

Recent records of remarkable sawflies in Bavaria (Hymenoptera: Diprionidae, Tenthredinidae, Xyelidae)

Andrew D. LISTON & Frank BURGER

Abstract

Noteworthy recent records of sawflies from Bavaria, Germany, are presented. *Nematus frenalis* THOMSON, 1888, a boreo-alpine species, is recorded as new to Germany, from the Berchtesgaden Alps. First records from Bavaria of *Amauronematus puniceus* (CHRIST, 1791), *Monoctenus obscuratus* (HARTIG, 1837), *Nematus capito* (KONOW, 1903), *N. distinguendus* (ENSLIN, 1915) and *Pristiphora bifida* (HELLÉN, 1948) are given. Collection of *Xyela longula* DALMAN, 1819 in Lower Bavaria in 2007, last found in Germany in 1940, permits the removal of this species from the list of vanished German sawflies.

Nematus capito (KONOW, 1903) species revocata is removed from synonymy with *Pachynematus declinatus* (FÖRSTER, 1854). *Nematus declinatus* FÖRSTER, 1854, is a junior synonym of *P. fallax* (SERVILLE, 1823) new synonymy.

Introduction

As a result of continuing investigations on the sawfly fauna of Germany, which were given an extra recent impetus by the need to obtain data for the forthcoming revision of the 'Rote Liste' (list of endangered species) for Germany, several interesting new distribution records for Bavaria were made. A problem involving the nomenclature of one species is dealt with. Species are listed in alphabetical order. The acronyms DEI and ZSM are used for the Senckenberg Deutsches Entomologisches Institut (Müncheberg) and the Zoologische Staatssammlung (Munich).

Records and comments

Amauronematus puniceus (CHRIST, 1791) (Tenthredinidae, Nematinae)

Germany, Bavaria: Landkreis Berchtesgadener Land, Ramsau, 3 km north of Hirschbichl, 1100 m, 1 larva on *Salix myrsinifolia*, 27.05.2007, leg. LISTON, Coll. LISTON. **New record for Bavaria.**

In Germany previously known from larvae collected in Brandenburg (LISTON 2007).

Monoctenus obscuratus (HARTIG, 1837) (Diprionidae)

Germany, Bavaria: Landkreis Berchtesgadener Land, Jenner, 1300m, 1♂, 26.05.2007, leg. LISTON (DEI). **New record for Bavaria.**

From the same juniper bush, 2♂♂ of *Monoctenus juniperi* (L.) were also taken. *M. obscuratus* was expected to occur in Bavaria, but has apparently never been recorded.

Nematus capito (KONOW, 1903) **species revocata**

Germany, Bavaria, Fichtelgebirge, Niederlamitz, 1♀, 4.6.1964, leg. H. TAUBALD, det. V. VIKBERG 1980 (VIKBERG Collection, Turenki, Finland). The saw is on slide no. 408, made by Olli RANIN. **New record for Bavaria.**

The synonymy of *Pteronus capito* KONOW, 1903, with *Pachynematus declinatus* (FÖRSTER, 1854) proposed by TAEGER & BLANK (1998) is not accepted. Confusion has occurred ever since KONOW's failure to associate the sexes of what he described on the one hand as *Pteronus capito* (female) (KONOW 1903a, b) and on the other determined as *Pachynematus declinatus* (FÖRSTER)

(KONOW 1904) (male and female). As pointed out by TAEGER & BLANK (1998), KONOW was probably misled by the variability in the length of the inner tooth of the claws in the female. KONOW's description agrees perfectly with the lectotype of *Pteroncus capito* (DEI), with other specimens in ZSM and DEI determined by various specialists as *N. capito*, as well as later redesignations by several authors (e.g. ENSLIN (1916), BENSON (1960, as *P. declinatus*) and ZHELOCHOVTSEV (1988, as *P. declinatus*).

