

Report on the annual excursion BLAM 2025 in the Tuxer Alps (Tirol) 10. – 14. September 2025

LING BI, ANDREA BERGER, MICHAEL BERGER, STEFAN GEY, ANNA GÖTZ,
ROMAN TÜRK AND ULRIKE RUPRECHT

In September 2025, the annual excursion of the BLAM took us to the Zillertal, organized by our Salzburg lichen working group. It was an event we had been eagerly anticipating – and it did not disappoint. Beyond the lichens and mosses, themselves, it was the people that made it special: a gathering of passionate bryologists and lichenologists, enriched by close cooperation with the Naturkunde Museum Tirol.

The excursion took place in the Tux Alps (Tyrol, Austria) and was organized by Ulrike Ruprecht, Peter Gruber, Anna Götz and Roman Türk (University Salzburg), together with Christian Anich and Ines Aster from the Tyrolean State Museum.

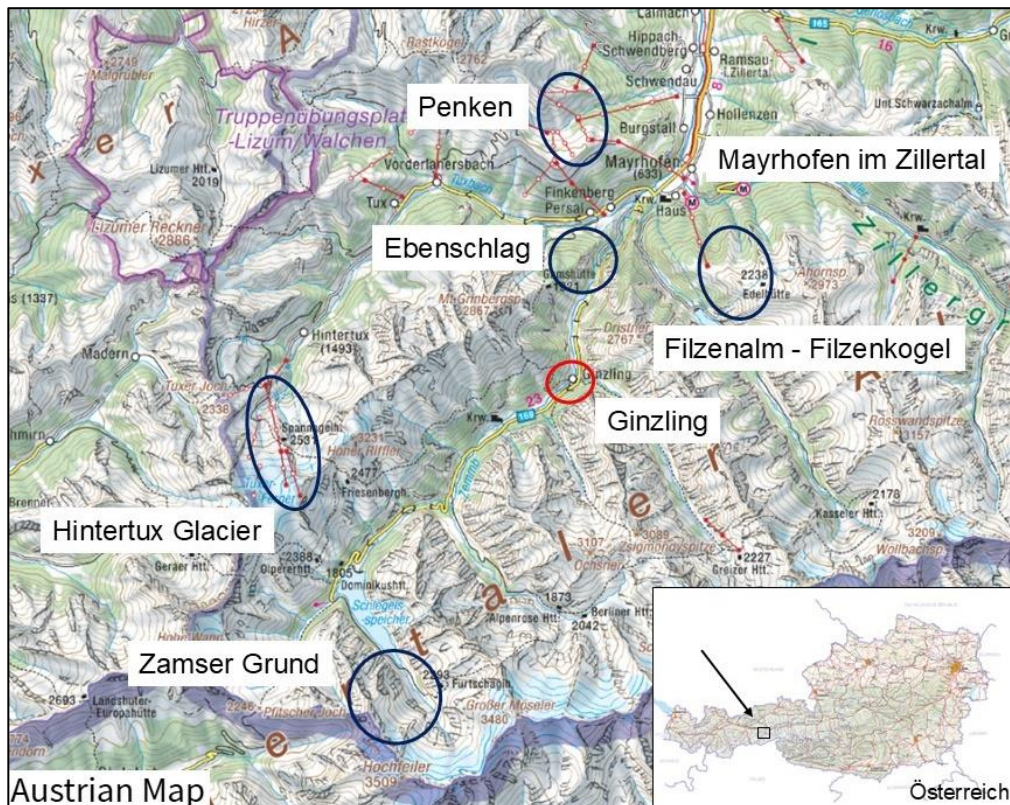


Fig. 1: Map of the excursion area in the Tux and Zillertal Alps, Tyrol, Austria (Austrian Maps)

Excursion areas

1. Hintertux - Tux Glacier (1500-) 2600 (-3288) m a.s.l. (mountain forest/alpine/high-alpine habitats)
2. Gschößberg, Penken 2090 - 2120 m a.s.l. (Tux Alps, Rastkogel-Gilfertgruppe)
3. alternatively Filzenalm - Filzenkogel 1907 – 2227 m a.s.l.
4. Zamser Grund 1780 - 2246 m a.s.l. (Schlegeis Stausee – Lavitzenalm – Pfitscher Joch)
5. Ebenschlag 1300 – 1500 m a.s.l.

