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Curriculum Vitae

Personal Details

Birthdate	:	6.8.1963
Place of birth	:	Bonn, Germany
Marital status	:	Married with Karola Turi, midwife
		Two children

Education

1995 - 1997	PhD Study Environmental Science, University of Kassel, Germany Main Topics : Agricultural Meteorology and Irrigation Management Accompanying Subjects : Plant Physiology and Soil Science
1993 - 1995	Postgraduate Study Environmental Science University of Kassel, Germany Main Topic : Limnology Accompanying Subjects : Waste Management and Eco-Chemistry
1988 - 1992	Study International Agriculture, University of Kassel, Germany Main Topic : Crop Production in the Tropics and Sub-Tropics Accompanying Subject : Resource Management
1985 - 1987	Agricultural Apprenticeship in Soest - Westfalia, Germany
	1. Year Teaching and Experimental Farm of the Agricultural Extension Service
	2. Year Farm of Ferdinand Korb

CV Summary

Interests

Plant ecophysiology, environmental physics, application of quantitative methods in the plant and environmental sciences, software engineering

Education

PhD Environmental Science (*Summa cum laude*) - University degrees in Environmental Science and International Agronomy - Agricultural Apprenticeship

Experience

Conducted field experiments in plant ecophysiology, environmental physics, agronomy, forest science and limnology.

Lecturing experience: Modelling Plant Systems, Quantitative Modelling (Mathematics/Statistics), Applied Mathematics, Agricultural Meteorology, Irrigation Science, Software engineering, System Analysis.

Extensive experience in international collaboration (Australia, Brazil, Israel, Kenya, Palestine, Tanzania, Turky, Russia, Denmark, England, France, Netherlands, Italy).

Participation in different committees of the Humboldt-University of Berlin. Member of an elected commission for restructuring its agricultural faculty.

Worked in collaborative research projects on flux control in biological systems and optimizing plant production systems (SFB 137 and SFB 192 - Deutsche Forschungsgemeinschaft)

Has six years experience in practical farming under temperate and semi-arid climate conditions

Computer Skills

Current programming languages and modelling environments. E-learning

Own model developments

TCorn (1997) - Model for calculating actual transpiration from uniform field crops

JKEbal (= Java Kwongan Energy Balance - since 2005) - Model for calculating the energy balances of heterogeneous plant canopies (Initial version published in Physiologia Plantarum 127: 465–477). Validation studies were recently carried out in Australia and Israel (Eucalyptus wandoo und Pinus halipensis - Species-ritch heat canopy in Western-Australia - Goal: Farming system design using nature as a model).

JCropTranspiration (since 2005) - Java version of TCorn (see above) - Multi-layer extension

JSWEA (= Java Small Wetlands in East Africa - seit 2007) - Model under construction for characterizing human-environment interactions in small wetland systems in East-Africa

Curriculum Vitae

My interest in ecological, agricultural and biophysical research was initially risen by Prof. Michael Evenari from the former Department of Botany at the Hebrew University in Jerusalem. His research farm in the Negev desert is known as one of the centres of modern ecological research, particularly with respect to gas-exchange analytics and plant-water relations. It has attracted many researchers to study plant physiological ecology under field conditions. A collaborative research program on flux control in biological systems was established during the early eighties with the University of Bayreuth, in which I participated from 1984 till 1985 (Prof. Horn, Prof. E.D. Schulze, German Science Foundation SFB 137). I attended Prof. Evenari's seminars on a diverse range of scientific disciplines.

I have a six-year experience in practical agriculture. From 1981 till 1983 I worked in Israel in the irrigation team of Kibbutz Gevim and as a field worker in the citrus, avocado, and banana plantations of Moshav Liman. I started my agricultural apprenticeship in mid 1985 at the teaching and experimental farm of the German Agricultural Extension Service (Haus Duesse) and finished it two years later on a family farm. I got acquainted with most areas of practical field and animal farming during this time. Furthermore, I also gained experience in field crop research, animal breeding and meat quality testing.

