



Agyneta alpica Tanasevitch, 2000 is a junior synonym of *Agyneta resslī* (Wunderlich, 1973)

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Abstract.– *Agyneta alpica* Tanasevitch, 2000 is a junior synonym of *Agyneta resslī* (Wunderlich, 1973) **syn. nov.** The lamella characteristic, on which the description and diagnosis of *A. alpica* is based, is variable and the differences depend largely on the angle of view. Even if some specimens exist that show the pure *alpica*-form or the *resslī*-form respectively, most of the specimens show both forms depending on the angle of view.

Keywords.– Araneae, Linyphiidae, alpine region, new synonymy

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Résumé.– *Agyneta alpica* Tanasevitch, 2000 est un synonyme junior de *Agyneta resslī* (Wunderlich, 1973) **syn. nov.** La lamelle caractéristique, sur laquelle se basent la description et le diagnostic d'*A. alpica*, est variable et les différences relevées dépendent grandement de l'angle de vue. Même s'il existe certains spécimens qui présentent respectivement la forme pure *alpica* ou la forme *resslī*, la plupart des spécimens présentent les deux formes selon l'angle de vue.

Mots-clés.– Araneae, Linyphiidae, région alpine, nouvelle synonymie.

Introduction

Agyneta resslī (Wunderlich, 1973) was first described (sub *Meioneta*) from Austria at altitudes of 1500 to 1900 meters (WUNDERLICH, 1973). Further records are known from Liechtenstein, Germany, Switzerland, North Macedonia, Italy and Greece (NENTWIG *et al.* 2025). While restudying the type material of *A. resslī*, TANASEVITCH (2000) described a new species *A. alpica*. TANASEVITCH (2000) noted that «The new species is very closely related to *A. resslī* but is well distinguishable by the narrowed lamella characteristic and larger of its upper lobes, almost equal to lower one. Female unknown.». He described a Holotype, collected in 1968 in Switzerland, Hospental, Uri and two paratypes from the Austrian Alps (TANASEVITCH, 2000 : p. 211). The distinction of the male individuals between *A. resslī* and *A. alpica* is difficult as these two species are extremely closely related to each other.

According to WUNDERLICH, 1873, females of *A. resslī* are not to be distinguished from *A. rurestris* (C. L. Koch, 1836) or *A. fuscipalpus* (C. L. Koch, 1836) while the female of *A. alpica* is unknown according to TANASEVITCH (2000).

MUFF *et al.* (2007) made some close-up pictures with a scanning electron microscope (SEM) from the tip of the lamella characteristic showing differences in the length of the two lobes at the end of the lamella (MUFF *et al.* 2007). They noted «Despite its great variability in *M. alpica*, it can be well distinguished from the lamella of *M. resslī* with respect to the size and shape of the two lobes.» Also, MICHAUD & FORËT (2018) integrated a photograph from P. Oger in their publication from the lamella characteristic of *A. alpica* to show the two diverging lobes of almost the same length.

Material and methods

During several projects in the Swiss Alps overall 58 males and 50 females of *Agyneta* cf. *resslī* were collected and analysed by the first author.

Switzerland, surroundings of Furka pass (Wallis and Uri cantons), 46.57 N, 8.41 E, altitudes from 2220 to 2650 m a.s.l., expositions SSW to SSE (only one female on NE), alpine grassland with sometimes grazing by sheep. Collections in the years 2012, 2013, 2014 (HÄNGGI, 2018) and 2019 (RAAFLAUB, 2020) from mid-June to mid-October (the whole snow free season) by pitfall traps. *Agyneta resslī* 28♂, 25♀, *Agyneta rurestris* 2♂, 2♀.

Switzerland, region Alp Flix (Grisons canton), 46.52 N, 9.66 E, along an altitudinal gradient from 2180 to 2400 m a.s.l., alpine pastures and dwarf shrub heath (HÄNGGI *et al.*, 2022). Collections from 20.06.2020 to 11.11.2020 (males only till 21.07.2020), *Agyneta resslī*, 18♂, 14♀.

