

Kouadjo Zaka Ghislaine Claude

RESEARCHER

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University Qualifications

- **2008-2012:** PhD thesis : exchange student, Institute for Microbial, Biotechnology and Metagenomics (IMBM), University of Western Cape (South-Africa) and University of Félix Houphoüet Boigny (Côte-d'Ivoire)

Subject: **Study of Mechanisms of resistance and microbial reduction of chromium: the case of fly ash from a dumping site in Mpumalanga (South Africa).**

- **2006-2008:** Master degree (Plant Biotechnology), University of Félix Houphoüet Boigny (Côte-d'Ivoire)

Subject: **Study of agricultural practices and emergence of tapping panel dryness in the rubber tree; sector of Daoukro and Soubré (Côte-d'Ivoire).**

- **2005-2006 :** Honors degree (Genetic), University of Félix Houphoüet Boigny (Côte-d'Ivoire)

- **2004-2005:** Bsc in Molecular Genetics, University of Félix Houphoüet Boigny (Côte-d'Ivoire)

Skills

- Molecular Biology
- Molecular pathology
- Molecular ecology of soil microorganisms/Soil microbiology
- Environmental biotechnology (bioremediation)
- Virology
- Bioinformatic

Awards

- ✓ **PhD thesis fellowship** (National Research Foundation (NRF), and IMBM/ South Africa) (2009-2011)
- ✓ **Winner of best poster** at the Bio2biz SASM Conference 2009 (Durban, South Africa) with the poster entitled: **Characterization of chromium-resistant bacteria from a fly ash dumping system in South Africa.**
- ✓ **BIOVISION** : The World Life Sciences Forum 2013 (Lyon/France): Awarded **fellowship program called BIOVISION NEXT.**
- ✓ **BEST-IRD 2016-2019** (Exchange programme /Recherche Institut for Development)/Montpellier France on : **Characterization of the pathogenicity of RYMV isolates (Rice yellow mottle virus) from Côte d'Ivoire**
- ✓ **Fullbright sholar (2017)** : African Research Scholar : University of Arizona/USA, 1st March-30 November. project title : **Providing technologies for the production of healthy vegetative cuttings for planting to improve cassava productivity in Côte d'Ivoire.**

Publications

- **16 articles published in peer-reviewed and indexed scientific journals**
- **04 Technical sheets**

1- Thulani P. Makhalanyane, Oliver K. I. Bezuidt, Rian E. Pierneef, Eshchar Mizrachi, Adolphe Zeze, Romain K. Fossou, Claude Ghislaine Kouadjo, Samuel Duodu, Chioma B. Chikere, Olubukola O. Babalola, Ashwil Klein, Marshall Keyster, Mornè du Plessis, Nourou S. Yorou, Mohamed Hijri, Theresa Rossouw, Casper N. Kamutando, Stephanus Venter, Lucy N. Moleleki & Colin Murrell (2023). African microbiomes matter. *Nat Rev Microbiol* 21, 479–481 <https://doi.org/10.1038/s41579-023-00925-y>

2- Claude, K.Z.G., B. N'zue and J.K. Brown, (2023). A molecular study on African cassava mosaic disease management in Côte d'Ivoire. *Int. J. Plant Pathol.*, 14: 1-12

3- GOGBE-DIBI Balé Françoise^{1*}, KOUADJO Zézé Claude Ghislaine, COULIBALY Klotioma¹, DIABATE Sékou¹, KOUADIO Ouattara Demby Laetitia Muriel¹, N'CHO Achi Laurent¹, DOGBO Dénézon Odette (2022). Pathogenic, Morphological and Molecular Diversity of *Fusarium oxysporum* f sp *elaeidis* Isolates, Causal Agent of

Fusarium Wilt of Oil Palm in Côte d'Ivoire. International Journal of Current Microbiology and Applied Sciences ISSN: 2319-7706 Volume 11 Number 12

4- Sara Laetitia Elphège Gngui, Romain Kouakou Fossou , Anicet Ebou, Chiguié Estelle Raïssa Amon , Dominique Kadio Koua , Claude Ghislaine Zaka Kouadjo , Don A. Cowan and Adolphe Zézé (2021). The Rhizobial Microbiome from the Tropical Savannah Zones in Northern Côte d'Ivoire. *Microorganisms*, 9, 1842. <https://doi.org/10.3390/microorganisms9091842>.

