



Swiss TPH



Colloque scientifique du projet TIGER
Wissenschaftliches Symposium des
TIGER Projekts

Jürg Utzinger, 13. November 2020

Herzlich Willkommen!

Planung und Durchführung eines Symposiums in Zeiten einer Pandemie...



Wissenschaftliches Symposium des TIGER Projekts

Punkte zum Mitnehmen

- **Grosses Interesse** am Thema Tigermücken und diesem Symposium
 - Über 150 Anmeldungen (trotz oder wegen Corona)
- Die Tigermücke kennt **keine Landesgrenzen**
 - Tri-nationale Zusammenarbeit ist wichtig, spannend und bereichernd
- Das Thema wird uns auch in **Zukunft** beschäftigen
 - Stichworte: Globalisierung, Klimawandel, etc.
- Zusammenarbeit zwischen Ländern und verschiedener «**Sektoren**»
 - Wissenschaft, Behörden und Bevölkerung
- **Bereitschaft bei den Behörden**, Überwachung und Kontrolle der Asiatischen Tigermücke weiter zu führen
 - Budgeterhöhung Basel-Stadt, Überwachung Basel-Landschaft, etc.)

Wie alles begann (6. Juni 2018)



Swiss TPH Strategie 2021-2024

Unsere drei strategischen Ziele und das TIGER Projekt



Exzellenz in der
Wissenschaft



Wissenschaft umsetzen
und Impact erzielen



Gegenseitiges Lernen für
nachhaltige Entwicklung

PLOS NEGLECTED TROPICAL DISEASES

RESEARCH ARTICLE

Surveillance of invasive *Aedes* mosquitoes along Swiss traffic axes reveals different dispersal modes for *Aedes albopictus* and *Ae. japonicus*

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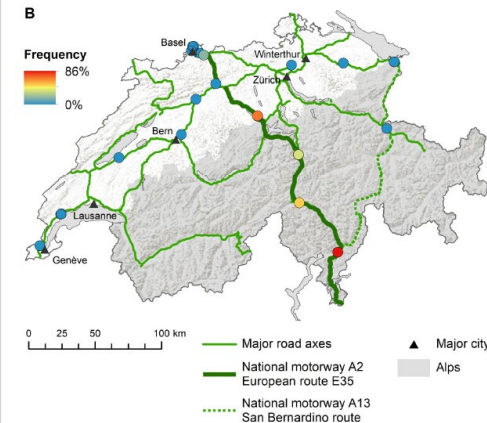
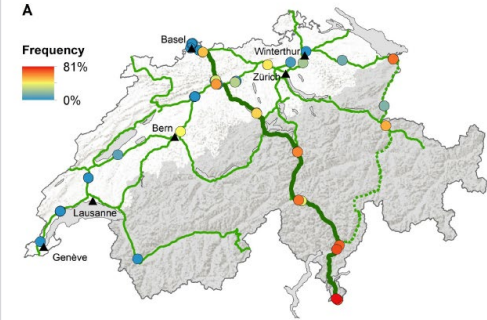


Abstract

Over the past three decades, Europe has witnessed an increased spread of invasive aedine mosquito species, most notably *Aedes albopictus*, a key vector of chikungunya, dengue and Zika virus. While its distribution in southern Europe is well documented, its dispersal modes across the Alps remain poorly investigated, preventing a projection of future scenarios beyond its current range in order to target mosquito control. To monitor the presence and frequency of invasive *Aedes* mosquitoes across and beyond the Alps we set oviposition and BG-Sentinel traps at potential points of entry with a focus on motorway service areas across Switzerland. We placed the traps from June to September and controlled them for the presence of mosquitoes every other week between 2013 and 2018. Over the six years of surveillance we identified three invasive *Aedes* species, including *Ae. albopictus*, *Ae. japonicus* and *Ae. koreicus*. Based on the frequency and distribution patterns we conclude that *Ae. albopictus* and *Ae. koreicus* are being passively spread primarily along the European route E35 from Italy to Germany, crossing the Alps, while *Ae. japonicus* has been expanding its range from northern Switzerland across the country most likely through active dispersal.

Author summary

Because of global trade of used tyres and ornamental plants, invasive mosquitoes of the genus *Aedes* are spreading passively between continents. Within continents, adults are frequently travelling along roads as hitchhikers in motorised vehicles and may then colonise new areas. Because some *Aedes* mosquitoes are competent to transmit diseases they threaten public and veterinary health. In Europe, the Asian tiger mosquito, *Aedes albopictus* is of particular concern as it is a vector of chikungunya, dengue and Zika virus. While its distribution in southern Europe is well documented, its dispersal modes across the Alps remain poorly investigated, preventing a projection of future scenarios beyond its current range in order to target mosquito control. To monitor the introduction of invasive



Wissenschaft umsetzen und Impact erzielen



Gegenseitiges Lernen für nachhaltige Entwicklung



Gute Wissenschaft mit viel Leidenschaft!



2021: Swiss TPH Headquarters move to Allschwil

Projekt "Belo Horizonte", © Kunz and Mösch Architects



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Have a great symposium!

Jürg Utzinger