The Tux Alps lie between the Inn Valley (north), Zillertal (east), and Wipptal (west), and are characterized by gentle, grassy peaks often used as alpine pastures. In contrast, the neighboring Zillertal Alps are much more rugged, with the main Tux ridge, including the Olperer, reaching over 3,400 m a.s.l. Geologically, the region is highly diverse, situated at the edge of the Tauern Window with a wide range of underlying rock types.

The excursion area itself lies at the transition between the Tux and Zillertal Alps. While the Tux Valley forms the geographical boundary, our accommodation in Ginzling was located in the Zillertal valley.

Pre-program

On 10.09.2025 from 13:30 - 16:00 a guided tour took place at the Collection and Research Centre of the Tyrolean State Museums in Hall in Tiro which houses offices, labs, and storage for thousands of valuable zoological, botanical, and geological specimens.

First, the zoological department was visited, where specimens such as the death's-head hawkmoth, a roe deer semi-albino specimen, and one of the few known specimens of the "great wolperting" were on display.

The botany section features a moss- as well as an impressive lichen herbarium. This led to our field assignment: collecting samples in southern Zillertal, identify them, and donating part of the material to the museum.

Welcome, 10.09.2025

The official start of the excursion took place at the Mehrzwecksaal Ginzling (Dornauberg 28, 6295 Mayrhofen, Österreich) on the evening of the arrival day, during which the excursion program and the general meeting were presented by Ulrike Ruprecht.



Fig. 2: Presentation setup for the initial BLAM gathering in the multipurpose meeting hall. (Illustration: Ling Bi).



Fig. 3: Participants mingling by the entrance of the meeting hall. (Illustration: Ling Bi).



Fig. 4: Attendees at 28 Dornauberg listening with anticipation to excursion plans. (Illustration: Ling Bi).



Fig. 5: First dinnertime at the Alpengasthaus Breitlahner with traditional Austrian fare, such as goulash and spaetzle. (Illustration: Ling Bi).



Fig. 6: Group photo of the excursion participants: 1 Alfons Schäfer-Verwimp, 2 Felix Faltner, 3 Ralf Schmiede, 4 Lukas Schröder, 5 Christiane Wiehle, 6 Elisabeth Koch, 7 Ulrike Ruprecht, 8 Wolfgang Schwarz, 9 Mariusz Wierzgoń, 10 Marion Eichler, 11 Wolfgang Wiehle, 12 Rainer Cezanne, 13 Ingmar Stelzig, 14 Norbert Stapper, 15 Othmar Breuss, 16 Fritz Volkers, 17 Christoph Langer, 18 Matthias Schultz, 19 Isaac Tiselius, 20 Uwe Schwarz, 21 Frank Müller, 22 Christian Printzen, 23 Anna Götz, 24 Jonas Bunte, 25 Sandra Ehmann, 26 Stefan Meisberger, 27 Sophia Knaus, 28 Kevin Wurnitsch, 29 Sebastian Dittrich, 30 Kalina Hable, 31 Martina Pörtl, 32 Stefan Gey, 33 Steffen Caspari, 34 Linda Gerra-Inohosa, 35 Thomas Wolf, 36 Ilze Barone, 37 Līga Strazdina, 38 Christian Anich, 39 Ilze Kukare, 40 Līga Mihailova, 41 Christian Berg, 42 Evita Olehnoviča, 43 Anita Schwarz, 44 Andrea Berger, 45 Michael Lüth, 46 Erich Zimmermann, 47 Wolfgang Decrusch, 48 Silvia Feusi, 49 Roman Türk, 50 Martin Grube, 51 Inge Verwimp-Schäfer, 52 Volker Otte, 53 Christian Dolnik, 54 Frank Mollenkopf, 55 Rudi Zielman, 56 Hanneke van Dorp, 57 Johann Peter Gruber, 58 Anna Rauchberger, 60 Mario Schanz, 61 NN, 62 Marianne Gruber, 63 Ling Bi (Photo Michael Berger)

Hintertux - Tux Glacier (1500-) 2600 (-3288) m a.s.l., 11.09.2025

The first day took us to the Hintertux Glacier, where we rode the gondola up to the “Gefrorene-Wand-Spitzen” at 3.288 m a.s.l.

