

# PRESSKIT FLYING SCENTS - OF PLANTS AND PEOPLE

Documentary feature, 66 min, Switzerland 8 August 2025 written and directed by Antshi von Moos

In Zurich, a female-led research team embarks on a quest to uncover the chemical secrets that make plants bloom instantly. The film explores the complex connections between plants, insects, and humans in a volatile world where science and art intertwine.

World premiere Locarno International Filmfestival - 35ème Semaine de la critique 10 August 2025, La Sala, 11 AM followed by Q & A, 2nd Screening 11 August, 9 AM

Special Event for journalists and interested audience

FLYING SCENTS LIVE - Public Conversation: Rethinking Our Relationship with Plants

Author and biologist Florianne Koechlin and chemical ecologist Prof.Dr. Consuelo De Moraes (ETH Zurich) — will discuss how recent discoveries in plant communication challenge long-held assumptions, and what these insights might mean for science, agriculture, and society. 10 August 2025, 1 PM, Parco Robinson



Prof. Dr. Consuelo De Moraes in the Biocommunication Lab at ETH Zurich, collecting "flying scents" - plant volatiles

Produced by Mira Film in Co-production with ZHdK, Zurich University of the Arts and SRF Swiss Radio and Television **SRG SSR** 

with the support of Zürcher Filmstiftung, Bundesamt für Kultur

Volkart Stiftung, Alexis Victor Thalberg Stiftung, Anne-Marie Schindler Stiftung, Fondation Suisa, Focal, Swissfilms Festival Support

#### **Contacts**

Mira Film: info@mirafilm.ch, +41 43 960 36 84, Zurich

Director: Antshi von Moos, antshivm@hotmail.com, +41 76 465 91 41, Zurich

Producer: Sonja Kilbertus, kilbertus@mirafilm.ch, +4176 737 2121

Festival Distribution: Raina Films, Andrew Norton & Inka Achté, andy@rainafilms.com, Helsinki

Presscontact: Eliott AG, Claudia Wintsch, claudia.wintsch@elliott.ch, +41 79 653 24 52

Theatr. Distributor Switzerland: Vinca Film, Nina Kovacs, info@vincafilm.ch, +41 43 444 48 21

Organisation Locarno: Stephanie Constantin, constantin@mirafilm.ch, +41 78 217 14 94



























# Trailer <a href="https://vimeo.com/1063303482">https://vimeo.com/1063303482</a>



Gerda Steiner in her permaculture garden

Current Premiere Status International Premiere and all continental/national premieres open

#### **Awards and Nominations**

Alexis Victor Thalberg Award for Directing&Sound, Cinematography and Music, 2025 DOK.fest München, DOK.talent Award 2022, Filmpitch (Winner, award in development)

#### **Starring**

Florianne Koechlin - Author and Biologist
Prof. Dr. Consuelo De Moraes - Head of Biocommunication Group, ETH Zurich
Dr. Emanuel Devers - Senior Scientist Biocommunication Group, ETH Zurich
Gerda Steiner, Jörg Lenzlinger - Artist duo Steiner & Lenzlinger, Switzerland

#### also starring

Prof. Dr. Patrick Grof-Tisza - Research Scientist, Institute of Biology, University of Neuchâtel Prof. Dr. Gabriele Berg - Head of Department Microbiome Biotechnology, ATB Leibniz Dr. Ahmed Abdelfattah - Head of Microbiome-Management, ATB Leibniz

# **CREDITS - HEADS OF DEPARTMENT**

Producers Sonja Kilbertus, Hercli Bundi
Director of Photography Pascal Kohler
Editing Manuel Troxler in collaboration with Myriam Flury
Music Pablo Jókay Location Sound Antshi von Moos, Kathleen Moser
Sound Design Roland Widmer Colorist Patrischa Freuler Mixing Martin Scheuter
(full credits at the end)

#### **Technical Specs**

2K | 1.85:1 | 5.1 Surround | Shot in 4K

#### Languages

Original: English, Swiss German, German

Subtitles: DE, EN, FR, bilingual DE-FR, IT (planned)) / Voice-over: French

Categories

First Feature | Environment | Art

# **Synopsis**

Combining science, biology, and art, this film immerses viewers in the hidden world of plant communication — where tomato plants interpret bumblebee bites, sage whispers in regional dialects, and microbes interact through complex chemical signals.