Switzerland, region Alp Flix (Grisons canton), 46.51 N, 9.64 E, 1950 m a.s.l., dwarf shrub heath (MUFF *et al.*, 2007). Collections from mid-May to mid-August. *Agyneta resslī*, 11♂, 7♀, *Agyneta rurestris* 2♂, 8♀.

Switzerland, Glarus canton, region Obersand, Beggenen, 46.83 N, 8.93 E, 2050 m a.s.l., alpine pasture, pitfall traps, leg. Daniel Gloor (GLOOR, 2009), 28.06.2008 to 17.08.2008, *Agyneta resslī*, 1♂, 4♀.

Type specimen of *Agyneta alpica* Tanasevitch, 2000 : «Switzerland, Uri canton, Hospental, under stones by a mountain brook, 09.VI.1968, leg. P. Lehtinen», loan of the Zoological Museum, University of Turku.



For comparison, further specimens of *Agyneta rurestris* and *Agyneta fuscipalpus* out of the collection of the Natural History Museum Basel were checked.

Photos were taken by using a KEYENCE VHX-6000 with autostacking.

Results

In our studies, we studied all male individuals of the mentioned material and compared it to some males of *A. rurestris*, *A. fuscipalpus* and *A. resslī* of the collection of the Natural History Museum Basel. The distinction between *A. rurestris* and *A. resslī* is comprehensible for us by the shape of the lamella characteristic. But, using taxonomic literature, we were not able to distinguish our individuals clearly as *A. resslī* or *A. alpica*. Under the consideration that our individuals were collected just approximately 12 km air-line distance from the location of the holotype described by TANASEVITCH (2000) the specimens rather could be attributed to *A. alpica*. Also, the two lobes at the distal end of the lamella mostly have almost the same length and are well recognisable looking at a certain angle at the lamella. But we recognised that, by changing the angle by rotating the lamella slightly in one or another direction, we can see both characteristics of *A. alpica* and *A. resslī* on the same bulbous of the same specimen. To underline this assumption, we took some close-up photographs from the bulbous and the lamella characteristic from one of our animals (see fig. 1-7, Switzerland, Grisons canton, Surses, Alp Flix, 46.520 N, 9.664 E, 2180 m a.s.l., wet pasture on riverside). The results of our close-up photographs indicate that the shape of the lamella characteristic is not an appropriate tool to distinguish between these two species. We assume that we can find support for our assumption in the drawings of TANASEVITCH (2000). While he drew the whole lamella characteristic of *A. alpica*, the angle of the drawing can be seen by the proximal part of the lamella. On the contrary, for *A. resslī* he just illustrated the distal part of the lamella and therefore, it is not apparent from which angle his illustrations were made. To point out our findings, we compare our photographs to the drawings Tanasevitch made for the description of the holotype of *A. alpica*. Note that our photographs were made from the left bulbous (retrolateral view), Tanasevitch used the right one (retrolateral view). So, we mirror-inverted inlets with the illustrations of Tanasevitch.

Our studied material shows polymorphism in most specimens. But there exist specimens that show, even if viewed under different angles, more or less the aspect of *A. resslī* (*resslī*-type) or *A. alpica* (*alpica*-type).

We borrowed the holotype of *A. alpica* from the Zoological Museum, University of Turku. Looking

at the lamella depicted by TANASEVITCH (2000) for *A. alpica* (the lamella of the right bulbous, dissected) really fits to the *alpica*-type, while in the left pedipalpus (not detached) depending on the angle of view one can find the *resslī*-type (fig. 8) as well as the *alpica*-type (fig. 9).