Right at the top station, we encountered classic saxicolous lichen communities colonizing the exposed rock faces – harsh, wind-swept habitats where these crustose specialists thrive under extreme conditions. Despite the altitude, the diversity was remarkable, with tightly adhering lichens forming intricate mosaics on the stone.



Fig. 7: Explorers looking for life at the top of the rock-face of the snow-covered mountain-top of the Hintertux Glacier. Only one moss was found, dead. (Illustration: Ling Bi).



Fig. 8: Watching the forest volume increase descending from the top level of the Hintertux Glacier in one of three lifts down. (Illustration: Ling Bi).

As we made our way down, the variety increased: more crustose lichens appeared alongside small but fascinating moss communities tucked into crevices, as well as species rich moss communities and even patches of biological soil crusts in more sheltered spots. These microhabitats revealed how life persists even in the most seemingly inhospitable alpine environments.

All the while, the setting remained strikingly ambivalent. The dramatic high-alpine scenery—with glaciers, jagged peaks, and wide panoramas—stood in sharp contrast to the constant presence of ski infrastructure: lifts, stations, and ongoing construction never far away. This juxtaposition of pristine nature and intensive human use made the day both visually impressive and thought-provoking – a contrast not easily forgotten.



Fig. 9: Distant view while hiking downwards. (Illustration: Ling Bi).



Fig. 10: Wolfgang kneeling down to the level of a small flower for a photo. (Illustration: Ling Bi).



Fig. 11: Barely a few steps from the lift exit, bryologists and lichenologists already pressing their noses into the wall. (Illustration: Ling Bi).



Fig. 12: Some moss found nestled within the rock, 2680 m up, on the middle level of Hintertux. (Illustration: Ling Bi).



Fig. 13: First level of the search, beside the lift and the Tuxer Fernerhaus rest stop. (Illustration: Ling Bi).

Notable moss species

Cratoneuron curvicaule
Brachythecium tauriscorum
Brachythecium turgidum
Grimmia elatior
Hymenoloma compactum
Isopaches decolorans
Schistidium agassizii
Sciuro-hypnum latifolium

Notable lichen species

Arthrorhaphis alpina
Caloplaca tetraspora
Lecidea sarcogynoides
Peltigera neckeri
Rhizocarpon subpostumum
Umbilicaria hyperborea
Varicellaria rhodocarpa

Gschößberg, Penken 2090 - 2120 m a.s.l., 12.09.2025

The Penken is a peak over 2.000 meters high in the Tux Alps, which can be easily reached by cable car from Mayrhofen; directly on the opposite side, there was an alternative route up (Filzenalm–Filzenkogel), which was also selected by some of the participants.



Fig. 14: Large *Peltigera leucophlebia* lichen, as well as a plant stem that appears to be growing out of the center, painted in the rain, Gschößberg, Penken. (Illustration: Ling Bi).

At this altitude, we were largely shielded from strong UV radiation by cloud cover, and later enjoyed periods of damp, cool weather – ideal conditions for mosses and lichens. We quickly split into smaller groups, many of us following Roman Türk, whose expert guidance turned the day into a masterclass in field lichenology.

Our planned circular route led through a charming alpine pasture landscape, but what unfolded felt almost cinematic: a comprehensive exploration of lichen as well as moss diversity across forests, heathlands, rocks, meadows, and grazed pastures. Dense fog and light drizzle, shaped by the terrain, created perfect microclimates – clouds drifted up the slopes and through the trees, fostering lush growth of beard lichens (*Usnea* sp.).



Fig. 15: A lichen found beside the parking lot within tree branches around Gschößberg, Penken.
(Illustration: Ling Bi).

