Additions and corrections to the Norwegian list of spiders (Araneae)

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Twelve species new to the Norwegian fauna are reported: *Clubiona genevensis* L. Koch, 1866, *Dictyna palmgreni* Marusik & Fritzén, 2011, *Gnaphosa nigerrima* L. Koch, 1877, *Kikimora palustris* Eskov, 1988, *Tibioploides arcuatus* (Tullgren, 1955), *Phrurolithus minimus* C. L. Koch, 1839, *Dolomedes plantarius* (Clerck, 1757), *Evarcha laetabunda* (C. L. Koch, 1846), *Tetragnatha nigrita* Lendl, 1886, *Dipoena nigroreticulata* (Simon, 1880), *Thymoites bellissimus* (L. Koch, 1879) and *Xysticus robustus* (Hahn, 1832). *Syedra myrmicarum* (Kulczynski, 1882) is replacing earlier records of *Syedra* cf. *apetlonensis* Wunderlich, 1992; *Trichoncus hackmani* Millidge, 1955 replaces all previous records of *Trichoncus* in Norway (including *affinis* Kulczynski, 1894 and *vasconicus* Denis, 1944); some new records are added to *Hackmania prominula* (Tullgren, 1948), *Diastanillus pecuarius* (Simon, 1884) and *Enoplognatha serratosignata* (L. Koch, 1879). The number of spider species in Norway is now 623.

Key words: Araneae, new to Norway, faunistics.

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Introduction

Aakra *et al.* (2016) presented a list of 46 species of spiders new to Norway. This paper reports a further 12 new species and give some additional distributional comments and corrections of misidentified species in the previous list.

Material and methods

Most of the material is collected in the period 2012–2016, either by hand (sieving and netting) or by traps (pitfall traps, malaise traps).

Results

CLUBIONIDAE

Clubiona genevensis L. Koch, 1866

(Figures 1A-C, 2)

Material: TEI, Seljord: Heggenes (Figure 2) (59.44024°N 08.77887°E), 130 m a.s.l., 7 specimens, both males and females, 29.III.–3.V.2015, caught in a malaise trap (material from two traps were lumped before sorting), $2\bigcirc \bigcirc$, 11.VI.–17. VII.2015, $1\bigcirc$, 17.VII.–4.IX.2015, $1\bigcirc$, 04.IX.–10.X.2015, in the same traps, leg. K.M. Olsen.

Remarks: New to Norway. The species is recorded from a few places in southern Sweden, where it is redlisted (NT). This record is close

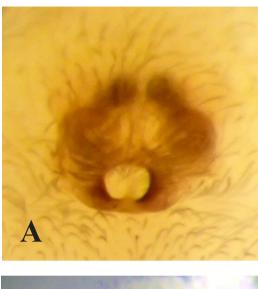




FIGURE 1 A–C. *Clubiona genevensis* L. Koch, 1866. **A**. Epigyne. **B**. Left palp, lateral. **C**. Left palp, ventral. Photo: A. Fjellberg.



to the northern limit in Europe. The area is an abandoned road along steep cliffs and screes with rich vegetation; sandy, sunny and warm.

DICTYNIDAE

Dictyna palmgreni Marusik & Fritzén, 2011

Material: ON, Sel: E of Kvernbrusætrin (61.71174°N 09.33511°E), 850 m a.s.l., $1^{\circ}_{\circ}4^{\circ}_{\circ}^{\circ}_{\circ}$, 15.VI.2013 and 18.VI.2013 respectively, beating with an insect net on low shrubs of *Salix* and smallgrown pine and spruce on a montane mire, leg. A. Fjellberg.

Remarks: New to Norway. The species was recently described from Finland and Russia/ Siberia, apparently with a boreal distribution, and the Norwegian locality is the most westernly so far.

Hackmania prominula (Tullgren, 1948)

Material: FØ. Sør-Varanger: Magesekkvatnet, Øvre Pasvik (69.15964°N 28.98369°E), 1 \bigcirc , 1.VI.2012, in dry old growth pine forest, leg. H. Løvbrekke. ON, Lom: Brettingsmoen (61.92212°N, 08.68007°E), $3\bigcirc \bigcirc$, 2.IX.2013, in moss/litter in open old pine forest, leg. A.



FIGURE 2. Collecting site of *Clubiona genevensis* L. Koch, 1866 and *Phrurolithus minimus* C. L. Koch, 1839 at Heggenes, Seljord. This location is reknown for having a number of warm-loving arthropods with more or less relic distribution in Norway. Photo: K.M. Olsen

Fjellberg. ON, Skjåk: Bispberget (61.88513°N, 08.28113°E), 1♀, 25.IX.2013, in pitfall trap in dry open pine forest, leg. A. Fjellberg.