According to all the facts above we declare that *Agyneta alpica* Tanasevitch, 2000 is a junior synonym of *Agyneta resslī* (Wunderlich, 1973), **syn. nov.**

Description of a male from Furkapass

♂, SWITZERLAND, Uri, Furkapass: 46°34'50.61 N / 8°25'29.41 E: 2427 m a.s.l., Barber-trap, alpine grassland : «Krummseggenrasen» with *Carex curvula*, *Vaccinium* sp., *Loiseleuria procumbens*, *Gentiana punctata*, *Geum montanum*, *Potentilla aurea* and *Homogyne alpina*. 11.09 – 24.09.2019, leg. D. Raaflaub, det. D. Raaflaub.

Coloration : Prosoma dorsally brown to yellowish brown with marginally darker coloration. Sternum dark brown, marginally darkened. Legs yellow brown, brighter than the dorsal and ventral part of the prosoma. The opisthosoma is grey on the dorsal part and dark brown on the ventral part with a colour transition from dorsally to ventrally and from brighter to darker colour, respectively

Prosoma : length: 0,75 mm, width: 0,6 mm. Prosoma and head regions inconspicuous, fovea is clearly visible as a darkened groove. Eyes are normally developed, posterior eye row is straight, separation between the posterior median eyes is distinctly less than their diameter. The anterior median eyes are distinctly smaller than the anterior lateral eyes. Chelicerae are long and distally strongly diverging. Sternum smooth, width of the sternum between coxae IV is equal in relation to the width of coxae IV.

Legs : Tibia I to IV are all with two dorsal spines (Wiehle-Formula : 2222). The length of femur I is 0.72 mm and therefore slightly shorter than the prosoma. Dorsal and prolateral spines on femur I are inexistent. Metatarsus IV is dorsally without a trichobothrium. The position of the trichobothrium on metatarsus I in relation to the metatarsus is 0.23 (0.20 – 0.29 by range). Metatarsus I is without any dorsal spine as well as the tibia I is without prolateral spines.

Male pedipalp : Tibia with two apophyses. Cymbium dorsally basal with one small cone-shaped elevation and a bigger one in the middle part. For lamella characteristic see figures 1-9.



Discussion

With the new synonymy of *Agyneta alpica* = *Agyneta ressl*i the known range of this species is European, reaching from the Pyrenees and the French Alps (MICHAUD & FORËT, 2018) over the Alps of Switzerland, Germany, Italy and Austria to North Macedonia and Greece (NENTWIG *et al.*, 2025). While the findings in the Alps and North Macedonia all come from altitudes above 2000 m a.s.l. (up to 2600 m a.s.l.) the ones from the Pyrenees come from about 1300 m a.s.l. and the one from northern Greece from about 90 m a.s.l. (BUCHHOLZ, 2013, only one ♂). All records were made in open habitats as pastures, dwarf heath and meadows with different degrees of humidity.

Earlier records of *A. ressl*i from the Caucasus or Middle Asia were attributed to *Agyneta mesasiatica* in the description of this species by TANASEVITCH (2000).

As far as known today, the species seems to be rare but it can not be excluded that in older material, determined as *Agyneta rurestris*, some more specimens of *Agyneta ressl*i may be included. Besides, «rareness» in alpine habitats often indicate that there only few investigations have been done.

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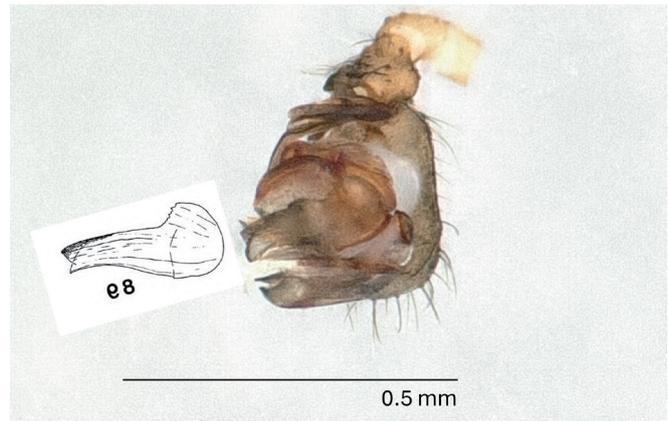


Figure 1.- Bulbus compared to illustration Nr. 89 from Tanasevitch showing the lamella characteristic of *A. alpica*.