Due to my rising interest in agricultural and environmental research I decided to study international agriculture at the former Faculty of International Agriculture at the University of Kassel in Germany. It offered a balanced combination of theoretical and applied studies, which I very much enjoyed between 1988 and 1992. I focussed on crop production in the Tropics and Subtropics, irrigation, and resource engineering. In 1990 I joined the Department of Environmental Physics

at the Research Organization of the Israel Ministry of Agriculture at Bet-Dagan for a five month practical (Dr. S. Moreshet, Prof. M. Fuchs, Dr. Y. Cohen). I wrote my first thesis on the determination of actual transpiration based on these studies. Prof. P. Wolff and Prof. S.C. Jutzi were my supervisors.

I collected my first teaching experience towards the end of my first study, when Prof. Wolff asked me to hold student tutorials about irrigation management at the Universities of Kassel and Goettingen. I also developed a lecture about the foundations of agricultural meteorology during this time, which I held as part of the lectures on agricultural physics.

I studied environmental science at the University of Kassel from 1993-1995. Due to my interest in ecophysiology and water resources, I emphasized on the ecology of streamwater sites. Other interests were in waste-management and environmental chemistry. I contributed to a number of seminars on diverse ecological issues during this second study, which I completed after one and a half years with a thesis on hydrological optics and microclimate at stream water sites. I increased my student budget as a caterpillar driver in a research project which dealt with eliminating groundwater seepage at an organic waste plant of the city of Kassel during this study.

In 1993, Prof. M. Fuchs (ARO, Israel), Prof. H. Bergamaschi (UFRGS, Porto Alegre, Brazil) and me planned a research on the improvement of agricultural system management based on meteorological data. It was funded with 499.000 Geman Marks by the German Ministry of Economic Cooperation. Prof. S.C. Jutzi was the leader of this project, which was marked by a very harmonic collaboration among all partners. Three master thesises and four PhD dissertations on the energy and water balances of field crops were based on the project‘s outcomes. Two postdoc students took part in the studies. In 1996, I participated in an international conference on evaporation and irrigation management, organized by the ASAE, ASA and IA, in which I presented some of the results of our project. I concluded my PhD study in 1997 with a *summa cum laude* degree. Prof. P. Wolff supervised my work and I am very thankful for his open and friendly support.

During my post-doc from 1998 till 2000 I worked in the coordination unit of a collaborative research team of the Faculties of Agronomy and Biology at the University of Kiel in North-Germany (Prof. Hanus, German Science Foundation SFB 192). It was my task to integrate the research of this 10 year project and to use the results for validating contemporary cropping systems models. In 1999, I participated in an international symposium on modeling cropping systems which took place at Lleida in Spain, where I presented our results. I used the new contacts I had made during this conference to plan a follow-up project which was funded with 468.000 German Marks by the German Environment Foundation .

In autumn 2000 I was invited to become a research assistant at the Faculty of Horticulture at the University of Hannover to strengthen the international contacts of its vegetable department. I was involved in administration and student teaching (calculus and statistics, production ecology and crop modeling).

I am currently a Juniorprofessor at the Humboldt-University of Berlin. Its Faculty of Agriculture and Horticulture established a chair of Modelling Plant Systems, which I am representing from teaching and research point of views since 2003. The juniorprofessorship program has been started as a pilot project by the German Ministry of Science to promote young scientist's earlier independance in research and teaching. My position was successfully reviewed in 2005. The review committee was composed of 11 internal and external members. It concluded that my current research adresses challenging issues which are at the forefront of agroecological research. I am one of the most popular lecturers at our faculty according to regular anonymous student rankings. I am currently involved in five research collaborations in the areas of plant modelling, agro-ecological systems analysis, plant stand microclimate, soil-physics, agro-forestry, precision-agriculture, and irrigation management.

Work Experience

2003 -

Juniorprofessor of Modelling Plant Systems. Institute of Crop Science, Agricultural and Horticultural Faculty, Humboldt-University of Berlin, Germany.

Teaching activities:

Development of four MSc courses: „Modelling Plant Systems", „Foundations of Quantitative Modelling", „Knowledge Management and Systems Analysis", and „Software Engineering" (Humboldt-University of Berlin 2003 - 2007). „Principles and Practices of Applied Modelling" and „Irrigation System Design" (Summer School Precision-Agriculture - Humboldt-University of Berlin 2005 - 2007). „Systems Analysis" (University of Hannover 2000 - 2002) Contributions to other courses: „Agricultural Meteorology" as part of a lecture on agricultural physics (University of Kassel 1992-1993). „Irrigation Management" as part of a post-graduate course on environmental engineering (University of Göttingen 1993).