5- Yao Kouakou Alban Prosper, Wahounou Polié Jean, Kouadjo Zaka Ghislaine, Mpika Joseph, Diallo Atta Hortense (2018). Morphological and Molecular Characterization of Isolates of *Corynespora* Spp, Causal Agent of “*Corynespora* Leaf Fall Disease” of RubberTree in Côte d'Ivoire. *European Journal of Scientific Research* ; Vol. 148 No 4 pp. 440-449

6- Kouadjo, Zaka Ghislaine Claude; Lassina, Fondio; N'gbesso, Mako François De Paul ; Koffi, Ghislain (2018). Detection of Pepper Yellow Vein Mali Virus associated withpepper in Yamoussoukro, Côte d'Ivoire. *.Greener Journal of Agricultural Sciences*. Vol. 8(10), pp. 304-309,

7- Y. Arocha Rosete, H. ATTA Diallo, J.L. Konan Konan, A.E.P. Kouamé, K. Séka, K.D. Kra, M.N. Toualy, K.E. Kwadjo, W.A.M.P. Daramcoum, N.I. Beugré, B.W.M. Ouattara, C.G. Kouadjo Zaka, K. Allou, N.D. Fursy-Rodelec, O.N. Doudjo-Ouattara, N. Yankey, S. Dery, A. Maharaj, M. Saleh, R. Summerbell, N. Contaldo, S. Paltrinieri, A. Bertaccini & J. Scott (2016). Detection and identification of the coconut lethal yellowing phytoplasma in weeds growing in coconut farms in Côte d'Ivoire. *Canadian Journal of Plant Pathology*, Vol. 38, No. 2, 164–173.

8- D. Jean-Marc Séry Z.G.Claude Kouadjo, B.R.Rodrigue Voko and Adolphe Zézé (2016) : Selecting Native Arbuscular Mycorrhizal Fungi to Promote Cassava Growth andIncrease Yield under Field Conditions. *Frontiers in Microbiology*, Volume7; Article 2063.

9- DROH, Germain, KOUASSI, Abou-Bakari, KOUADJO, Zaka Ghislaine Claude, ZÉZÉ, Adolphe, NGUETTA, Assanvon Simon-Pierre, SANDERS, Ian R. (2016). Effects of two types of amf on growth of cocoa seedlings (*Theobroma cacao* l.) In greenhouses. *157Global Journal of Advanced Research Vol-3, Issue-3 PP. 157-164* 10- Kouadjo Zaka Ghislaine Claude and Zeze Adolphe 2013. Genes related to chromate challenging systems in native *Staphylococci* species isolated from a fly ash dumping site. *Geomicrobiology Journal* Vol 30 61-67

11- Kouadjo Zaka Ghislaine Claude and Zeze Adolphe 2013. Proteomic analysis of chromate response in *Staphylococcus saprophyticus* isolated from a fly ash dumping site. *African Journal of Biotechnology* Vol 12 2322-2330

12- Kouadjo Zaka Ghislaine Claude and Zeze Adolphe 2012. Native chromium resistant *Staphylococcus* species from a Fly Ash dumping site harbor plasmid pMOL28 determinants. *Agronomie africaine* 13- Fossou Kouakou Romain, Kouassi Koffi Il Nazaire, Kouadjo Zaka Claude Ghislaine, Zako Bi Iritie Marc Soumaila, Zeze Adolphe 2012. Diversité de rhizobies associés à un champ de pois d'angle (*Cajanus cajan* L.) à Yamoussoukro (Centre de la Côte d'Ivoire). *Agronomie Africaine*

14- Zako Bi Iritie Marc, Tie Bi Tra, Zirihi Guede Noel, Kouadjo Claude Zaka, Fossou Kouakou Romain, Zeze Adolphe 2012. Arbuscular mycorrhizal fungi associated to *Theobroma cocoa*. *African journal of Agricultural research* Vol. 7(6), pp. 993-1001