Figure 1.- Bulbe comparé à l'illustration n° 89 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta alpica*.

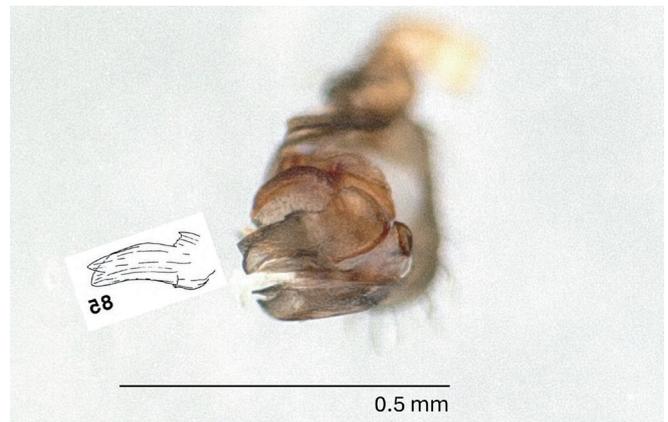


Figure 2.- Bulbus compared to illustration Nr. 85 from Tanasevitch showing the lamella characteristic of *A. alpica*.

Figure 2.- Bulbe comparé à l'illustration n° 85 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta alpica*.

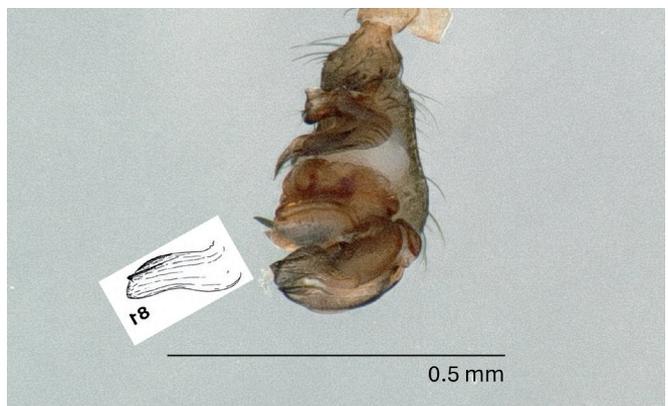


Figure 3.- Bulbus compared to illustration Nr. 81 from Tanasevitch showing the lamella characteristic of *A. ressl*i.

Figure 3.- Bulbe comparé à l'illustration n° 81 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta ressl*i.

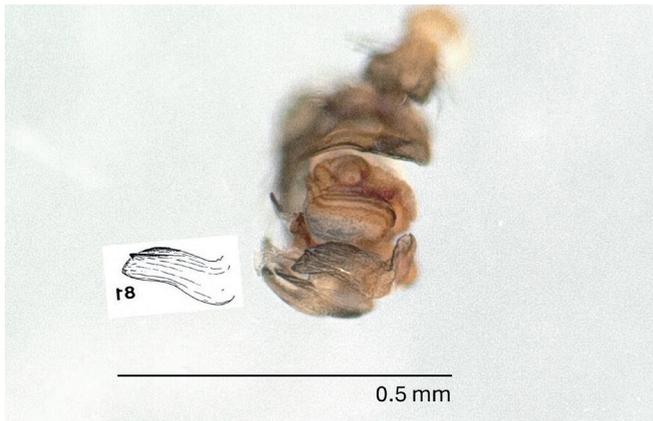


Figure 4.- Bulbus compared to illustration Nr. 81 from Tanasevitch showing the lamella characteristic of *A. resslī*.

Figure 4.- Bulbe comparé à l'illustration n° 81 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta resslī*.