Remarks: The two first Norwegian specimens appeared in pitfall traps set in a dry oldgrowth pine forest at BV, Ål: Tuftelia (60.67700°N, 08.74400°E), V.–IX. 2000 (Fremmersvik 2002).

GNAPHOSIDAE

Gnaphosa nigerrima L. Koch, 1877

Material: OS, Østre Toten: S of Skjeppsjøen (60.58879°N 10.94973°E), 1° , 22.VII.2015, in a spring-fed *Sphagnum* bog with *Parnassia*, *Pedicularis*, *Comarum*, *Vaccinium*, etc., leg. J. Vogels.

Remarks: New to Norway. The species is known from our neighbouring countries and has actively been searched for but escaped Norwegian

arachnologists so far. The record was published in a German spider network (Vogels 2015).

LINYPHIIDAE

Syedra myrmicarum (Kulczynski, 1882)

(Syedra cf. apetlonensis Aakra et al. (2016), nec Wunderlich, 1992)

Remarks: The species was reported as *Syedra* cf. *apetlonensis* Wunderlich, 1992 in Aakra *et al.* (2016). Further records of the species, including males, and comparison with Swiss material, gave clear evidence that the species is indeed *M. myrmicarum*, a myrmecophilous species so far not reported from Scandinavia, but widely distributed in Europe. The posterior eye row is procurved, like in *apetlonensis*, but it differs from the latter by absence of spines on 1. femur (present in *apetlonensis*). Also, the shape of the

epigyne differs. The new records are all from ant nests (*Formica fusca* Linnaeus, 1758 and *F. rufa*group) in Vestfold county, where it appears to be quite common. The species was also recorded as new to Sweden from nests of *F. fusca* on Öland (Myhrer 2015).

Trichoncus hackmani Millidge, 1955

(Trichoncus affinis Aakra et al. (2016), nec Kulczynski, 1894) **Remarks**: After re-examination of Norwegian material and correspondence with Jörg Wunderlich (in lit.) it is concluded that Norwegian records of T. affinis and T. vasconicus Denis, 1944 are indeed T. hackmani Millidge, 1955 which is thus the only known species of Trichoncus in Norway.

Kikimora palustris Eskov, 1988

(Figures 3 A–B)

Material: HEN, Engerdal: S of Kvilten, Drevsjø (61.83985°N 11.97100°E), 750 m a.s.l., $2\bigcirc \bigcirc$, 7.VI.2012 and 26.VIII.2013, in moss/ litter from an open mire with scattered small pine trees, leg. A. Fjellberg. ON, Nord-Fron: Svartbekkmyrane (61.42687°N 9.24385°E), 1.000 m a.s.l., $1\bigcirc 1\bigcirc 7$, 10.VIII.2017., alpine bog, leg. B. Aadland.

Remarks: New to Norway. The species was originally described from several Siberian localities, and in 1999 for the first time found in Europe in a palsa mire at Enontekiö in northern Finland (Koponen *et al.* 2002). The Norwegian records are thus the most westernly so far.

Tibioploides arcuatus (Tullgren, 1955)

Material: HES, Elverum: Bergeberget (60.99686°N 11.77551°E), 1 \bigcirc , 5.VI.2012, mire vegetation. Elverum: Løvbergsmoen (60.90167°N 11.59457°E), several $\bigcirc \bigcirc$, 26.VIII.2013, moss/ lichens in dry pine forest. HES, Engerdal: Røafallene (61.61599°N 12.0536°E), several $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$, 7.VI.2012 and 26.VIII.2013, in damp moss in the spray zone along waterfall, all leg. A. Fjellberg. HES, Grue: Svullrya, (60.41616°N 12.39915°E), 4 $\bigcirc \bigcirc$, 21.X.2014, leg. H. Løvbrekke. Grue: Rokaberget, (60.40073°N 12.40568°E), 1 \bigcirc , 15.X.2014, leg. H. Løvbrekke.