Nematus capito is provisionally placed in subgenus *Pteronidea* ROHWER, 1911, until the phylogeny of this very large assemblage of species is examined more thoroughly. The penis valve lacks the elongate ventral lobe typical of *Pachynematus* s. str. (BENSON 1960, ZHELOCHOVTSEV 1988). *Nematus capito* is widely distributed in Central Europe (TAEGER et al. 2006, as *P. declinatus*), but seems to be restricted to the montane and subalpine zones (for which reason a record from the Netherlands would seem to require confirmation). Records from other parts of the Palaearctic are discussed by TAEGER & BLANK (1998). *Nematus capito* is probably attached to various *Salix* species (e.g. BENSON 1960), from which the adults have mostly been collected (J. MACEK in litt., also by AL in the Massif Central, France). The suggestion that *Carex* is a host (LACOURT 1999, as *P. declinatus*) seems unlikely, because the only Nematinae known to use *Carex* as a larval host are species of *Pachynematus* s. str.

Pachynematus fallax (SERVILLE, 1823)

= *Nematus declinatus* FÖRSTER, 1854: 348-349, ♂, type locality Aachen. **New synonymy.**

Type material examined (ZSM): lectotype, ♂, *Nematus declinatus* FÖRSTER, 1854: Type [printed, red]; *Pristiphora vaga* F. det. O. CONDE 1940; *Nematus declinatus* FRST. A. FÖRSTER det. ♂; *Pachynematus declinatus* FÖRST. ♂ det. F. W. KONOW; GBIF-GSHym 3260. A label was added: Lectotype *Nematus declinatus* FÖRSTER, 1854, designated by HARIS 1997. Condition poor: both eyes missing (eaten), right wings missing, penis valve missing, abdomen broken at third tergite and glued together.

The lectotype of *Nematus declinatus* FÖRSTER, 1854, designated by HARIS (1997) (see TAEGER & BLANK 1998), was examined by AL and found to belong to *Pachynematus* KONOW, 1890 s. str., i.e. to belong to the groups attached to monocotyledons (grasses, sedges). The penisvalve was probably removed and examined by CONDE, but the whereabouts of the preparation are unknown. CONDE had identified the specimen as „*Pristiphora vaga* (F.)“, an opinion followed by HARIS (1997), who placed *P. declinatus* as a synonym of *Pachynematus vagus* (FABRICIUS, 1781), but this does not seem to be correct. The shape of the projection to the 8th tergite is intermediate between figures 787 and 788 in BENSON (1958). The carinate medial ridge is fairly pronounced. Although the legs, particularly the hind femora, are very pale, the specimen belongs to *Pachynematus fallax* (SERVILLE, 1823) as characterized by TAEGER & BLANK (1998) under the name *P. xanthocarpus* (HARTIG, 1840).

Nematus distinguendus (ENSLIN, 1915) (Tenthredinidae, Nematinae)

Germany, Bavaria: 1♀, Landkreis Nürnberg, Erlenstegen, Wasserwerk, 14.5.2007, Eiche, leg. A. WEIGEL, EKL, DEI. **New record for Bavaria.**

Confirmed records in Germany are from Saxony and Saxony-Anhalt (BLANK et al. 2001). Morphology and colouration of the adult immediately suggest that this is an *Amauronematus* species, as proposed originally by ENSLIN and followed by most subsequent specialists until ZHELOCHOVTSEV & ZINOVJEV (1995) placed it in *Nematus* subgenus *Pteronidea* because of larval characters. The above specimen was compared with the female lectotype in ZSM. The types were reared from an unidentified *Salix* sp. by BAER in Tharandt, Saxony (ENSLIN 1915). According to KANGAS (1985), in southern Finland *A. distinguendus* feeds on *Salix pentandra*, *S. phylicifolia* and *S. fragilis*. WEIFFENBACH (1962) states that larvae were found on *Salix pentandra* in Lower Saxony. His identification was confirmed by LINDQVIST (1959), but other German records have not been confirmed, e.g. AERTS (1960: former Rhine Province) and WEIFFENBACH (1985: HESSE, reared from smooth-leaved willow).