At the heart of Zurich, Prof. Dr. Consuelo De Moraes and her team work tirelessly to unravel a century-old mystery: What makes plants bloom? While others sleep, De Moraes works through the night, a habit that gave her a crucial breakthrough: she was the first to prove that plants don't just communicate in sunlight; they produce volatile scents in the dark too.

Meanwhile, writer Florianne Koechlin journeys through Europe's most advanced labs, uncovering the constant exchange between plants, fungi, insects and microbes—interactions that shatter the myth of plants as mere photosynthetic machines.

Artist duo Gerda Steiner and Jörg Lenzlinger dissolve the boundary between humans and nature, creating surreal installations from their living garden, where roots intertwine with wires and plastic flowers. Their work forms a poetic counterpoint to science as it reveals intuitive connections and reimagines natural cycles.

United by their passion for the plant world, the protagonists illuminate the complex interactions between plants, insects and humans. As groundbreaking discoveries emerge from dissected leaves, the damage behavior of bumblebees, and the extracted scents of tomato plants, the film raises urgent questions: Once the underlying processes of plants are uncovered, how will these findings be applied by humans?

**Rezension Ruth Baettig - Selection Committee Semaine de la Critique Locarno** "Flying Scents – of Plants and People calls for a change of thinking and invites the audience to a new perspective on life and its fragility – towards a coexistence of humans, plants, and animals. The film opens our minds to sensory thinking where science and art meet – sensually, poetically, and literally getting under our skin."



# **The Participants**

# Prof. Dr. Consuelo De Moraes - Head of Biocommunication Group, ETH Zurich



De Moraes on Alp Calanda, observing bumblebees during an outdoor experiment

Prof. Dr. Consuelo De Moraes is one of the world's foremost experts in the field of plant-derived volatile compounds. Since 2013, she has led the <u>Biocommunication Group at ETH Zurich</u>, where she also teaches as a lecturer in Biocommunication and Ecology. Her research focuses on the chemical aspects of interactions between plants, insects, and other organisms, with a particular emphasis on the ecological role of plant volatile compounds.

## **Achievements**

When De Moraes began her work as a researcher, the prevailing assumption was that plants responded to insect damage with a general scent reaction. However, early in her career, she demonstrated that plants communicate with each other—both within and across species—using a wide variety of specific volatile compounds. Many of her findings have shed entirely new light on plants, revealing a previously undocumented level of complexity in their ability to communicate. Today, her experiments have been extensively reviewed and validated, giving rise to an entire field of research. Her contributions have been recognized with numerous awards and honors, and her work has been published in leading scientific journals such as *Nature and Science*.



Collecting volatile scents at ETH Zurich



Working at night in the Biocommunication lab

## The Bee Damage Project

One of the ongoing research projects featured in the film is the *Bee Damage Project*. The first scientific paper on this topic was published in *Science* in 2020, and since then, it has garnered <u>significant media attention</u>. The Biocommunication Research Lab observed that bumblebees bite holes in plants, causing them to bloom up to a month earlier. Research teams around the world are exploring similar phenomena in parallel.

"With insects, we know that the noses are their antennae. We know what receptors are there, we know how these receptors perceive these volatiles, how they process them, and how they combine all this information. In plants, we know that they perceive that but we don't know exactly how. That's the million-dollar question."



Bumblebees interacting with styrofoam balls, a behavior now recognized as play in insect research

# Florianne Koechlin - Author and Biologist



Florianne Koechlin explains mycorrhizal networks in forest soil





The trained biologist is the author of several nonfiction books, including <u>Verwoben & verflochten</u> (Entwined & Interwoven – What Unites Microbes, Animals, and Plants, and How They Sustain Us) (Lenos Verlag, 2025), available in every Swiss bookstore. In this book, she discusses the latest discoveries in plant communication, explores their intricate relationship networks, and reflects on the future of agriculture in conversations with scientists, farmers, and philosophers. She has a gift for making complex scientific concepts accessible to a broad readership.

"At its core, my guiding thread is a plea against mechanistic worldviews. In science, plants are still treated like objects—passive beings where water goes in at the bottom and  $CO_2$  at the top. It's a major step to acknowledge that a plant is more than that: it communicates, forms networks, and is a living subject. It's hard to grasp—but plants act autonomously."