Remarks: New to Norway. This boreal species (Sweden, Finland, Estonia, Russia) is possibly

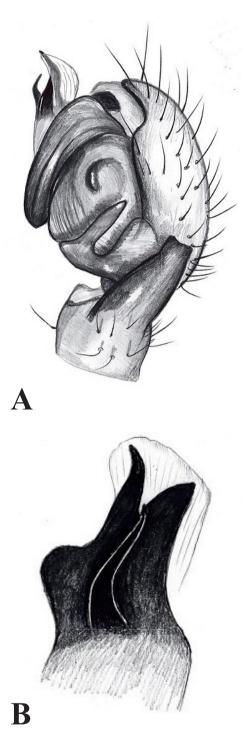


FIGURE 3 A–B. *Kikimora palustris* Eskov, 1988. **A.** Left palp, lateral. **B.** Embolus. Illustration: H. Løvbrekke.

quite common in both wet and dry habitats in eastern parts of South Norway.

Diastanillus pecuarius (Simon, 1884)

Remarks: This myrmecophilous species was reported by Aakra *et al.* (2016) from a number of inland and alpine localities north to Bodø in Nordland county. A new northern record pushes the distribution north to Tromsø: Several specimens under stones with *Formica lemani* Bondroit, 1917 at TRY, Tromsø: Rekvik in Skulsfjord (69.80233°N 18.73657°E), 11.VI.2015, leg. A. Fjellberg. Males collected at Bodø (leg. T. Husdal) verify our species identification.

Semljicola caliginosus (Falconer, 1910)

Remarks: In Aakra *et al.* (2016) there were two Norwegian records reported, one from Hemsedal and one from Gjesdal. The one from Hemsedal proved to be *S. lapponicus* (Holm, 1939). Thus, the only Norwegian locality so far is Lake Ålgård in Gjesdal (Rogaland).

LIOCRANIDAE

Phrurolithus minimus C. L. Koch, 1839 (Figures 4 A–C)

Material: TEI, Seljord: Heggenes (Figure 2) (59.44024°N 08.77887°E), 130 m a.s.l., 13° , 11.VI.–10.X.2015, in yellow pan trap at foot of a warm, dry scree slope, leg. K.M. Olsen.

Remarks: New to Norway. A more than 100-year-old unverified record from Buskerud, near Kongsberg is now regarded as dubious (Aakra *in lit.*). The species has a wide distribution in Europe north to southern Sweden. Our record is close to the northern limit.

PISAURIDAE

Dolomedes plantarius (Clerck, 1757)

(Figures 5 A–B)

Material: Ø, Marker: Gjølsjøen, north end $(59.466212^{\circ}N \ 11.68496^{\circ}E)$, 1° , 9.VIII.2013, on of water lily in a eutrophic lake, leg. T. Blindheim and K.M. Olsen.

Remarks: New to Norway. The species is well known from Sweden and probably has a



FIGURE 4 A–C. *Phrurolithus minimus* C. L. Koch, 1839. **A**. Male, habitus. **B**. Left palp, dorsal, showing tibial apophysis. **C**. Left palp, ventral, with the characteristic tegular apophysis. Photo: A. Fjellberg.

southeastern distribution in Norway. The record was also mentioned in a report by Blindheim & Olsen (2014).

Evarcha laetabunda (C. L. Koch, 1846)

Material: HES, Eidskog: Linåsmyra at Magnor (59.94458°N 12.24999°E), $2 \bigcirc \bigcirc$, 15.VIII.2012, sieved from moss/litter on a *Sphagnum* bog with scattered small pines, leg. A. Fjellberg.

Remarks: New to Norway. The species has a



FIGURE 5 A–B. *Dolomedes plantarius* (Clerck, 1757). **A**. Female on leaf of water lily at Gjølsjøen, Marker. **B**. Epigyne. Photo: K.M. Olsen.

wide Palaearctic distribution and its presence in Norway was expected.

TETRAGNATHIDAE

Tetragnatha nigrita Lendl, 1886

Material: RY, Eigersund: Tengs (58.47971°N 05.99578°E), 1♂, 6.VIII.2016, collected from the rail of a bridge crossing a small stream, leg. H. Løvbrekke.

Remarks: New to Norway. The species is known from our neighboring countries and its presence in Norway was expected.

THERIDIIDAE

Dipoena nigroreticulata (Simon, 1880) (Figure 6).

Material: VE, Larvik: Sæteråsen (59.13543°N 09.93620°E), 2♂♂1♀, 1 subadult, 27.IV.2015,



FIGURE 6. *Dipoena nigroreticulata* (Simon, 1880). Female and subadult male specimens from Sæteråsen, Larvik. Photo: A. Fjellberg.

sieved from moss and rotten wood/bark at foot of an old oak; Vemannsås (59.13437°N 09.93666°E), 1, 6.V.2015, moss at foot of old oak tree, leg. A. Fjellberg.

