



Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

# **CURRICULUM VITAE**

Surname:	Andres
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# I. Education:

Institution:	Swiss Federal Institute of Technology (ETH Zurich)	
Date:	04. 2015 – 03. 2018	
Degree:	Dr. sc. ETH (Agro-Ecosystem Sciences)	
Thesis title:	Transdisciplinary Systems Research to Reduce the Cocoa Swollen Shoot Virus Disease in Ghana	

## 2. Language skills (5 is the highest):

Language	Level	Passive	Spoken	Written
German	Mother tongue	Mother tongue	Mother tongue	Mother tongue
English	5	5	5	5
French	5	5	5	4
Spanish	4	4	4	3

# 3. Professional experience:

Date: from (month/year) to (month/year)	Since 05. 2018 – present
Location	Zürich, Switzerland
Company / Organisation	Swiss Federal Institute of Technology, Zurich (ETH)
Present position	Post-Doctoral Research Fellow
Job Description	Research sustainable production systems in the tropics
Date: from (month/year) to (month/year)	Since 03. 2018 – present
Location	Zürich, Switzerland / Busua, Ghana
Company / Organisation	UP Development / OPC (Obrobibini Peace Complex)
Present position	President / CEO
Job Description	Founder and President/CEO of two NGOs in sustainable development
Date: from (month/year) to (month/year)	09. 2011 – 12.2019
Location	Frick, Switzerland
Company / Organisation	Research Institute of Organic Agriculture (FiBL)
Present position	Senior Research Scientist & Coordinator
Job Description	Research sustainable production systems in the tropics

# 4. Key qualifications:

Tropical agronomy, esp. agroforestry with perennial crops (cocoa, oil palm and fruits); organic agriculture (agroforestry, vegetables, beekeeping and mushrooms); organic soil fertility management; data collection, management, presentation and interpretation (quality monitoring, statistics (R)); participatory and transdisciplinary research; sustainable building; project management, communication and coordination; networking and fundraising.

### 5. Current project and partners

Country	Date: from (month/year) to (month/year)	Name and brief description of the project	Partners
Ghana	03/2023 - 02/2026	Dynamic cocoa agroforestry in action in Ghana (DAF)	ETH Zurich (lead), University of Ghana (Accra), OPC, Kwame Nkrumah University of Science and Technology (KNUST), Yayra Glover Limited (YGL) and HALBA

6. Specific experience in low- and middle-income countries:

Country	Date: from (month/year) to (month/year)	Name and brief description of the project
Ghana	2023 - date 2018 - 2022 2015 - 2017 06. 2014	Several business trips for <i>project implementation</i> "DAF" (Research Scientist) Several business trips for <i>project implementation</i> "DAFS" (Post-Doc) Several business trips for <i>project implementation</i> "TransdisCSSVD" (PhD) Business trip for <i>project development</i> TransdisCSSVD (PhD)
Bolivia	07. 2014 - 08. 2014 11. 2012 - 12. 2012 04. 2012 - 05. 2012	Scientific support in the FiBL project "Long-term systems comparison in the tropics" (remote area). Crop: cocoa
India	03. 2013	Coordination of the FiBL project "Long-term systems comparison in the tropics" (small village). Crop: cotton
Côte d'Ivoire (Ivory Coast)	2018 07. 2011 – 12. 2011	Business trip for <i>project implementation</i> "DAFS" (Post-Doc) Multiply awarded <i>Master thesis</i> at Bringakro field station (small village) of CSRS, lab work at INP, Yamoussoukro. <b>Title</b> : "Fertilization of <i>D. rotundata</i> with poultry manure: effect on nutrient dynamics and nutrient use efficiencies". Crop: yam
Sri Lanka	10. 2008 – 01. 2009	Certified <i>professional internship</i> at CIC Pelwehera and University of Peradeniya (non-compulsory part of M.Sc. studies at ETH). <b>Title</b> : "Gaining applied research experience in tropical agriculture in Sri Lanka". Crops: maize, tropical vegetables

## 7. Selected publications:

#### **Peer-reviewed articles**

Lembrechts, J. J., et al. (2021) Global maps of soil temperature. Global Change Biology. doi: 10.1111/gcb.16060

Niether, W., Jacobi, J., Blaser, W.J., Andres, C., Armengot, L. (2020) Cocoa agroforestry systems versus monocultures: a multi-dimensional meta-analysis. *Environmental Research Letters* 15: 104085. doi: 10.1088/1748-9326/abb053

Cicek, H., Bhullar, G.S., Mandloi, L.S., Andres, C., Riar, A.S. (2020) Partial Acidulation of Rock Phosphate for Increased Productivity in Organic and Smallholder Farming. Sustainability 12: 607. doi: 10.3390/su12020607