Florianne Koechlin explains: "When a tomato plant is attacked by caterpillars, it starts to defend itself by producing warning substances. By doing so, it warns its own leaves and the neighbouring plants: Watch out, danger is approaching! Then it emits a scent to attract beneficial insects. The fascinating thing is that the plant can not only identify that there is danger, but *who* is causing the threat. It knows from the saliva. When the caterpillar chews a hole, saliva drips into the leaf. The plant can interpret the saliva and it then produces a mix of scents to attract the beneficial insects."



Florianne Koechlin visits the lab of the Institute of Biology, University of Neuchâtel



"I think plants are very sophisticated. We think that maybe they have 20 senses, compared to the five of primates. They're able to sense the world around them and respond to it." Prof. Patrick Grof-Tisza, Research Scientist, Institute of Biology, University of Neuchâtel

Prof. Patrick Grof-Tisza discussing with Florianne Koechlin

Florianne Koechlin not only explains but also attempts to point out the problems of industrial agriculture:

"In monocultures, plants can't form mycorrhizal networks, attract beneficial insects, or warn each other of dangers. We're stripping plants of a vast potential they naturally possess."

"One thing is clear: Continuing as before is not an option. Despite significant scientific advances and many practical improvements, this has been more or less a lost decade. Biodiversity is collapsing, fertile soil is eroding everywhere, and we're facing a serious food crisis."[1]

Switzerland is the only country in the world to have enshrined the "dignity of living beings" in its constitution. This principle was further specified in a 2002 law regulating genetic modifications. As a former member of the Swiss Ethics Committee, Florianne Koechlin contributed to the brochure "The dignity of living beings with regard to plants. Moral consideration of plants for their own sake." In 2008, this work was awarded the IG Nobel Prize, which honors scientific achievements that "first make people laugh, then make them think." "Perhaps now, ten years later, the time for laughter is over," remarks Florianne Koechlin.



"It's a continuous battle of communication." Dr. Ahmed Abdelfattah (Head of Microbiom Management, ATB Leibniz) "A battle and symbiosis." (Forianne Köchlin, Author and Biologist) together with Prof. Dr. Gabriele Berg (Head of Department Microbiome Biotechnology, ATB Leibniz)

Ul Von Böden die klingen und Pflanzen die tanzen [Of Soils That Sing and Plants That Dance] Florianne Koechlin, 2021, S. 121

<sup>[2]</sup> Das Lauschen im Walde [Listening in the Forest], Samanta Siegfried, 2018

# Gerda Steiner, Jörg Lenzlinger - Artist duo



Gerda Steiner at her permaculture garden



**Gerda Steiner and Jörg Lenzlinger** have been creating expansive, immersive installations in museums worldwide for over two decades. The artist duo crafts intricate artworks from dried plant materials such as roots, branches, leaves, and seeds — interwoven with found objects, electronic waste, animal figurines, and sculptures made of artificial fertilizer. The plants appear to grow into and around these elements, blurring the boundaries between nature and human intervention. At the heart of it all? The visitors themselves, who become part of the living installation.

Beyond their art, they've transformed the green spaces around their home into a thriving permaculture garden, where wild perennials, vegetable beds, fruit trees, flowers, chickens, and bees coexist in harmony. "We live in a community with plants. They are our siblings. We cannot survive without them—a truth I think many people have forgotten."

Gerda Steiner continues: "When our food is treated like a disposable item nothing will change in the way we treat plants. But that doesn't only apply to plants. It affects animals and humans too. [...] People don't show much care for each other anymore. But we need to show more care. Urgently! We are plants too."





Through their works, they challenge the relationship between humans and nature. In the film, Jörg Lenzlinger reflects: "For a long time, our work has been about showing that the boundary between artificiality and 'nature' is total nonsense. Because that implies that 'nature' is in the forest and humans are separate, that they are totally different things. But I'm sure that's not the case. Because we are full of life and can't escape what we call 'nature'."





When asked why they avoid being photographed, Steiner replies: "If you go to a newsstand and look at the display, all you see are faces. It seems as though humans are the most important thing of all. We actually find these heads quite superfluous." Lenzlinger adds: "Everything is always thought of from a human perspective."[3] When filmmaker Antshi von Moos proposed documenting them, Steiner remarked: "For ten years, we've always said no. Now we thought we might as well see what happens if we say yes."

# Dr. Emanuel Devers - Senior Scientist Biocommunication Research Group, bee damage project, ETH Zurich











**Emanuel Devers** is a Senior Scientist in the Biocommunication Research Laboratory at ETH Zurich, led by Consuelo De Moraes. There, he contributes to the *Bumblebee Damage Project*. Through his experiments, he confirmed a key discovery: bumblebees deliberately damage leaves to induce plants to flower significantly earlier—in some cases, by up to three weeks.