Current research collaborations:

Development of a mathematical model for understanding and simulating energy balances and primary production of heterogeneous plant canopies (Collaborations with Prof. Hans Lambers [School of Plant Biology, University of Western-Australia, Perth] and Prof. Pedro Berliner [Jacob-Blaustein Institute for Desert Research, Sde Boqer, Israel)

Analysing soil heterogeneities at two farm locations and modelling their influences on wheat growth (Collaboration with Prof. Herbst (Dep. Precision Agriculture, Humboldt-University of Berlin), Prof. Sommer, Dr. Werner and Prof. Wenkel (Leibniz-Centre for Agricultural Landscape

Research (ZALF) Müncheberg)).

Agricultural use and vulnerability of small wetlands in East Africa (Collaboration with Prof. Becker (Dep. Plant Nutrition, University of Bonn), Prof. Bürkert (Dep. Tropical & Sub-Tropical Field Crop Research, University of Kassel), Prof. Schlecht (Dep. Animal Husbandry, Universities of Kassel and Göttingen), Prof. Oiyeke (National Museum of Kenya, Nairobi) and Prof. Misana (University of Dar-es-Salaam, Tansania)).

Optimizing chickpea phylloclimate for higher productivity under dryland farming conditions in Israel and the Palestine Authority (Prof. Abbo, Prof. Saranga (Hebrew-University of Jerusalem) and Prof. Khamis (Al-Quds University of Jerusalem)).

Stomatal responses of tomatoes and cucumbers to greenhouse climate pertubations using precision control technology (i.e. Phytomonitoring). (Collaboration with Prof. Schmidt (Dep. Horticultural Engineering, Humboldt-University of Berlin) and Prof. Topcu (Department of Agricultural Structures and Irrigation, Cukurova University, Adana, Turkey)).

Optimizing irrigation management of maize and cotton crops under mediterranean climate conditions (Collaboration with Prof. Topcu and Prof. Kanber,Irrigation and Agricultural Structures Department, Cukurova University, Adana, Turkey)

Closer scientific exchange during the last 5 years:

School of Plant Biology (Perth), CSIRO Plant Industry (Canberra), CSIRO Land and Water (Canberra), Research School of Biological Science, Australian National University (Canberra), Faculty of Engineering and Built Environment (University of Newcastle), School of Physical Sciences, University of Queensland (Brisbane), Agricultural Production Systems Unit (Toowoomba).

National Agricultural University Novosibirsk, Russia

National Museum of Kenya and ICRAF, Nairobi, Kenia

Department of Geography, University of Dar-es-Salaam, Tanzania

The Robert H. Smith Institute of Plant Sciences and Genetics in Agriculture, Faculty of Agricultural, Food, and Environmental Quality Sciences - Hebrew University of Jerusalem

Institute of Soil, Water and Environmental Sciences. The Volcani Center. The Agricultural Research Organisation of the Israel Ministry of Agriculture.

The Jacob Blaustein Institute for Desert Research, Ben Gurion University of Beer-Sheva, Sede Boqer, Israel.

Plant Science International, Wageningen, The Netherlands.

Irrigation and Agricultural Structures Department, Cukurova University, Adana, Turkey

Other experiences:

Chair of the Agro-Ecological Colloquia of the Berlin Universities (2003 - 2007).

Responsible for the scientific program of the symposium „Modelling Plant Systems: History and Future Challenges“ which honored the contributions of Prof. Dr. Dr. h. c. Eilhard Alfred Mitscherlich (1874 - 1956) to crop modelling - Humboldt-University of Berlin, 2-3 February 2006.

Active participation in a number of internationl symposia and workshops.

2000 - 2002

Assistant Professor, Faculty of Horticulture, University of Hannover - Supervision of graduate and post-graduate students. Responsible for computer installations and operating the computer network of the Institute of Vegetable Production. Administrative tasks. Tutorials on system theory, higher mathematics and applied statistics.