Nematus frenalisis THOMSON, 1888 (Tenthredinidae, Nematinae)

Germany, Bavaria: 1♂, Landkreis Berchtesgaden, Funtensee, 4571184 / 5262064 MF2 [Malaise trap], Schotterbank 1650 m., 27-28.7.2004. leg. J. VOITH, Coll. M. KRAUS. **New record for Germany.**

A boreo-alpine species, associated with several *Salix* species as larval hosts, previously recorded in Central Europe from the High Tatra and the Alps of Austria, Switzerland and France (TAEGER et al. 2006). The male is readily identified using ZHELOCHOVTSEV (1988). A record published by MUCHE (1968) for the Kyffhäuser Region, Thuringia, noted for its warm and dry climate, can be discounted as being entirely improbable.

Pristiphora bifida (HELLÉN, 1948) (Tenthredinidae, Nematinae)

Germany: Bavaria, Landkreis Dingolfing-Landau, banks of River Vils (398m), 3♀♀ 12-26.5.2002, 1♂ 25.4.2003, 1♀ 28.4.03, 1♀ 10.5.03, 2♀♀ 17.5.03, 2♂ 21.6.03, 1♀ 28.6.03, 1♂ 10.7.03. All specimens were captured on *Salix viminalis*, leg. LISTON (DEI, ZSM). **New record for Bavaria.**

Identification confirmed by K. J. GREARSON and V. VIKBERG, after examination (including penisvalve) of a male Bavarian specimen and comparison with type material from Finland. Both in numbers of adults and larvae (one male reared), this is the most abundant sawfly on *Salix viminalis* in the study area. The larva is a solitary leaf-edge feeder. *P. bifida* is at least bivoltine here, possibly even plurivoltine. None of the other common willow species found in this part of the Vilstal (*Salix alba*, *triandra*, *purpurea*, *cinerea*) seems to be a host of *P. bifida*, but in northern Europe, in regions where *S. viminalis* is absent, *P. bifida* must be attached to other *Salix* species.

Xyela longula DALMAN, 1819 (Xyelidae)

Germany, Bavaria: 1♂, Landkreis Dingolfing-Landau, 2km north of Poxau (Vilstal), 25.03.2007, swept from young *Picea abies* beneath stand of ca. 70 year-old *Pinus sylvestris*, leg. LISTON, Coll. DEI. **First record in Germany and Bavaria since 1940.**

The last previous record in Germany was of one female: Bavaria, Franconian Jura, 01.05.1940, leg. E. ENSLIN (Coll. M. KRAUS, Nürnberg). Between the first mention of this species by von HEYDEN (1887: date of capture not recorded) and 1940, *X. longula* was found in Germany on at least 15 separate occasions by 7 collectors (based on literature and museum specimens examined mostly by S. M. BLANK and a few by AL). Apparently this species was found more or less throughout Germany during this period (BLANK et al. 2001). Dates of collection were between 28.03. - 01.05. *X. longula* is listed in the German and Bavarian red data books as RL0 (extinct or disappeared) (TAEGER et al. 1998; KRAUS & BLANK 2003). Published records from lowland areas for countries bordering on Germany are also only for before 1940. Apart from the new record from Lower Bavaria, the only other recent Central European record is of 3♀♀, 3♂♂, Austria, North Tyrol, Martinswand, Zirler Berg, 22.03.1980, leg. E. HEISS (Coll. S. M. BLANK). A number of recent European records exist for northern countries (Scotland, Finland and N. Russia). It is suggested that *X. longula* may be one of many sawfly species which undergo long-term, extreme fluctuations of population level. It is therefore not clear whether it really is an endangered species in Central Europe.

Acknowledgements

Dr. Jan MACEK (National Museum, Prague) drew our attention to the problem with the nomenclature of *N. capito*. For permission to examine specimens in their care or providing us with useful information, we are also most grateful to the following individuals: Dr. Stephan BLANK (Senckenberg DEI, Müncheberg), Mr. K. J. GREARSON (Milton Keynes), Dr. Manfred KRAUS (Nürnberg), Dr. Stefan SCHMIDT (ZSM, Munich), Dr. Andreas TAEGER (Senckenberg DEI, Müncheberg), Dr. Veli VIKBERG (Turenki).