His research reveals just how intricate and highly specific the interactions between insects and plants truly are. Everything is in a constant state of exchange—both chemically and physically.

In his perspective on plants, Devers shares views similar to those of Florianne Koechlin. He states:

"Although plants aren't able to speak, and they can't scream or see either, they have a conscious awareness of their environment. They are living organisms. That's why I believe they should be shown as much respect as any other living being."



Collecting volatile organic compounds (VOCs) emitted by plants at ETH Zurich's Biocommunication Lab

On his research, Devers remarks: "Research on plant flowering goes back many centuries. We've been seeking the holy grail of plant research, that one specific substance that makes plants blossom immediately. The so-called "florigen". It's a high-risk but high-reward project. It's difficult to achieve useful results because it's such a complex subject. But when we do discover something, it will have global impact. There are more than two or three other universities working in this field."

## **Directors' Statements**

I believe it's time to fundamentally rethink our relationship with plants.

Human dominance over plants and animals is outdated. In many structures of Western society, such as industry and politics, an old perception still prevails in which plants are devalued and dominated. Yet scientific research paints a different picture: within the plant kingdom, diverse and intelligent systems coexist in constant and meaningful communication.

With Flying Scents - Of Plants and People, I want to reframe how we perceive plants. The film brings together diverse perspectives from science and art and invites reflection: How do we want to shape our coexistence with plants on this one shared planet? If environmental and climate measures are to be more than symbolic gestures, we need a genuine paradigm shift. I believe this begins with how we perceive plants – and must lead to a deeper transformation in how we grow, produce, share, eat, and live.

I have consciously chosen female protagonists whose perspectives open up different ways of relating to plants. Despite their different professional backgrounds, they all share a deep fascination for plants as communicative, autonomous living beings. Scientific research makes visible what otherwise would remain hidden, as we can't see what plants really do with our eyes. That is why I chose Florianne Koechlin as participant, because she bases her broad societal and political questions on this research, that she tries to explain to a non expert audience. The artist duo, on the other hand, has already adopted a new perspective through the way they live with plants in their everyday life. I loved their approach as well, as it is not theoretical but practiced and based on our five senses - Gerda Steiner also points out that she "smells" the night activity of plants.

I wanted to add a visual and acoustic layer where the plants could speak for themselves. We worked with macro lenses at night, using cranes and high-sensitive microphones. These sounds became the inspiration and starting point of the score, reflecting the unseen world of plants: their vibrations, signals, tensions, and constant communication with their surroundings. The result is a subtle, immersive soundscape — an acoustic extension of the film's central message: that plants are living beings.

By bringing together these four perspectives, I try to transmit, that the question is not whether we need to change our relationship with plants, but how.

# **Biographies**

## Writer and Director

Antshi von Moos was born 1986 in Steinhausen, Switzerland. In 2009 she graduated with a Bachelor in video from Lucerne School of Design, Film and Art in Switzerland. She works as an independent filmmaker since 2009. BROTHER, MOVE ON (2018) was showcased at festivals such as the Encounters Short Film and Animation Festival and the Odense International Film Festival, receiving an honorable mention for Best Documentary Short at the Palm Springs International ShortFest. In 2025, she completed a Master's degree in Directing Documentary at Zurich University of the Arts, with her graduation film *Flying Scents - Of Plants and People*.



#### **Filmography**

2025 – Flying Scents - of Plants and People Documentary, 66 min, Writer and Director Locarno Film Festival, Semaine de la Critique, CH

### 2018 – Brother Move On, Short Documentary, 9 min, Writer, Director, Sound, Editing

Palm Springs Int. ShortFest USA, Encounters Film Festival UK Odense Int. Film Festival DK, Solothurner Filmtage CH, Brooklyn Film Festival USA

# 2009 – Herr der Lage, Short Film, 7 min, Writer, Director

Alternative Film/Video Festival SRB, European Media Art Festival DE

#### **Awards**

2025 – Alexis Victor Thalberg Documentary Film Award for Director & Sound Flying Scents

2022 - Dok.talent Award, DOK.fest Munich, Winner Filmpitch for Flying Scents

**2020** – Jury Award, Best Film, New Delhi Int. Film Festival, India for Brother, Move On

2019 – Special Mention, Best Documentary Short, Palm Springs Int. SF, USA for Brother, Move On

