

CURRICULUM VITAE

Name: TOUNOU Agbékô Kodjo
Adresse: Ecole Supérieure d'Agronomie, Université de Lomé, BP 1515
Lomé Togo

Field of expertise

- *Ecology and Biodiversity* ;
- *Biological Control and IPM* ;
- *Tropical pests* ;
- *Postharvest*
- *Pesticides and environmental health*;
- *Multi-trophic Interactions (Interactions Plant-Insect-Natural enemies)* ;
- *Insect pathology* ;
- *Organic agriculture* ;
- *Insecticidal plants* ;
- *Natural disaster management*
- *Good Agricultural Practices* ;
- *Proposal writing*;
- *Publication writing and review and student supervision*

FORMATIONS

2003-2007: Ph.D., Entomologie, Gottfried Wilhelm Leibniz Universität Hannover (Allemagne), Faculty of Natural Sciences, Institute of Plant Diseases and Plant protection
Magna cum laude

Research project: The potential of *Paranosema (Nosema) locustae* and its combination with *Metarhizium anisopliae* var. *acridum* for the control of locusts and grasshoppers in West Africa

2000–2002: Master of Sciences en Horticulture, Gottfried Wilhelm Leibniz Universität Hannover (Allemagne), Faculty of Natural Sciences, Institute of Plant Diseases and Plant protection

Major: Entomology – Phytopathology
Magna cum laude

Research project: The potential of entomopathogenic fungi to control the green leafhopper *Empoasca decipiens* Paoli (Homoptera: Cicadellidae) and potential side effects on the egg parasitoid *Anagrus atomus* L. (Hymenoptera: Mymaridae)

1999: Agronomist, University of Lomé, Togo (West Africa)
Research project: Use of *Bacillus thuringiensis* for control of maize stem borers, *Eldana saccharina*, *Busseola fusca* and *Sesamia calamistis* and side effect on the larval parasitoid *Cotesia sesamiae*

PROFESSIONAL EXPERIENCES

2013-2014: Visiting scientist at Executive Secretariat of the West and Central African Council for Agricultural Research and Development (CORAF/WECARD), Dakar-Senegal

From 2007:- Lecturer and Researcher at Ecole Supérieure d'Agronomie (ESA) of Université de Lomé (UL)

Main Duties

Courses

- Entomology and Insect pathology
- Good Agricultural Practices
- Biotechnology and Plant Protection
- Interactions plant-insect-Environnement
- Supervision of Students

April-july 2008: Assistant Logistian and Administrator, SERIST Project (Seed Recovering Initiative in Savannah Region of Togo), CARE International-Togo

Duties and Responsibilities:

- Arrange logistics for all meetings, assure information sharing mechanisms are working;
- Identify local suppliers for seeds and purchase seeds;
- Confirm quality of seeds that don't have certifications;
- Assure transportation of seeds to villages with supervisors and project chief;
- Distribute seeds to beneficiaries through village-based distribution committees;
- Aid in monitoring and evaluation.

Oct. 2007- oct. 2008: Volunteer work with CARE GoG (Ghana, Togo, Bénin) in Accra (Ghana)

Duties and Responsibilities:

- Support development a monitoring and evaluation plan for new agriculture project;
- Develop protocols for baseline data collection, analyses and processing;
- Review technical documents (training manuals, required by the projects;
- Support development of training plans for staff and partners in support to star-up of agriculture projects;
- Participate in the development of projects workplans.

2003 – 2007: Research Associate at IITA-Cotonou (Benin Rep.).

Research Project: Evaluation of the entomopathogens, *Paranosema locustae* and *Metarhizium anisopliae* to control locusts and grasshopper in West Africa: Ph.D project done as part of the PRÉLISS project in collaboration with Gottfried Wilhelm Leibniz University of Hannover (Germany).

Main duties

- Prospection pour la détection de pathogènes de criquets et sauteriaux ;
- détection de pathogènes par le Test ELISA ;

- Essais biologiques au laboratoire et au champ : utilisation des entomopathogènes pour la lutte contre les criquets et sauteriaux au sahel (Cap Vert, Niger et Sénégal) ;
- étude de l'interaction entre pathogènes.

1999 –2000 Research Assistant at IITA-Cotonou, Unité de Coordination et de Recherches sur les Igname CIRAD/IITA

OTHER EXPERIENCES

July 2009 : Training on Postharvest Lost Assessment "Identification of Appropriate Postharvest Technologies for Improving Market Access and Incomes For Small Farmers in Sub-Saharan Africa and South Asia" Organized by WFLO Project (World Food Logistics Organization) and financed by "the Bill and Melinda Gates Foundation".

December 2007 : Training on Project Monitoring and Evaluation by CARE International-Togo.