Andres, C., Hoerler, R., Home, R., Jörin, J., Dzahini-Obiatey, H.K., Ameyaw, G.A., Domfeh, O.K., Blaser, W.J., Gattinger, A., Offei, S.K., Six, J. (2018) Social network to inform and prevent the spread of cocoa swollen shoot virus disease in Ghana. Agronomy for Sustainable Development 38: 53. doi: 10.1007/s13593-018-0538-y

Niether, W., Armengot, L., Andres, C., Schneider, M., Gerold, G. (2018) Shade trees and tree pruning alter throughfall and microclimate in cocoa (*Theobroma cacao* L.) production systems. Annals of Forest Science 75: 38. doi: 10.1007/s13595-018-0723-9

Andres, C., Blaser, W.J., Dzahini-Obiatey, H.K., Ameyaw, G.A., Domfeh, O.K., Awiagah, M.A., Gattinger, A., Schneider, M., Offei, S.K., Six, J. (2018) Agroforestry systems can mitigate the severity of cocoa swollen shoot virus disease. *Agriculture, Ecosystems and Environment* 252:83-92. doi: 10.1016/j.agee.2017.09.031

Niggli, U., Andres, C.\*, Willer, H., Baker, B.P. (2017) Building a global platform for organic farming research, innovation and technology transfer. Organic Agriculture. doi: 10.1007/s13165-017-0191-9

Andres, C., Gattinger, A., Dzahini-Obiatey, H.K., Blaser, W.J., Offei, S.K., Six, J. (2017) Combatting Cocoa Swollen Shoot Virus Disease: What do we know? Crop Protection, 98, 76-84.

Gramlich, A., Tandy, S., Andres, C., Chincheros, J., Armengot, L., Schneider, M., Schulin, R. (2017) Cadmium Uptake by Cocoa Trees in Agroforestry and Monoculture Systems under Conventional and Organic Management. Science of the Total Environment 580, 677 – 686.

Armengot, L., Barbieri, P., Andres, C., Milz, J., Schneider, M. (2016) Cacao agroforestry systems have higher return on labor compared to full-sun monocultures. Agronomy for Sustainable Development 36: 70. doi:10.1007/s13593-016-0406-6

Schneider, M., Andres, C.\*, Trujillo, G., Alcon, F., Amurrio, P., Perez, E, Weibel, F., Milz, J. (2016) Cocoa and total system yields of organic and conventional agroforestry vs. monoculture systems in a long-term field trial in Bolivia. *Experimental Agriculture* 53, 351-374. doi: 10.1017/S0014479716000417.

Andres, C., Bhullar, G.S.\* (2016) Sustainable Intensification of Tropical Agro-Ecosystems: Need and Potentials. Frontiers in Environmental Science 4: 5. doi: 10.3389/fenvs.2016.00005

Jacobi, J., Andres, C., Schneider, M., Pillco, M., Calizaya, P., Rist, S. (2014) Carbon stocks, tree diversity, and the role of organic certification in different cocoa production systems in Alto Beni, Bolivia. Agroforestry Systems 88: 1117. doi: 10.1007/s10457-013-9643-8

Forster, D., Andres, C.\*, Verma, R., Zundel, C., Messmer, M.M., Mäder, P. (2013) Yield and Economic Performance of Organic and Conventional Cotton-Based Farming Systems – Results from a Field Trial in India. *PLoS ONE* 8(12): e81039, doi: 10.1371/journal.pone.0081039.

## Books

Rahmann, G., Andres, C., Yadav, A.K., Ardakani, M.R., Babalad, H.B., Devakumar, N., Goel, S.L., Olowe, V., Ravisankar, N., Saini, J.P., Soto, G., Willer, H. (Eds.) (2017) Innovative Research for Organic 3.0 - Proceedings of the Scientific Track. Volume 1. Johann Heinrich von Thünen-Institut, Braunschweig, I, Thünen report, Nr. 54, S. I-511. Proceedings zu: Organic World Congress 2017, Delhi, India, 9-11 November 2017.

Rahmann, G., Andres, C., Yadav, A.K., Ardakani, M.R., Babalad, H.B., Devakumar, N., Goel, S.L., Olowe, V., Ravisankar, N., Saini, J.P., Soto, G. Willer, H. (Eds.) (2017) Innovative Research for Organic 3.0 - Proceedings of the Scientific Track . Volume 2. Johann Heinrich von Thünen-Institut, Braunschweig, 2, Thünen report, Nr. 54, S. 512-808. Proceedings zu: Organic World Congress 2017, Delhi, India, 9-11 November 2017.

## **Book chapters**

Andres, C.\*, AdeOluwa, O.O., Bhullar, G.S. (2017), Yam (*Dioscorea* spp.). In: Thomas, B., Murray, B. G. and Murphy, D. J. (Eds.), Encyclopedia of Applied Plant Sciences, Vol 3, Waltham, MA: Academic Press, 2017, pp. 435–441.