1998 - 2000

Research Assistent of Prof. Hanus at the Department of Agronomy, University of Kiel. Collaborative research 192 of the German Science Foundation „Optimizing plant production systems with respect to economic performances and ecological effects“. Faculties of Agriculture and Biology. Christian-Albrechts-University Kiel, Germany.

Member of the coordination unit. Integration of research results. Validating cropping systems models.

1994 - 1997

Brazilian-German-Israeli Research Project: Using agrometeorological network data for an improved arid and semi-arid agrosystem management. Financed by the German Ministry of Economic Cooperation (German Israeli Agricultural Research Agreement for the Benfit of Developing Countries).

Fund-raising, field research, practical project management and integrating research results of the participating groups as PhD student of the departments of Land- and Resource Management (Prof. Peter Wolff) and Field Crop Research (Prof. Samuel Jutzi) at the University of Kassel.

Collaborating with Prof. M. Fuchs, Dr. S. Moreshet, Prof. Dr. Y. Cohen, Dr. S. Cohen (Department of Environmental Physics, Institute of Soils and Water, Volcani Center, Israel Ministry of Agriculture, Bet-Dagan, Israel), Prof. H. Bergamaschi, Dr. L.M. Rosa (Department of Agricultural Meteorology, Universidade Federal do Rio Grande do Sul Porto Alegre, Brazil)

1995 - 1997

Several contributions to seminars on resource management and sustainability. Deputizing in university lectures as PhD-student of Prof. Wolff and Prof. Jutzi. Topics: Irrigation Management and Crop Physiology. University of Kassel.

1993 - 1995

Analysing hydro-optical properties of forest streams and vegetation microclimate at these sites. Limnological studies (Prof. Dr. M. Meijering, University of Kassel).

1992

Student tutor at the Department of Resource Engineering and Water Management at the Universities of Göttingen and Kassel.

Curriculum development for a university course on agricultural physics at the University of Kassel (Prof. Krause): Conceiving a course on agricultural meteorology.

1990

Trainee at the Department of Environmental Physics - Agricultural Research Organization of the Israel Ministry of Agriculture, The Volcani Center at Bet-Dagan (Dr. Moreshet, Prof. Fuchs, Prof. Cohen and Prof. Stanhill). Verification of an agrometeorologcial transpiration model under varying soil moisture supply conditions. Field studies on cotton.

1988

Practical at the Institute of Geo-Sciences - University of Bayreuth (Prof. R. Horn and Prof. E.D. Schulze). Assisting in an almond experiment. Analysing soil structure, tree growth parameters and stomatal responses to the environment (gas exchange, water potential, abscisic acid).

1985 - 1987

Agricultural Apprenticeship („Lehre“ in German)

Assisting in the educational and experimental programs of the Agricultural Extension Service of Westfalia at „Haus Düsse“ (1st year).

Apprentice at a dairy farm with 37 ha land (2nd year).

1984 - 1985

Trainee at the Avdat Farm of Prof. Evenari, Department of Botany, Hebrew University of Jerusalem, Israel.

Physiology of desert agriculture and eco-systems.

Literature: Lange, O. L und Schulze, E.D. (1989) In memorium - Michael Evenari (formerly Walter Schwarz) 1904-1989. Oecologia 81: 433-436.

1981 - 1983

Volunteer at Kibbutz Gevim and Moshav Liman. Irrigation, field and orchard plantations.

Gaining experience in practical farming under semi-arid climate conditions.

Publications

Peer reviewed articles and book contributions

Six papers are currently submitted to peer-reviewed journals and five in preparation (Results from my sabbatical in 2007).