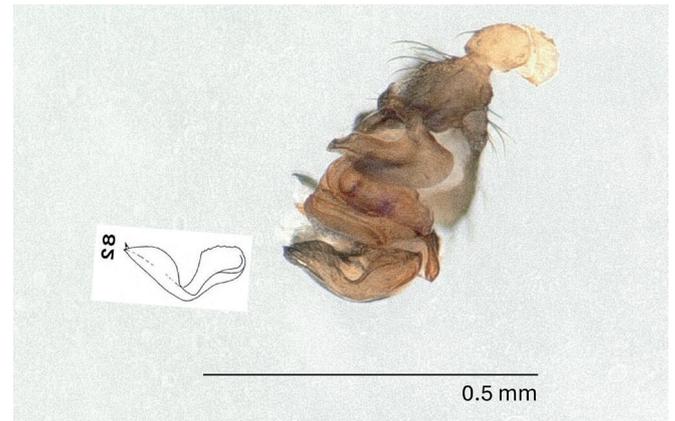


Figure 7.- Bulbus compared to illustration Nr. 82 from Tanasevitch showing the lamella characteristic of *A. alpica*.

Figure 7.- Bulbe comparé à l'illustration n° 82 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta alpica*.

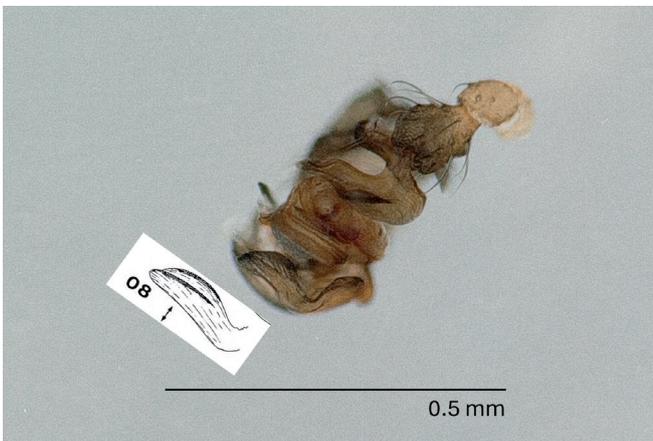


Figure 5.- Bulbus compared to illustration Nr. 80 from Tanasevitch showing the lamella characteristic of *A. resslī*.

Figure 5.- Bulbe comparé à l'illustration n° 80 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta resslī*.

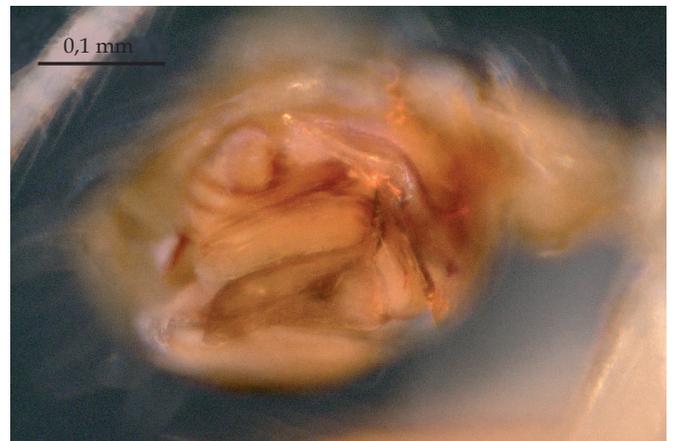


Figure 8.- Type specimen of *Agyneta alpica*, left bulbus, position to show the *resslī*-type.

Figure 8.- Spécimen type de *Agyneta alpica*, bulbe gauche, position pour faire voir le type *resslī*.