February-march 2005 : Training courses in Data Management and Statistical Analysis Using SAS Software. Conducted at IITA-Benin Station.

2001 : Training at BBA-Darmstadt (Institut für biologischen Pflanzenschutz): Development of bioassay procedures in pest control using entomopathogenic fungi

1998-1999 : Practical training at IITA-Cotonou (Benin) and IITA-Ibadan (Nigeria) during the course of the Ir. Agronome project.

HONORS AND AWARDS

- **2012-2015** : International Foundation for Sciences (IFS) Grant
- 2000-2002: DAAD (German Academic Exchange Service) Scholarship for International M.Sc. Course at Gottfried Wilhelm Leibniz University, Hanover
- 2003-2005: IITA Scholarship for Ph.D
- 2005-2007: DAAD Scholarship for PhD. completion at Gottfried Wilhelm Leibniz University, Hanover

INVITED PRESENTATIONS AT INTERNATIONAL CONFERENCES

- October 2012 Quinzième Journées Scientifiques Internationales de Lomé, Campus de l'Université de Lomé (Togo).
- October 2010 Quatorzième Journées Scientifiques Internationales de Lomé, Campus de l'Université de Lomé. (Togo).
- 27 September–1 October 2010. Proceedings of the Fifth World Cowpea Conference on improving livelihoods in the cowpea value chain through advancement in science, held in Saly, Senegal

- 27 november-4december 2010. FRSIT 2010. Forum national de la Recherche Scientifique et des Innovations Technologiques, 9^{ème} Edition.
- May 2009 Deuxième colloque de l'UAC des sciences, cultures et technologies, Campus d'Abomey-Calavi (Cotonou-Rép. Bénin).
- 2002: The 2002 ESA Annual Meeting and Exhibition Fort Lauderdale, FL (USA).

COMPUTER SKILLS

Familiar with the following softwords : Word, Excel, PowerPoint ; SigmaPlot (graphs) ; SAS and SPSS (Statistics); Web

LANGUGE SKILLS AND OTHERS

Languages	Speak	Written	Reading
French	Excellent	Excellent	Excellent
English	Good	Good	Good
German	Slight	Slight	Slight

Driving licence : Category B

REFEREED PUBLICATIONS

1. Sokame Bonoukpoè Mawuko, **Tounou Agbékô Kodjo**, Datinon Benjamin, Dannon Elie Ayitondji, Agboton Cyriaque, Ramasamy Srinivasan, Pittendrigh Barry Robert, Tamò Manuele (2015). Combined activity of the *Maruca* multi-nucleopolyhedrovirus, *MaViMNPV* and oil from Neem, *Azadirachta indica* Juss and *Jatropha curcas* L., for the control of cowpea pests. *Crop Protection*, 72: 150-157.
2. Edem Wetro, **Agbékô Kodjo Tounou**, Cyriaque Agboton, Benjamin Datinon, Ramasamy Srinivasan, Barry Robert Pittendrigh and Manuele Tamò (2014). Bionomics of the parasitoid *Apanteles taragamae* Viereck (Hymenoptera: Braconidae) as influenced by different diets fed to its host *Maruca vitrata* Fabricius (Lepidoptera: Crambidae). *BioControl*, 59: 55-65
3. Sêmihinva Akpavi, **Kodjo Agbékô Kodjo**, Komi Odah, Komlan Batawila, Jean Jacob Sahou, Kpérkouma Wala, Patrick Van Damme, Koffi Akpagana (2013). Threatened food plants in Togo : Diversity and causes of threats. *Revue Togolaise des Sciences* 7 (1) : 7-39
4. **Tounou Agbékô Kodjo**, Agboka Komi, Agbodzavu Komi and Wegbe Komlan (2013). Maize