Langensiepen M., Hanus H., Schoop P. and Gräsle W. (2008) Validating CERES-Wheat under North-German environmental conditions. Agricultural Systems (In Print)

Langensiepen, M., Burgess, S., Lambers, H., Mitchell, P. and Veneklass, E. (2006) A model for simulating the transpiration of *Eucalyptus salmonoploia* trees. Physiologia Plantarum 127: 465–477

Langensiepen M. (2005) Sofware development and water science. In: Encyclopedia of Water Science, Trimble S. (ed.) M. Dekker, New York (Online at dekker.com)

Langensiepen M. (2005) Scaling transpiration from leaves and canopies. In: Encyclopedia of Water Science, Trimble S. (ed.) M. Dekker, New York (Online at dekker.com)

Langensiepen M. (2005) Quantifying stomatal responses to the environment. In: Encyclopedia of Water Science, Trimble S. (ed.) M. Dekker, New York (Online at dekker.com)

Langensiepen M. (2003) Evaporation and Energy Balance. In: Encyclopedia of Water Science, Stewart B.A. and Howell T. (eds.) M. Dekker, New York pp. 238 - 241

Gabrielle B., Roche R., Angas P., Cantero-Martinez C., Cosentino L., Mantineo M., **Langensiepen M.**, Henault C., Laville P., Nicoullaud B. and Gosse G. (2002) A priori parameterisation of the CERES soil-crop models and tests against several European data sets. Agronomie 22: 119 - 132

Moreshet S., Fuchs M., Cohen Y., Cohen Y., **Langensiepen M.** (1996) Water transport characteristics of cotton as affected by drip irrigation. Agron. J. 88: 712-722

Langensiepen M. (1995) Introduction to the thermoelectric method for measuring plant sap flux: A comparison between Heat-Balance and Heat-Pulse Methods. Zeitschrift für Bewässerungswirtschaft 30: 53-71

Langensiepen M. (1992) Experimental Verification of an Agrometeorological Transpirationmodel. Zeitschrift für Bewässerungswirtschaft 27: 85-101 (in German).

Other Contributions

Langensiepen M, Mitchell P, Burgess SSO (2007) Quantifying the Heterogeneity of Transpiration Fluxes from Tree Crowns: Results from a Case Study on Eucalyptus Trees in the West-Australian Wheat-Belt. Tropentag „Utilisation of diversity in land use systems:

Sustainable and organic approaches to meet human needs“, 9. - 11. October 2007, Witzenhausen, Proceedings.

Langensiepen M. (2007) Improving farming systems design based on the agile modelling paradigm. Farming Systems Design 2007, 10.- 12 September, Catania, Italy, Proceedings.

Langensiepen M. (2006) Historical roots and perspectives of modelling plant systems. In Hertwig, F. and Langensiepen, M. (eds.) Modelling plant systems from historical and current viewpoints - Symposium honring the work of Prof. Dr. Dr. h. c. Eilhard Alfred Mitscherlich (1874 - 1956). Brandenburg Ministry of Rural Development, Environment and Consumer Protection. pp. 9-20. [PDF-File (in German)]

Langensiepen M., Topcu, S., and Kaman, H. (2006) Modeling the effects of different irrigation application techniques and varietal influences on maize transpiration: A Case study from the North-East Mediterranean. International Symposium on Water and Land Management for Sustainable Irrigated Agriculture. Adana, Türkei 4 - 8 April, 2006.

Langensiepen M. (2005) Application of modelling in agricultural research and education.International Conference on Agricultural Research for Development: European Responses to Changing Global Needs 27-29 April 2005, Swiss Federal Institute of Technology, ETH Zurich, Switzerland Proceedings.

Langensiepen, M., Burgess, S., Lambers, H. and Mitchell, P. (2005) A model for simulating transpiration from *Eucalyptus salmonophloia* and *Eucalyptus wandoo* trees. International Workshop „Plant Water Relations in Seasonally Dry Environments“ 6-8 July 2005. The School of Plant Biology. The University of Western Australia Crawley, Western Australia. Proceedings

Schultz C., Herbst R., **Langensiepen M.**, Ulrichs C. (2005) Challenges of sustainable aquaculture. Humboldt-Spectrum 1/2005. pp. 42–48 (in German)

Langensiepen M., Fuchs M. and Bergamaschi S. (2004) Modelling Transpiration under contrasting climate conditions. COMBIO 2004, Burswood Convention Center, Perth, Australien 20-24. September 2004. Conference Proceedings

Ulrichs, Ch., Herbst, R., **Langensiepen, M.**, Schultz, C. (2004) Fossil plancton as a natural insectizide. Humboldt-Spectrum 2/2004, pp. 24-28.