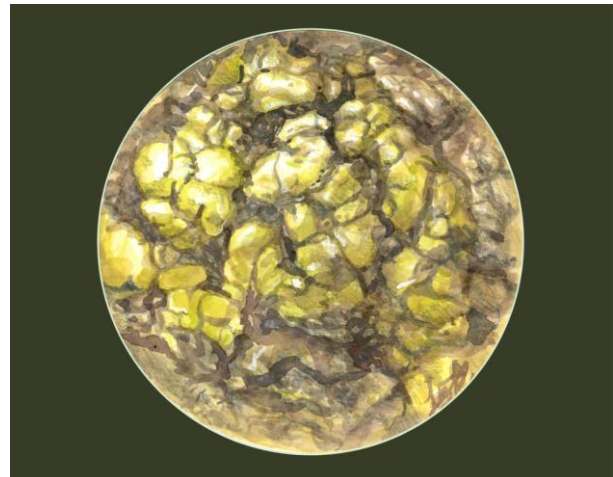


Fig. 16: A lichen growing on a boulder near the parking lot by Gschößberg, Penken.
(Illustration: Ling Bi).

Within a very small area, we encountered an extraordinary diversity of species, all clearly and engagingly explained. Highlights included the “Usnea forest,” lichen and moss-rich deadwood near the cable car station, and detailed fieldwork at rock outcrops. We also examined epiphytic lichens on alpine shrubs such as *Rhododendron ferrugineum*, demonstrating once again how rich and varied these habitats can be. The results of this field trip are impressive: By April 2026, 120 species of lichen had already been identified on the Penken

Notable Moss species

Didymodon subandreaeoides
Encalypta longicolla
Gymnobarbula bicolor
Odontoschisma macounii
Orthothecium strictum
Pohlia longicolla
Schistidium pratense
Tayloria froelichiana
Tetraplodon angustatus and mnioides
Tritomaria scitula

Notable lichen species

Aspicilia laevata
Caloplaca sorocarpa
Evernia divaricata
Lecanora expansa
Peltigera leucophlebia
Rimularia gyrizans
Rinodina orculata
Rinodina septentrionalis
Umbilicaria subglabra

Annual general meeting BLAM 2025

The annual general meeting of the BLAM took place at 8 p.m at the Mehrzwecksaal Ginzling.

All items on the agenda were concluded as planned (please see page 3, Mitgliederversammlung), and as a truly delightful conclusion, Roman Türk (Professor Emeritus, University of Salzburg) was named an honorary member in recognition of his many years of dedicated service to the BLAM.

Zamser Grund, 13.09.2025

The third day brought us back to the Zamser Grund, this time at a much more relaxed pace that allowed us to take in the landscape more fully. We followed the valley up to the Lavitzen Alm, where the terrain opens into a broad, amphitheatre-like cirque shaped by glacial processes and marked by striking geological diversity.



Fig. 17: Conversations along the lower level of the Hintertux Alps while the lift trundles by above. (Illustration: Ling Bi).



Fig. 18: Participants bottlenecking at the start of the third day at Zamsergrund, due to the high density of bryophytes and lichens all over. Everyone is very cute with how happy they are to discuss their findings. (Illustration: Ling Bi).

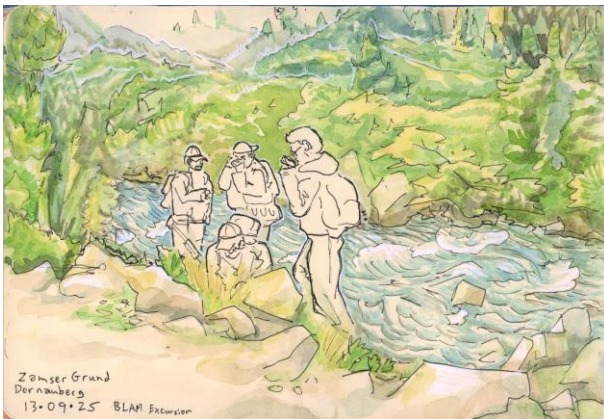


Fig. 19: Searching for wetter mosses beside the river at Zamsergrund (Illustration: Ling Bi).