Zusammenfassung

Bemerkenswerte Nachweise von Pflanzenwespen in Bayern werden präsentiert. *Nematus frenalis* THOMSON, 1888, eine boreo-alpine Art aus den Berchtesgadener Alpen, ist als neu für Deutschland gemeldet. Neunachweise für Bayern sind *Amauronematus puniceus* (CHRIST, 1791), *Monoctenus obscuratus* (HARTIG, 1837), *Nematus capito* (KONOW, 1903), *Nematus distinguendus* (ENSLIN, 1915) und *Pristiphora bifida* (HELLÉN, 1948). Ein Wiederfund von *Xyela longula* DALMAN, 1819, in Bayern wird geschildert. Die Art wurde zuletzt in Deutschland im Jahr 1940 gesammelt und bisher als ausgestorben / verschollen betrachtet.

Nematus capito (KONOW, 1903) sp. rev. ist eine valide Art. *Nematus declinatus* FÖRSTER, 1854, ist ein jüngeres Synonym von *Pachynematus fallax* (SERVILLE, 1823) syn. nov.

References

- AERTS, W. 1960: Die rheinischen Blatt-, Halm- und Holzwespen (Tenthredinoidea). – Decheniana **113**(2), 285-311.
- BENSON, R. B. 1958: Hymenoptera, Symphyta. – Handbooks for the Identification of British Insects **6**(2c), 139-258.
- BENSON, R. B. 1960: Some more high-alpine sawflies (Hymenoptera; Tenthredinidae). – Mitteilungen der Schweizerischen Entomologischen Gesellschaft **33**(3), 173-182.
- BLANK, S. M., DETERS, S., DREES, M., JÄNICKE, M., JANSEN, E., KRAUS, M., LISTON, A. D., RITZAU, C. & A. TAEGER 2001: Symphyta. In: DATHE, H. H., TAEGER, A. & S. M. BLANK (Hrsg.): Verzeichnis der Hautflügler Deutschlands (Fauna Germanica 4). – Entomologische Nachrichten und Berichte, Beiheft 7, 8-27.
- ENSLIN, E. 1915: Die Tenthredinoidea Mitteleuropas IV. – Deutsche entomologische Zeitschrift [1915] (Beiheft 4), 311-412.
- ENSLIN, E. 1916: Die Tenthredinoidea Mitteleuropas V. – Deutsche entomologische Zeitschrift [1916] (Beiheft 5), 413-538.
- FÖRSTER, A. 1854: Neue Blattwespen. – Verhandlungen des naturhistorischen Vereins der Preussischen Rheinlande und Westfalens (N. F.) **1**, 265-350; Taf. IV-VII.
- HARIS, A. 1997: Taxonóiai jegyzetek a sárga-búzadarázs (*Pachynematus clitellatus* LEPELETIER) Fajról (Hymenoptera, Tenthredinidae). – Integrált termesztés a szántóföldi kultúrákban **13**, 111-121.
- HEYDEN, L. von 1887: Beiträge zur Kenntnis der Hymenopteren-Fauna der weiteren Umgegend von Frankfurt a. M. – Bericht der Senckenbergischen Naturforschenden Gesellschaft **1886-1887**, 65-87.
- KANGAS, J. K. 1985: Pälkäneen Sahapistiäisfauna 1953-1983. – Pälkäne-Seuran julkaisu **5**, 1-113.
- KONOW, F. W. 1903a: Revision der Nematiden-Gattung *Pteronus* JUR. (Hym.). – Zeitschrift für Systematische Hymenopterologie und Dipterologie **3**(5), 305-315.
- KONOW, F. W. 1903b: Revision der Nematiden-Gattung *Pteronus* JUR. (Hym.) (Fortsetzung). – Zeitschrift für Systematische Hymenopterologie und Dipterologie **3**(6), 366-376.
- KONOW, F. W. 1904: Revision der Nematiden-Gattung *Pachynematus* KNW. (Hym.) (Fortsetzung). – Zeitschrift für Systematische Hymenopterologie und Dipterologie **4**(3), 145-161.
- KRAUS, M. & S. M. BLANK 2003: Rote Liste gefährdeter Pflanzenwespen (Hymenoptera: „Symphyta“) Bayerns. In: BAYERISCHES LANDESAMT FÜR UMWELTSCHUTZ (Hrsg.): Rote Liste gefährdeter Tiere Bayerns. – Schriftenreihe **166**, 174-181.
- LINDQVIST, E. 1959: Über einige neue oder wenig bekannte *Amauronematus*-Arten (Hym., Tenth.). – Notulae Entomologicae **39**, 1-15.
- LISTON, A. D. 2007: Notes on Palaearctic sawflies, with particular reference to the German fauna (Hymenoptera, Symphyta). – Nachrichtenblatt der bayerischen Entomologen **56**(3/4), 82-97.
- MUCHE, W. H. 1968: 2. Beitrag zur Blattwespenfauna Thüringens – Kyffhäusergebiet (Hymenoptera, Tenthredinoidea). – Faunistische Abhandlungen. Staatliches Museum für Tierkunde Dresden **2**(17), 117-119.