Remarks: New to Norway. The collecting sites are situated in mixed old growth hardwood forests among rocky outcrops. The species is distributed in southern and central Europe north to Germany and Poland and probably represents a thermophilic element in Norway.

Thymoites bellissimus (L. Koch, 1879) (Figure 7)

Material: ON, Ringebu: Søråa (61.55721°N 10.15603°E), several specimens, 28.IV.2012, collected from dripping wet moss hanging from cliffs and fallen logs in a dark river canyon. Sør-Fron: Steinåa (61.53335°N 09.97753°E), $1^{\uparrow}_{\circ}1^{\circ}_{\circ}$, 12.VI.2012, wet moss in river canyon. Sør-Fron: Augledalen (61.58598°N 09.91601°E), several specimens, 12.VI.2012. Sel: Berdøla (61.71359°N 09.39541°E), 1♀ 15.VI.2013,, wet moss on cliffs in river canyon. HEN, Engerdal: Røafallene (61.61599°N 12.05361°E), several specimens, 7.VI. 2012, wet moss in spray zone along waterfall. VE, Larvik: Djupedal (59.26461°N 09.98822°E), 1∂1♀, 2.V.2015, thick moss on shaded rocks along stream. NTI, Lierne: E. Holdelva (64.30367°N 13.61162°E), 3 \bigcirc \bigcirc 10.VI.2012, under damp rocks at cliff in dense forest, all records leg. A. Fjellberg.

Remarks: New to Norway. This boreal species has a wide distribution in Sweden, Finland and Russia and appears to be overlooked in Norway.

Enoplognatha serratosignata (L. Koch, 1879)

Remarks: Aakra *et al.* (2016) reported the species as new to Norway from several localities in Gudbrandsdalen and Ottadalen in Oppland. After that an isolated population has been discovered further south in the Jotunheimen mountains: ON, Lom: Gjendebu (61.45347°N 08.48324°E), 1.150 m a.s.l., 1, four juveniles, 17.VIII.2015, under flat rocks in a dry S-facing scree slope, leg. A. Fjellberg.



FIGURE 7. *Thymoites bellissimus* (L. Koch, 1879). Female from Steinåa, Sør Fron. Photo: A. Fjellberg.

THOMISIDAE

Xysticus robustus (Hahn, 1832)

(Figure 8 A–C, 9)

Material: TEI, Tokke: WNW of Gunnarshelle (Figure 9) (59.44476°N 08.03545°E), 100 m a.s.l., 13, 13.IV.–04.V.2014 and 13 4.V.–7.VI.2014 in traps in a warm S-facing rocky slope. Tokke: south of Bratsberg (59.42457°N 08.16759°E), 245 m a.s.l., 322, 29.V.–16.VII.2016, captured in a flight intercept trap (yellow balcony box placed under the partition wall of a malaise trap), all leg. K.M. Olsen.

Remarks: New to Norway. The two localities are situated about 8 km apart. The species is distributed in southern Sweden and was expected to occur in Norway.

Discussion

Including the present records, the number of spider species in Norway is now 623. Without doubt, there will be more species to come. Exotic species are introduced all the time through trade and transport. Some of these become established, in particular in man-made and disturbed habitats. Increased distributional area due to climate change will also add species to our fauna. And

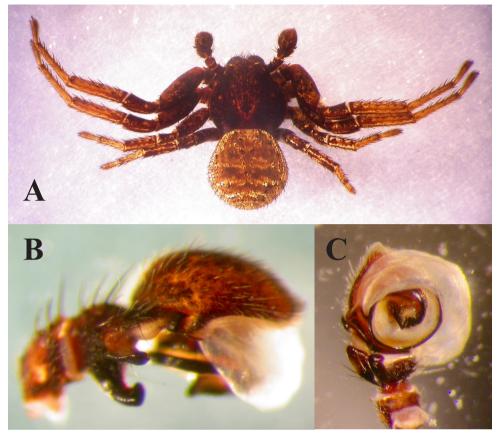


FIGURE 8 A–C. *Xysticus robustus* (Hahn, 1832). **A**. Adult male from Gunnarshelle, Tokke. **B**. Right palp, dorsal. **C**. Right palp, ventral. Photo: A. Fjellberg.



FIGURE 9. Collecting site of *Xysticus robustus* (Hahn, 1832) at Gunnarshelle, Tokke. Photo: K.M. Olsen.

there are still species which have lived here for long times, not yet being recorded. Almquist (2006) reports 715 species from Sweden and Koponen *et al.* (2016) list 647 species from Finland. Admitting that such figures are usually underestimated, we may suggest that a further 50 species may be discovered in Norway during the next few decades.

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