Fig. 20: Rain starts and stops and starts. Participants, unbothered and well-prepared, squat to inspect what grows on the stones. (Illustration: Ling Bi).

One of the day's highlights was the Rotbach, a stream descending from the Rotbachspitze, whose waters are colored a deep reddish hue by iron-rich minerals – giving the stream its distinctive name and an almost surreal appearance against the alpine backdrop. Along the descending path, deposits of mica (glimmer) caught the light, adding another geological curiosity to the route.



Fig. 21: Moss found with capsules by the river at Zamsergrund. (Photo and Illustration: Ling Bi).

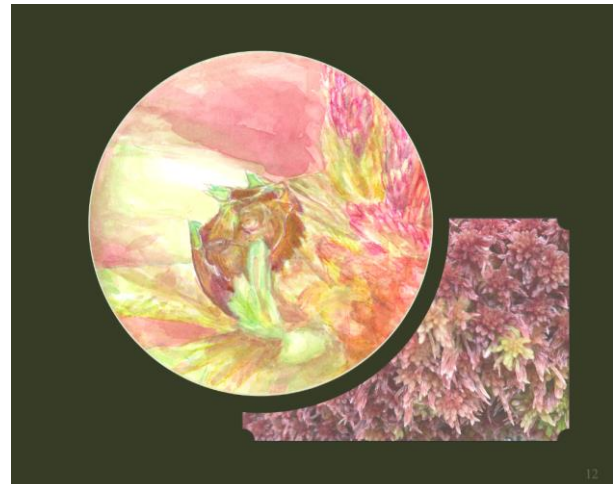


Fig. 22: More moss with capsules. (Photo and Illustration: Ling Bi).

Due to the highly varied and humid conditions along the streams, old logs and further up on large rock formations, we found species-rich lichen and moss communities in all areas. The weather, however, was harsh – cold, very cold for the time of year – and at times biting winds swept through the valley. Still, the group proved resilient, and fieldwork continued with determination. Despite the conditions, sampling never stopped, and the combination of geological variety and alpine habitats once again offered rewarding finds.

Notable Moss species

Aongstroemia longipes
Brachytheciastrum collinum
Cynodontium fallax
Frullania jackii
Grimmia incurva
Gymnomitrium coralloides
Lescuraea saxicola
Meesia minor und minutissima
Odontoschisma elongatum
Platyhypnum alpinum
Tayloria splachnoides
Tetradontium ovatum
Timmia bavarica

Notable lichen species

Alectoria nigricans
Bryoplaca sinapisperma
Alectoria nigricans
Lecanora lojkaeana
Lecidea swartzioidea
Lobaria linita
Micarea incrassata
Rhizocarpon geographicum ssp. lindsayanum
Schaereria fuscocinerea var. fuscocinerea
Umbilicaria crustulosa
Umbilicaria polyphylla
Usnea glabrata
Usnea hirta



Fig. 23: Moss with a shimmering capsule.
(Illustration: Ling Bi).

