frode Ødegaard, coll. NINA. Both Malaise traps were in wetland areas along rivers, which can sometimes flood (Figure 1B).

Biology: *Streblocera longiscapha* Westwood, 1882 is a probably a parasitoid of Chrysomelid

FIGURE 2. Female of *Schizoprymnus collaris* (Thomson, 1874) from Leistad, Malvik municipality in Trøndelag. Photo: Arnstein Staverløkk.

FIGURE 3. Female (**A**) and male (**B**) of *Streblocera longiscapha* Westwood, 1882 from Rønnebergdammen, Holmestrand municipality in Vestfold. Photos: Arnstein Staverløkk.

beetles (Čapek & Šnoflák 1959, Shaw 1985). The females can be easy to recognize with their strongly modified antenna. This raptorial shape is believed to restrain hosts during oviposition, similar to the mandibles in *Cosmophorus* (Euphorinae), but it has never been observed (Quicke 2015).

Distribution: *S. longiscapha* is recorded from Denmark, Finland, Czech Republic, Kazakhstan, Sweden, United Kingdom (Čapek & Šnoflák 1959, Yu *et al*. 2016, FBIF 2025, Fägerström 2025)

Ademon decrescens (Nees, 1811)

The genre *Ademon* belongs to the subfamily Opiinae Blanchard, 1845 which is a large subfamily with approximately 2000 species and 39 genera worldwide (Yu *et al*. 2016). They are koinobiont endoparasitoid wasps of mainly mining or fruit-infesting dipterous larvae (van Achterberg 2023). In Norway, only 33 species of Opiinae have been recorded while the respective number in Sweden is 86 (SLU Artdatabanken 2025c). This new record adds the first species of *Ademon* in Norway.

Record: NORWAY [**AK**] Lillestrøm, Sulerud [N60.05577° E11.17384°] 1♀ (Figure 4), MT 17 July–21 August 2023, leg. A. Staverløkk, coll. NINA. The locality is in a ravine landscape close to a large stream with lots of dead wood and water plants. Mixed forest along stream dominated with birch and alder (Figure 1C).

Biology: *A. decrescens* is associated with aquatic environment and is a parasitoid of the larvae of *Hydrellia* species among the shore flies (Ephydridae). *Hydrellia* larvae are plant miners and specialists on different plants.

Distribution: *Ademon decrescens* is reported from most of Europe and the Western Palearctic, but also Mongolia and Uzbekistan (Eastern Palearctic) and Vietnam (Oriental) (Yu *et al*. 2016).

Phrudus badensis Hilpert, 1987

Phrudus belongs to the subfamily Tersilochinae, a widespread subfamily with approximately 450 species worldwide. Species of Tersilochinae can be distinguished by a combination of a strongly curved hind wing vein M+CU, triangular pterostigma, a relatively large antennal pedicel and the proboscidal fossa strongly narrowed (Broad *et al*. 2018). Together with *Phrudus defectus* Stelfox, 1966 and *Phrudus monilicornis* Bridgman, 1886, this record adds the third species of *Phrudus* in Norway. A total of 54 species of Tersilochinae are recorded from Norway (Artsdatabanken 2025), while 76 species are known from Sweden (SLU Artdatabanken 2025d).

Record: NORWAY [**BØ**] Gol: Dokken [N60.678148° E9.031832°] 1♀ (Figure 5), MT: 22 June–17 July 2023, leg. A. Staverløkk, coll. NINA. The site is located on a southwestern rocky slope, under a power line. The surrounding area is a pasture landscape with mixed deciduous forest, shrubs, and some junipers (Figure 1D).

Biology: The biology for *Phrudus badensis* is unknown, but the species is supposed to be a

FIGURE 4. Female of *Ademon decrescens* (Nees, 1811) from a Malaise trap near a stream at Sulerud, Lillestrøm municipality in Akershus. Photo: Arnstein Staverløkk.

FIGURE 5. *Phrudus badensis* Hilpert, 1987 from Dokken, Gol municipality in Buskerud. Photo: Arnstein Staverløkk.

koinobiont endoparasitoid of beetles. Vikberg and Koponen (2000) reports that the species is associated with pine logs and wood piles, particularly old wood with bark containing tunnels and exit holes of several different species of Coleoptera. The species has a strongly laterally compressed body that makes it easy to identify. One of the other four European species of the genus, *P. defectus*, has been reared as a koinobiont endoparasitoid of the nitidulid beetle, *Epuraea melanocephala* (Marsham, 1802) (Varga 2023).

Distribution: *P. badensis* is recorded from Finland, Germany, Italy, Korea, Poland, Russia, Ukraine, United Kingdom (Yu *et al*. 2016, Varga 2023).

Discussion

Several mapping surveys on the Norwegian biodiversity the last 15 years, has led to a huge amount of material collected with Malaise traps from all around Norway. Many traps have been placed in particularly interesting habitats to find rare species and specialists. All the localities are relatively stable habitats, but parts of the site where *Schizoprymnus collaris* was collected are affected by large ongoing road construction right now. It is uncertain how well the locality will be affected by this disruption. Although the habitat at the site is common in the region, it is striking how rarely the species occurs in collections. By-catches in Malaise traps can often be suprisingly interesting. Species can sometimes be classified as rare because they have not been looked for in their right habitat and their biology is unknown. Ichneumonids and braconids are species rich groups and there is still a lot of work to be done in Norway compared to other countries.

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