15- Kouadjo Zaka Ghislaine Claude and Zéze Adolphe 2011. Chromium tolerance and reduction potential of *Staphylococcus* species isolated from a fly ash dumping site in South Africa. *African Journal of Biotechnology*, 69 15587-15594

16- Kouadio Dian, Maturin Koffi Okoma, Edmond Kouablan Koffi, Désiré N'da Pokou, Modeste Kouassi Kan, Ghislaine Zaka Kouadjo, Nazaire Koffi Il Kouassi, Abdourahamane Sangaré, Samuel OBOUYEBA (2016). [Effect of Ethephon stimulation frequency in downward tapping on the production potential in upward tapping among PB 260 clone of *Hevea brasiliensis* in Ivory Coast. *Int. J. Agr. Agri. Res.* 8(2), pp. 51-63.

Fiches technique

1- Brou K Guy; Kouassi K. Nazaire; Zohouri G. Pierre N'Zué Boni, Kouadjo C. Ghislaine; Guessan A. Carine Dibi K.B. Evrard; Koné Daouda; Dogbo D. Odette Abdourahamane Sangaré. Les principales maladies fongiques, bactériennes et virales du manioc et, les approches de lutte recommandées. (2015). *Bulletin CORAF* ; PP. 25.

2- C. Kouadjo, N.D. Pokou, G. P. Zohouri, A. M. Kouakou, E. B. Essis, K. E. Dibi, A. Adiko, G. P. Gnonhour, R. Asiédu, S. Abdourahamane (2018). Bien identifier les ravageurs de l'igname en Côte d'Ivoire. *AISA Développement* n°13. pp. 33- G. C. Kouadjo, N. D. Pokou, G. P. Zohouri, A. M. Kouakou, E. B. Essis, K. E. Dibi, A. Adiko, G. P. Gnonhour, R. Asiédu, S. Abdourahamane (2018). Bien identifier les maladies fongiques des Ignames en Côte d'Ivoire. *AISA Développement* n°13 ; pp. 5.

4- Kouadjo-Zeze Claude Ghislaine, Konan K. Jean Louis, Daracoum V. Marie Pierre,

(2020). Comment faire le diagnostic précoce de la maladie de jaunissement mortel du cocotier en Côte d'Ivoire. Bulletin CNRA

Research projects

- 2016-2018: Head of the Working Group "Diagnosis and molecular characterization of pathogens responsible for fatal yellowing of coconut palms" CRDI project "Fight against fatal yellowing in the Grand Lahou region"

- 2021-Now: CNRA coordinator of the "validation of the LAMP early detection kit for CSSV virus in cocoa" working group. Project financed by MARS, under the supervision of ICRAF.

- 2021-Now: Coordinator of the working group "identification and characterization of the fungus responsible for basal stem rot in oil palm" of the FIRCA project "*Ganoderma sp.* running".

- 2022-Now: Head of the Working Group "Diagnosis and molecular characterization of *Fusarium spp.* responsible for leaf wilting in coffee. FIRCA 2QC project.

Responsibility

Dr. KOUADJO Zaka Ghislaine Claude is Molecular ecologist (Biotechnology) and director at the Central Laboratory of Biotechnology (LCB: Laboratoire Central de Biotechnologie) of the Centre National de Recherche Agronomique (CNRA) or the National Center for Agricultural Research since one year.

In the LCB / CNRA, my research activities relate to the diagnosis and molecular characterization of pathogens such as viruses cocoa swollen-shoot (CSSV), CMV, BBTV, BSV viruses on banana, the fungus *Mycosphaerella sp* in banana etc

I am also involved in the implementation of the National Laboratory of Biosecurity, which provides research and regulation of GMOs in Ivory Coast for the biosafety.

Reference

✓ **National Polytechnic Institution of Yamoussoukro (INP-HB)**

Prof Adolphe Zeze

Biotechnologie végétale et microbiologie environnemental (Côte-d'Ivoire)

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✓ **Scientific coordinator ; National Center for Agronomic Research (CNRA)**

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