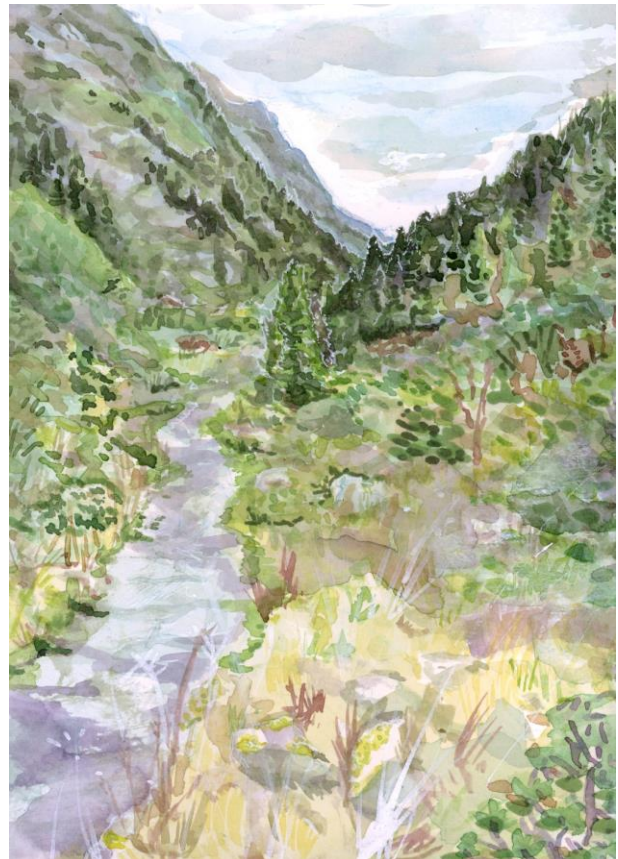


Fig. 24: View of the long path back to the entrance
at Zamsergrund (Illustration: Ling Bi).

Ebenschlag, Finkenberg, 13.09.2025

Among other places, the excursion focused on historical lichen sites that Ferdinand Arnold studied and described in the Tux Alps around 1878 (Ebenschlag, Finkenberg). Arnold documented numerous species and made a significant contribution to the cataloging of 19th-century alpine lichen flora. In doing so, he highlighted the ecological importance of these organisms in high-alpine regions. His work is documented by around 120,000 lichen specimens, now housed in Munich, and by publications such as *Lichenological Excursions in Tirol*.

A small group of Lichenologists followed Arnold's footsteps under the guidance of Roman Türk and Matthias Schultz near Brunnhaus by Finkenberg. The north-facing slope lies on a northeastern spur of the nearly 3,500 m high Olperer. Its lower parts are steep but actively farmed, featuring a varied mosaic of meadows, pastures, small woods, walls, rocks, and shrubs. Grazing animals help maintain the landscape, which also includes scattered farms, hay barns, and stables. Higher up, meadows give way to steeper terrain dominated by dense, natural mixed forest.

Many locations showed high humidity, with springs, a well, and damp roadside depressions creating ideal habitats. Fertilization has led to lush, green grass growth, while old hay barns and untreated wood structures also provided valuable lichen habitats.

The area is scenic and easy to walk, with well-maintained paths. For lichenologists, stone walls covered in lichens are especially striking, with large *Peltigera* colonies visible from afar. Although Arnold might hardly recognize the area today, our results were impressive: over 100 lichen species were identified on site, and many samples were collected.

Notable lichen species

Bryoria fuscescens

Chaenotheca trichialis

Chrysothrix candelaris

Cladonia arbuscula

Hypogymnia physodes

Lecanora pulicaris

Pseudevernia furfuracea

Usnea dasopoga

Usnea subfloridana

On our final evening, all participants had the opportunity to identify their specimens using the microscopes and binoculars provided and to discuss any uncertainties with their colleagues.

The entire excursion was met with great enthusiasm, thanks both to the beautiful scenery and the lively interaction among altogether 85 participants.

An important aspect of this excursion was, above all, that many specimens were made available to the Tyrolean State Museum, allowing the state herbarium to record a significant increase in its collection of lichen and moss specimens. The complete species lists will be published in one of the upcoming issues of "Herzogia."

The organizers would like to once again extend their heartfelt thanks to all participants for their attendance, their active participation, and, above all, for their extensive knowledge.

Anschriften der Autoren

Ulrike Ruprecht: ulrike.ruprecht@plus.ac.at

University Salzburg, Dept. of Environment & Biodiversity, Hellbrunnerstrasse 34, A-5020 Salzburg

LING BI

E-Mail: lingbi901@yahoo.ca

ANDREA BERGER

E-Mail: liriodendra@googlemail.com

MICHAEL BERGER

E-Mail: limulus.polyphemus@freenet.de

Stefan Gey

E-Mail: tayloria@my.mail.de

ANNA GÖTZ

E-Mail: anna.goetz@plus.ac.at

ROMAN TÜRK

E-Mail: roman.tuerk@plus.ac.at