- MUCHE, W. H. 1974: Die Nematengattungen *Pristiphora* LATREILLE, *Pachynematus* KONOW und *Nematus* PANZER (Hym., Tenthredinidae). – Deutsche entomologische Zeitschrift, N. F. **21**(1-3), 1-137
- TAEGER, A. & S. M. BLANK 1998: Beitrag zur Kenntnis einiger Nematinae (Hymenoptera: Tenthredinidae). In: TAEGER, A. & S. M. BLANK 1998 (Hrsg.): Pflanzenwespen Deutschlands (Hymenoptera, Symphyta). Kommentierte Bestandsaufnahme. – Goecke & Evers, Keltern, 247-277; Taf. 3, 7.
- TAEGER, A., BLANK, S. M., JANSEN, E., KRAUS, M. & C. RITZAU 1998: Rote Liste der Pflanzenwespen (Hymenoptera: Symphyta). In: BINOT, M., BLESS, R., BOYE, P., GRUTKE, H. & P. PRETSCHER (Hrsg.): Rote Liste gefährdeter Tiere Deutschlands. – Schriftenreihe für Landschaftspflege und Naturschutz **55**, 147-158.
- TAEGER, A.; BLANK, S. M. & A. D. LISTON 2006: European Sawflies (Hymenoptera: Symphyta) - A Species Checklist for the Countries. – In: BLANK, S. M., SCHMIDT, S. & A. TAEGER (eds): Recent Sawfly Research: Synthesis and Prospects. Pp. 399-504. Goecke & Evers, Keltern.
- WEIFFENBACH, H. 1962: Tenthredinidenstudien II. (Hym.). – Mitteilungen der Münchner Entomologischen Gesellschaft **52**, 123-145.
- WEIFFENBACH, H. 1985: Symphyta (Hymenoptera) von Süd-Niedersachsen, Nord- und Mittelhessen. – Mitteilungen der Münchner Entomologischen Gesellschaft **75**, 5-44.
- ZHELOCHOVTSEV, A. N. 1988: Pereponchatokrylye. Shestaya chast. In: MEDVEDEV, G. C. (ed.): Opredelitel' nasekomykh evropeyskoy chasti SSSR. – Nauka, Leningrad **3**(6), 3-237.
- ZHELOCHOVTSEV, A. N. & A. G. ZINOVJEV 1995: [A list of the sawflies and horntails (Hymenoptera, Symphyta) of the fauna of Russia and adjacent territories.] (russ.). – Entomologiceskoe Obozrenie **74**(2), 395-415.

Authors' addresses:

Andrew LISTON

Senckenberg Deutsches Entomologisches Institut, Eberswalder Str. 84, D-15374 Müncheberg

E-mail: Andrew.Liston@senckenberg.de

Frank BURGER

Carl-von-Ossietzky-Straße 31, D-99423 Weimar,

E-mail: benti.burger@t-online.de

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Nachrichtenblatt der Bayerischen Entomologen](#)

Jahr/Year: 2009

Band/Volume: [058](#)

Autor(en)/Author(s): Liston Andrew D., Burger Frank

Artikel/Article: [Recent records of remarkable sawflies in Bavaria \(Hymenoptera: Diprionidae, Tenthredinidae, Xyelidae\). 34-38](#)