2019 - Jury Award, Best Swiss Made, Shnit Shortfilmfestival, CH, for Brother, Move On

2019 - Production Grant, Canton of Zug

2013 - Production Grant, Canton of Zug

2012 - Six-month Artist Residency, Indian Atelier Grant, (SKK)

## **Producer**

Sonja Kilbertus produced FLYING SCENTS - OF PLANTS AND PEOPLE together with Hercli Bundi. She founded Evolution Film (2012–2024) and currently works under Mira Film (Zurich) and Einhorn Film (Bern). A graduate of Vienna's Film Academy, she has produced award-winning documentary films, including OSTROV-LOST ISLAND (Swiss Film Award, 2022) or AMONG US WOMEN (SIGNIS jury price FIDBA IFF 2022). She was nominated for the VFF Production Award, won the BR-Telepool treatment award and served on the Aargau Cultural Fund's film jury (2021–2024). Currently, she lectures at HSLU Lucerne, coaches in Nonviolent Communication and is a member of ARF/FDS, the European Film Academy and SWAN. She is convinced to empower female filmmakers and perspectives in the film industry.



## Filmography (selection)

2021 OSTROV – LOST ISLAND, 92 min, von Svetlana Rodina und Laurent Stoop, DokLab. Premiere: Visions du Réel 2021; winner hotdocsbest international feature 2021, Guanajuato Filmfestival Int. Feature Documentary Award

2021 AMONG US WOMEN Dokumentarfilm 93 min. Regie Sarah Noa Bozenhardt, Co-Regie Daniel Abate Tilahun; Produzentin für die Evolution Film in München, in Koproduktion mit ZDF, Efuye Gela Films Addis Abeba, in Kooperation mit Mira Film. Weltpremiere DOK Leipzig, 40 Festivals und 7 Preise

2019 BODY OF TRUTH, 96 min, dir: Evelyn Schels, (Swiss coproducer) DokLab, Indifilm

2019 LAS HERMANAS DE ROCINANTE, 76 min, dir: Alexandra Kaufmann, Premiere DOK.fest Munich int. competition, audience award at Festival dei Popoli 2019, RSI, ZDF/Arte

## Mira Film

Mira Film was founded in 2002 by Vadim Jendreyko and Hercli Bundi. Alongside Vadim Jendreyko, Susanne Guggenberger has been a core member of the producing team since 2012.

Mira Film creates bold, thought-provoking documentaries that combine artistic ambition with a strong personal vision, tackling pressing social, political, and cultural issues. Through co-productions with Belgium, Chile, China, Germany, France, Georgia, Canada, the Netherlands, Austria, Poland, Portugal, and the USA, the company has produced award-winning films that have captivated global audiences in cinemas, on television, and at major festivals. Filmography

## **FULL CREDITS**

Additional Cinematography Lukas Gut Additional Location Sound Anuk Schmelcher / Julia Furer / Dejan Barac /Tim Egner Editing Mentor Myriam Flury Editing Postproduction Assistant Lisa Jödicke Dialog Editing Joel Gilardini / Adrian Würsch/ Leonardo Guerra Titel and Credits Grafics Modulator Subtitles Babelfisch Translations, Henrike Bauer, Annika Vieweg, Alex Zuckrow, Aya Kouamé Trailer Trinipix, Aron Nick Impact Campaign Gudula Meinzolt Accounting Fabienne Spiller, Michael Lang, Exalt Production Assistants Yangdon Tenzin Nesar, Eline Kersten, Anaïs Steiner, Katerina Vesela Associate Producers Vadim Jendreyko, Susanne Guggenberger Festival Distribution Raina Films

#### ZHdK:

Directing Mentor Sabine Gisiger
Line Producer Filippo Bonacci
Content Producer Maya Galluzzi
Post production ZHdK Fabienne Koch, Norbert Kottmann
Head of Documentary Film Program Sabine Gisiger
Head of Masters of Arts in Film Sabine Boss

#### SRG:

Commissioning Editor SRF Urs Augstburger Commissioning Editor RTS Steven Artels SRG SSR National Coordination Sven Wälti

## Festival History:

Locarno International Filmfestival – <u>35ème Semaine de la critique</u> Locarno, Switzerland, 08.08.2025 - 15.08.2025 (Worldpremiere)