Langensiepen M., Herbst R., Schulz C. and Ulrichs C. (2004) What is agricultural science ? Humboldt-Spektrum 1/2004, pp. 12 - 14.

Langensiepen M. (2004) Modelling plant systems: Perspectives of a new research and teaching topic. Humboldt Lectures, Humboldt-University of Berlin. 28 pages.

Langensiepen M. (2001) Validating the DSSAT-Model. In:Optimizing cropping systems. Collaborative Research 192, German Science Foundation. Final report. Hanus H. (ed.) University of Kiel, Germany (in German)

Bergamaschi H., Radin B., Rosa L.M., Bergonci J.I., Aragones R., Santons A.O, Franca S. and **Langensiepen M.** (2001) Estimating maize water requirements using agrometeorological data. In: Revista Argentina de Agrometeorologia. Climatologia y Fenologia Agricolas, Pascale A.J. and Murphy G.M. (eds.) Buenos Aires, Argentina.

Langensiepen M., Bergamaschi H., Bergonci J. and Rosa L.M. (2000) Optimizing crop water use by deficit irrigation : A case study in South Brazil using Corn. Tropentag „International Agricultural Research: A Contribution to Crisis Prevention“, 11. - 12. Oktober 2000, Stuttgart, Proceedings.

Langensiepen M., Fuchs M., Bergamaschi H., Jutzi S., Moreshet S. and Rosa L.M. (2000) Estimating Maize Transpiration using TCorn. International Crop Science Congress, 17. - 22. August 2000, Hamburg, Proceedings.

Bergonci J., Bergamaschi H., Santos A.O., Franca S., Radin B. and **Langensiepen M.** (2000) Irrigation use efficiency in relation to grain and dry matter yield of maize. International Crop Science Congress, 17. - 22. August 2000, Hamburg, Proceedings.

Bergamaschi H., Radin B., Rosa L.M., Bergonci J., Aragones R., Santos A.O., Franca S. and **Langensiepen M.** (2000) Estimating maize water requirements using standard agrometeorological data. International Crop Science Congress, 17. - 22. August 2000, Hamburg, Proceedings.

Langensiepen M. (1999) Crop Models in International Development: The Challenges Ahead. Tropentag „Knowledge Partnership: Challenges and Perspectives for Research and Education at the Turn of the Millennium“, 14. - 15. Oktober, 1999, Berlin, Proceedings.

Langensiepen M., Fuchs M. and Bergamaschi H. (1999) TCorn : A Computer Model Simulating Maize Transpiration.Tropentag „Knowledge Partnership: Challenges and Perspectives for Research and Education at the Turn of the Millennium“, 14. - 15. Oktober, 1999, Berlin, Proceedings.

Langensiepen M., Schröder H., Voß W. and Sieling K. (1999) Simulating wheat and barley yields under the soil and climate conditions of Schleswig- Holstein using DSSAT. 43rd annual meeting of the German Society of Crop Research, 16-18 September 1999, Göttingen, Germany, proceedings (in German).

Langensiepen M., Fuchs M., Bergamaschi H. Gräsle W. and Scholberg J. (1999) Are crop models universally applicable ? International ESA symposium „Modelling Cropping Systems“, 21. - 23. Juni 1999, Lleida, Spain, Proceedings.

Gabrielle B., Angas P., Mantineo D., **Langensiepen M.** and Gosse G. (1999) Extrapolation of soil-crop models across Europe: is model structure still relevant compared to parameterization? International ESA symposium „Modelling Cropping Systems“, 21. - 23. Juni 1999, Lleida, Spain, Proceedings.

Langensiepen M. (1998) Options and limits of an ecological oriented irrigation practice. In : Sustainable water management in agricultural production. Amini and Baum (Hrsg.) Journal of Agriculture in the Tropics and the Subtropics, Der Tropenlandwirt, Suppl. 63: 111- 135. Selbstverlag des Verbandes der Tropenlandwirte e.V. Witzenhausen (in German).

Moreshet S., Bergamaschi H., Fuchs M., **Langensiepen M.**, Cohen S. and Bergonzi J.I. (1998) Verifying a modeled output of transpiration from a well watered and stressed corn (Zea maize) crop with the sap flow measurement. International symposium „World Food Security and Crop Production Technologies for Tomorrow“ Crop Science Society of Japan, Nov. 1998, Kyoto, Japan. Proceedings.