- stemborers distribution and their parasitoids and farmer's perception on climate change in southern Togo. *Journal of Applied Biosciences*, 64: 4773-4786
5. Kukom Edoh Ognakossan, **Agbékô Kodjo Tounou**, Yendouban Lamboni and Kerstin Hell (2013). Post-harvest insect infestation in maize grain stored in woven polypropylene and in hermetic bags. *International Journal of Tropical Insect Science*, 33 (1): 71-81.
 6. Gbénonchi Mawussi, **Agbékô Kodjo Tounou**, Kwasi Dzola Ayisah, Gérard Vilarem, Christine Raynaud, Georges Merlina, Komla Sanda (2013). Chemical composition and insecticidal activity of *Ocimum canum* essential oil against coffee berry borer, *Hypothenemus hampei* (Ferrari) (Coleoptera: Scolytidae). *Journal of Essential Oil Bearing Plants*, 15 (6): 955-963
 7. **Tounou Agbékô Kodjo**, Sokame Bonoukpoè Mawuko, Akpavi Sêmihinva, Ganyo Komlan Kyky, Kétoh Kofi Guillaume, Gumedzoe Yawovi Mawuena Dieudonné (2013). Effets des extraits végétaux sur la dynamique des populations des insectes ravageurs du niébé, *Vigna unguiculata* Walp, dans le sud du Togo. *J. Rech. Sci. Univ. Lomé (Togo)*, 2012, Série A, 14(1) : 25-34.
 8. Kukom EDOH OGNAKOSAN; **Agbékô Kodjo TOUNOU**; Yendouban LAMBONI; Kerstin HELL (2013). Population dynamics of *Sitophilus zeamais* Motschulsky (Coleoptera, Curculionidae) and *Prostephanus truncatus* Horn (Coleoptera, Bostrichidae) in IRRI Super bags during maize storage. *International Journal of Tropical Insect Science*, 33 (1): 71-81
 9. Komi Agboka, Fritz Schulthess, **Agbékô Kodjo Tounou**, Manuele Tamò, Stefan Vidal (2013). The effect of leguminous cover crops and cowpea planted as border rows on maize ear borers with special reference to *Mussidia nigrivenella* Ragonot (Lepidoptera: Pyralidae). *Crop Protection*, 43: 72-78
 10. Bissadou Kossi Dodzi, Tchabi Atti, **Tounou Agbékô Kodjo**, Ayessom Affoh, Gumedzoe Mawuena (2012). Impact de la fumure organique appliquée seule et en combinaison avec une souche indigène de champignon mycorhizien arbusculaire *Glomus mosseae* sur *Meloidogyne* spp, principal nématode parasite de la tomate au Togo. *Journal of Applied Biosciences*, 55: 3973-3986
 11. Komla Kyky Ganyo, **Agbékô Kodjo Tounou**, Cyriaque Agboton, Elie Ayitondji Dannon, Barry Robert Pittendrigh and Manuele Tamò (2012). Interaction between the aphid parasitoid *Lysiphlebus testaceipes* (Hymenoptera: Aphidiidae) and its hyperparasitoid *Syrphophagus*

- africanus* (Hymenoptera: Encyrtidae). *International Journal of Tropical Insect Science*, 32: 45–55.
12. **Agbékô Kodjo Tounou**, Hans-Michael Poehling, Komi Agboka, Katharina Raupach, Gilbert Zimmermann and Christian Borgemeister (2011). A laboratory assessment of the potential of selected entomopathogenic fungi to control the green leafhopper *Empoasca decipiens* Paoli (Homoptera: Cicadellidae). *Journal of Applied Biosciences*, 46: 3195– 3204.
13. **Tounou Agbékô Kodjo**, Mawussi Gbénonchi, Amadou Sadate, Agboka Komi, Gumedzoe Yaovi Mawuena Dieudonné and Sanda Komla (2011). Bio-insecticidal effects of plant extracts and oil emulsions of *Ricinus communis* L. (Malpighiales: Euphorbiaceae) on the diamondback, *Plutella xylostella* L. (Lepidoptera: Plutellidae) under laboratory and semi-field conditions. *Journal of Applied Biosciences*, 43: 2899-2914.
14. **Agbékô Kodjo Tounou**, Christiann Kooyman, Orou Kobi Douro-Kpindou, Gumedzoe Yao Mawuena and Hans Michael Poehling (2011). Laboratory assessment of the potential of *Paranosema locustae* to control immature stages of *Schistocerca gregaria* and *Oedaleus senegalensis* and vertical transmission of the pathogen in host populations. *Biocontrol Science and Technology*, 21: 605-617.
15. K. Hell, K. Edoh Ognakossan, **A.K. Tounou**, Y. Lamboni, K.E. Adabe, and O. Coulibaly (2010). Maize stored pests control by PICS-bags: Technological and economic evaluation. Proceedings of the Fifth World Cowpea Conference on improving livelihoods in the cowpea value chain through advancement in science, held in Saly, Senegal, 27 September - 1 October 2010: 334-342.
16. **Agbékô Kodjo Tounou**, Christiann Kooyman, Orou Kobi Douro-Kpindou and Hans Michael Poehling (2008). Interaction between *Paranosema locustae* and *Metarrhizium anisopliae* var. *acridum*, two pathogens of the desert locust, *Schistocerca gregaria*. *Journal of Invertebrate Pathology*, 97: 203–210.
17. **Agbékô Kodjo Tounou**, Christiann Kooyman, Orou Kobi Douro-Kpindou and Hans Michael Poehling (2008). Combined field efficacy of *Paranosema locustae* and *Metarrhizium anisopliae* var. *acridum* for the control of sahelian grasshoppers. *BioControl*, 53: 813-828.
18. **Agbékô Kodjo Tounou**, S. Gounou, C. Borgemeister, Y.M.D. Gumedzoe, and F. Schulthess (2005): Susceptibility of *Eldana saccharina* (Lepidoptera: Pyralidae), *Busseola fusca* and