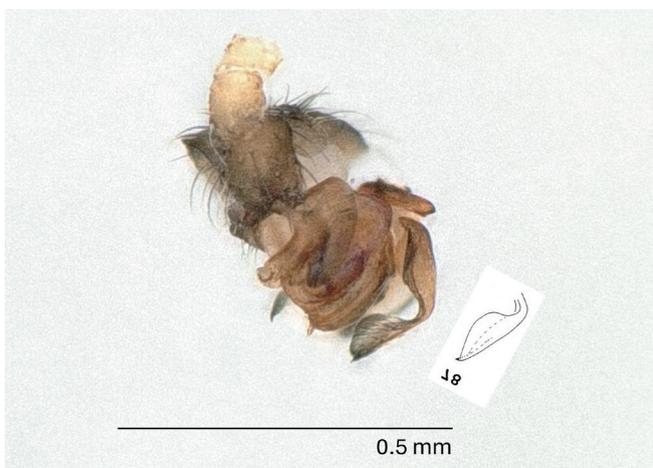


Figure 6.- Bulbus compared to illustration Nr. 78 from Tanasevitch showing the lamella characteristic of *A. resslī*.

Figure 6.- Bulbe comparé à l'illustration n° 78 de Tanasevitch, montrant la lamelle caractéristique d'*Agyneta resslī*.



Figure 9.- Type specimen of *Agyneta alpica*, left bulbus, position to show the *alpica*-type.

Figure 9.- Spécimen type de *Agyneta alpica*, bulbe gauche, position pour faire voir le type *alpica*.



References

- BUCHHOLZ S. 2013. Spider records from East Macedonia and Thrace (NE Greece). *Arachnologische Mitteilungen*, **45**: 45-53. [doi:10.5431/aramit4510](https://doi.org/10.5431/aramit4510)
- GLOOR D. 2009 in BACHMANN P., FRIEDLI M., ZIMMERMANN L. & ZIMMERMANN P. 2009. Obersand 2008 – Sommer der alpinen Artenvielfalt. – *Mitteilungen der Naturforschenden Gesellschaft des Kantons Glarus*, **18**: 254-265.
- HÄNGGI A. 2018. Spinnen (Araneae) alpiner Rasen auf der Furka: Ergebnisse einer Vorversuchsreihe. – *Mitteilungen der Naturforschenden Gesellschaften beider Basel*, **18**: 67-80.
- HÄNGGI A., GERMANN C., LÜDEKE M. & BORER M. 2022. Bodenlebende Makroarthropoden oberhalb der Alp Flix – Unterschiede zu den Beständen auf der Alp. – *Jahresbericht der Naturforschenden Gesellschaft Graubünden*, **122**: 75-85.
- MICHAUD A. & FORÉ J. 2018. Découverte en France d'*Agyneta alpica* Tanasevitch, 2000 et de *Mughiphantes baebleri* (Lessert, 1910) (Araneae, Linyphiidae). – *Revue Arachnologique* (2), **5**: 11-13.
- MUFF P., SCHMIDT M. H., FRICK H., NENTWIG W. & KROPF C. 2007. Spider (Arachnida: Araneae) distribution across the timberline in the Swiss Central Alps (Alp Flix, Grisons) and three morphologically variable species. – *Arachnologische Mitteilungen*, **34**: 16-24. [doi:10.5431/aramit3404](https://doi.org/10.5431/aramit3404)
- NENTWIG W., BLICK T., BOSMANS R., HÄNGGI A., KROPF C., STÄUBLI A. (2025) Spinnen Europas. Version 05.2025. Online <https://www.araneae.nmbe.ch>, accessed on 26.11.2025. <https://doi.org/10.24436/1>
- RAAFLAUB D. 2020. *Spider (Arachnida: Araneae) species distribution along an elevational gradient and four hillocks in the alpine grassland in the Swiss Central Alps (Furkapass, Uri)*. Master thesis. University Basel.
- TANASEVITCH A. V. 2000. On some Palaearctic species of the spider genus *Agyneta* Hull 1911, with description of four new species (Aranei: Linyphiidae). – *Arthropoda Selecta*, **8**: 201-213.
- WUNDERLICH J. 1973. Zur Spinnenfauna Deutschlands, XV. Weitere seltene und bisher unbekannte Arten sowie Anmerkungen zur Taxonomie und Synonymie (Arachnida: Araneae). – *Senckenbergiana Biologica*, **54**: 405-428.

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