Langensiepen M., Bergamaschi H. und Fuchs M. (1997) Transpiration of maize plantations: Influences of Phytoactinometry and Water Statuts.Tropentag. Stuttgart, 11. - 12. Dezember 1998, Proceedings.

Langensiepen M. (1997) Improving agrosystem management using meteorological network data: Case studies in Brazil, Germany and Israel. Journal of Agriculture in the Tropics and the Subtropics Der Tropenlandwirt, Suppl. 59, 146 p. ISBN 3-881229280. Selbstverlag des Verbandes der Tropenlandwirte e. V. Witzenhausen, Germany (in German).

Santos A.O., Bergamaschi H., **Langensiepen M.**, Bergonci J.I. and Rosa L.M.(1997) Verificacao do metodo do pulso de calor para medicao direta da transpiracao. In : Congresso Brasileiro de Agrometeorologia 10 Anais, Piracicaba, SP. USP/Soc. Bras. Agrometeor. p. 722 - 724.

Santos A.O., Bergamaschi H., **Langensiepen M.**, Bergonci J.I. and Rosa L.M. (1997) Avaliacao do metodo do pulso de calor para na medicao direta da transpiracao, sob diferentes condicoes hidricas. In : Congresso Brasileiro de Agrometeorologia 10 Anais, Piracicaba, SP. USP/Soc. Bras. Agrometeor. p. 725 - 727.

Langensiepen M., Moreshet S., Rosa L.M., Fuchs M., Bergamaschi H., Cohen Y. and Bergonzi J.I. (1996) Upscaling of heat and energy transfer processes in field plantations from leaf to canopy level. Mitt. Ges. Pflanzenbauwiss. 9: 53 - 54.

Langensiepen M., Bergamaschi H., Cohen S., Cohen Y., Fuchs M., Moreshet S., Rosa L.M.and Santos A.O. (1996) Improved modeling of evapotranspiration by relating leaf stomatal vapor conductance to phytoactinometric plant stand characteristics: A case study using maize. Int. Conf. Evapotranspiration and Irrigation Scheduling, ASAE, IA, ICID, San Antonio 3. - 6. Nov. 1996. Proceedings: 685 - 690.

Langensiepen M. (1995) The concept of sustainability In : Sustainable Resource Management in Tropical and Subtropical Environments. Becker B. (ed.) Selected Seminar Papers No.1, Institute of Crop Science. University of Kassel.

Langensiepen M. (1995) Light extinction and Microclimate at Stream Water Sites: Investigations at the Wilhelmhaeuser Stream System. Second Thesis, Environmental Engineering, University of Kassel (German).

Langensiepen M. (1992) The determination of Actual Transpiration with the Penman-Monteith Combination Method. First Thesis, International Agriculture, University of Kassel (Full versions in German and English).

Interests

Professional Interests

Environmental physics, plant ecophysiology, agronomy, water management. Interrelations between these areas and assessing options for applying inter-disciplinary methods. System analysis.

Development and testing of computer simulation models for characterizing plant responses to the environment: Weather dynamics, soil water and nitrogen availability in particular.

Member in Professional Organizations

Tropical Farmers Association (since 1989)

Council for Agricultural Research in the Tropics and Subtropics (since 1996)

Australian Society of Plant Scientists (since 2004)

German Society of Agronomy (since 2006)

Private Interests

We are spending joyful times in our family and this is my main off-time activity.

I also like listening or playing music, particularly from French, Russian and Scandinavian composers. Brazilian music and Jazz music are another interest. I am a flute player and was a member of the ensemble of the Ruhrfestspiele Recklinghausen during 1981 theater season.

Moderate triathlon training is my sport activity. Long swims or runs are compensating for sitting many hours in front of computers.

Literature on the cognitive basis of science and cultural-societal issues is another interest. I also often study politics and history of the Middle-East. Economical aspects of world food production are another interest.

I am a protestant christian and was a member of the church council at Witzenhausen while studying at this town. I particularily contributed in the areas of church music and youth affairs during this time. Jolanta Zochovska from Goettingen was my flute teacher during this time.