- Sesamia calamistis (Lepidoptera: Noctuidae) to *Bacillus thuringiensis* cry toxins and potential side effects on the larval parasitoid *Cotesia sesamiae* (Hymenoptera: Braconidae). *Biocontrol Science and Technology*, 15: 127-137.
19. Komi Agboka, **Agbékô Kodjo Tounou**, Rasmieh Al-Moaalem, Hans-Michael Poehling, Katharina Raupach and Christian Borgemeister (2004). Life-table study of *Anagrus atomus*, an egg parasitoid of the green leafhopper *Empoasca decipiens*, at four different temperatures. *BioControl*, 49: 261-275.
 20. Komi Agboka, **Agbékô Kodjo Tounou**, Hans-Michael Poehling, Katharina Raupach and Christian Borgemeister (2003). Searching and Oviposition Behavior of *Anagrus atomus* L. (Hymenoptera: Mymaridae) on Four Host Plants of Its Host, the Green Leafhopper *Empoasca decipiens* Paoli (Homoptera: Cicadellidae). *Journal of Insect Behavior*, 16: 667-678.
 21. **Agbékô Kodjo Tounou**, Komi Agboka, Hans-Michael Poehling, Katharina Raupach, J. Langewald, G. Zimmermann and Christian Borgemeister (2003). Evaluation of the Entomopathogenic Fungi *Metarrhizium anisopliae* and *Paecilomyces fumosoroseus* (Deuteromycotina: Hyphomycetes) for Control of the Green Leafhopper *Empoasca decipiens* (Homoptera: Cicadellidae) and Potential Side Effects on the Egg Parasitoid *Anagrus atomus* (Hymenoptera: Mymaridae). *Biocontrol Science and Technology*, 13: 715-728.

Submitted publications

1. The effect of host quality on the bionomics of *Nemorilla maculosa* Meigen (Diptera: Tachinidae), a parasitoid introduced into West Africa for the control of *Maruca vitrata* Fabricius (Lepidoptera: Crambidae)
2. Experimental release of parasitoid *Trichogrammatoïdea eldanae* Viggiani (Hymenoptera: Trichogrammatidae) against two main stem borers of maize: *Eldana saccharina* Walker (Lepidoptera: Crambidae) and *Sesamia calamistis* Hampson (Lepidoptera: Noctuidae).
3. Host range of the exotic parasitoid *Nemorilla maculosa* Meigen (Diptera: Tachinidae) and attraction to herbivore-induced plant volatiles by the host-foraging parasitoid fly *N. maculosa*.
4. Interactions variations climatiques-insectes ravageurs et perception des producteurs de céréales au Togo
5. Contribution à la connaissance des insectes associés à la culture de *Pachyrhizus erosus* et potentiel de rendement des variétés EC533 et ECKew au Sud Togo.

Books (02)

Agbeko Kodjo Tounou (2016). Elaboration d'une base de données sur les liens agriculture-nutrition : Leçons apprises des plateformes d'innovation du CORAF/WECARD sur le lait de vache et le maïs QPM au Togo. 116p, CTA, the Nederland

Agbeko Kodjo Tounou (2007). The potential of *Paranosema (Nosema) locustae* and its combination with *Metarhizium anisopliae* var. *acridum* for the control of locusts and grasshoppers in West Africa. **Cuvillier Verlag Göttingen, Germany**

Poster (1)

Agbéko K. Tounou, Komi Agboka, Katharina Raupach, Hans-Michael Poehling, Christian Borgemeister (2002): Entomopathogenic fungi and an egg parasitoid--Can they collaborate? New strategies for biological control of the greenhouse leafhopper *Empoasca decipiens* Paoli. **The 2002 ESA Annual Meeting and Exhibition Fort Lauderdale, FL.**

REFERENCES

- 1- **Prof. Sanda Komla**, Président de l'Université de Kara, Directeur du LARASE, Tel : 00228 90122647 (mobile) ; 00228 22214906 (bureau) ; Email : komla.sanda@gmail.com
- 2 **Prof. Mawuena D.Y. GUMEDZOE**, Président de l'Université des Sciences et Technologie du Togo Tél (228) 99465464 ; Email : donne@tg.refer.org
- 3- **Dr Aboubakar NJOYA**, Directeur de Recherche et des Innovation du CORAF/WECARD, 7 Avenue Bourguiba, BP 46 Dakar-RP Sénégal Tel ; +221338699618, Fax : +221338699631, Email ; a.njoya@coraf.org

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