Andres, C.\*, Comoé, H., Beerli, A., Schneider, M., Rist, S., Jacobi, J. (2016) Cocoa in monoculture and dynamic agroforestry. In: Lichtfouse, E. (Ed.) Sustainable Agriculture Reviews 19, 121-153, Springer International Publishing, Switzerland.

Andres, C.\*, Mandloi, L.S., Bhullar, G.S. (2015) Sustaining the supply of organic White Gold: The case of SysCom innovation platforms in India. In: Dror, I., Cadilhon, J.-J., Schut, M., Misiko. M., Maheshwari, S. (Eds.) Innovation Platforms for Agricultural Development: Evaluating the mature innovation platforms landscape. Routledge, London, UK.

## Strategic documents

Niggli, U., Andres, C.\*, Willer, H., Baker, B.P. (2017) A Global Vision and Strategy for Organic Farming Research – Condensed version. Version February, 2017, TIPI – Technology Innovation Platform of IFOAM – Organics International, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland

\*corresponding lead author

## 8. Selected Grants and Awards:

**Solution-oriented Research for Development (SOR4D) programme** (2022, amount awarded: 793'562 CHF), Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF), Switzerland. 3-year grant for the project "Dynamic cocoa agroforestry in action in Ghana".

ETH4D Research to Action Grant (2021, amount awarded: 5'000 CHF), ETH for Development (ETH4D), ETH Zurich, Switzerland. 8 months grant for the project "Discussing dynamic agroforestry (DAF) as a regenerative way to produce cocoa in Ghana with a diverse group of stakeholders".

**D-USYS CO2** emission compensation fund (2021, amount awarded: 10'000 CHF), Environmental Physics Group, ETH Zurich, Switzerland. 12 months grant for the project "Ghanaian cocoa production in dynamic agroforestry systems (DAFS) for enhanced forest tree planting".

World Food System Grants (2018, amount awarded: 270'000 CHF), World Food System Center, ETH Zurich, Switzerland. 24 months grant for the project "Dynamic agroforestry systems for sustainable intensification of cocoa production in West Africa (DAFS)".

Josef G. Knoll European Science Award (2018, amount awarded: 10'000 Euro), Stiftung fiat panis, Ulm, Germany. Oral presentation at award ceremony in the frame of Tropentag 2018: "Global food security and food safety: The role of universities", September 17-19, Gent, Belgium.

Visiting Research Fellowship for Early Postdoctoral Researchers (2018, amount granted: 60'000 CHF), Swiss–African research cooperation SARECO, Switzerland. 15 months grant for the project "Dynamic agroforestry systems (DAFS) to reduce greenhouse gasses and restore environmental health in West African cocoa landscapes".

Swiss – African kick-starting projects (2016, amount granted: 10'000 CHF), University of Basel, Vice Rectorate for Education, Switzerland. Two-year kick-starting grant for the project "Transdisciplinary systems research to reduce cocoa swollen shoot virus in Ghana (TransdisCSSVD)".

**E4D Scholarship** (2014, amount granted: 175'000 CHF), programme "Engineering for Development", ETH Global / Sawiris Foundation for Social Development, Zurich, Switzerland. PhD scholarship granted for three years for the project "Transdisciplinary systems research to develop a novel holistic concept for reducing the spread and impact of CSSVD in West Africa (TransdisCSSVD)".

Hans H. Ruthenberg Award for Graduates (2013, amount awarded: 2'500 Euro), Stiftung fiat panis, Ulm, Germany. Oral presentation at award ceremony in the frame of Tropentag 2013: "Agricultural development within the rural-urban continuum", September 17-19, Stuttgart-Hohenheim, Germany. More info.

SFIAR Master Thesis Award (2013, amount awarded: 1'000 CHF), Swiss Forum for International Agricultural Research, Zollikofen, Switzerland. More info. SFIAR Interview No.17.

**Poster award** (2011, amount awarded: 100 CHF), Zurich-Basel Plant Science Center (PSC), PSC Symposium: "Understanding Plant Phenotypes", November 4, ETH Zurich, Switzerland. Title of awarded Poster: "Fertilization of *Dioscorea rotundata* with poultry manure: effects on nutrient dynamics and nutrient use efficiencies".

Master thesis grant (2009, amount granted: 15'000 CHF), Fondation du Centre Suisse de Recherches Scientifiques en Côte d'Ivoire, Neuchâtel, Suisse. Scholarship granted for the implementation of a field trial for the project "Effet d'apport de fientes de poulet sur la productivité et l'efficacité d'utilisation des éléments nutritifs de *Dioscorea rotundata* dans le centre de la Côte d'Ivoire".

# 9. Personal interests:

Decades of practical experience with the subjects of gardening, cooking, healthy nutrition, sports and herbal medicine. Intensive practice of meditation, yoga and Ayurveda.

# 10. Personal references:

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