Dr Dioumacor FALL

Researcher at ISRA (Senegalese Institute of Agricultural Research)

Adresse: LCM-Laboratoire Commun de Microbiologie IRD/ISRA/UCAD, Route des Hydrocarbures, BP 1386, Dakar-Senegal

E-mail: dioumacor.fall@isra.sn / dioumacorfall@yahoo.fr

Tel: +221 77 532 37 91
LCM: Three Institutions:

Created in 2004; Certified ISO 9001 : 2008

Institute of Research for Development (IRD, France)

Senegalese Institute of Agricultural Research (ISRA)

University of Cheikh Anta DIOP (UCAD, Dakar)
LCM: Staff

34 persons

- 12 Researchers (ISRA, UCAD and IRD)

- 05 Post-doc

- 06 Technicians

- 08 PhD students

- 03 Master
Three missions

1: Research (basic and applied)

2: Training

3: Valorization
Research Activities

Three major axes of research

i- Microbial (rhizobia, frankia, PPGR, Mycorrhiza) diversity:

- **Phenotypical diversity** (pH, salinity, temperature, dryness tolerance, carbohydrate utilization, antibiotics resistance,....)

- **Genotypical diversity** (PCR-RFLP, Rep-PCR, DNA-DNA hybridation,....)
Research Activities

Three major axes of research

Dendrogram showing the phenotypic relationships among the strains investigated based on UPGMA program analysis of 69 characteristics.

Restriction patterns of twelve strains representative of the various IGS–RFLP profiles obtained and the reference strains of CIRADF using PCR–RFLP of the 16S–23S rDNA intergenic spacer region. The PCR products were digested by two restriction enzymes (HaeIII and MspI)
Research Activities

Three major axis of research

ii- Selection and use of an effectives symbiotic microorganisms to improve plants productivity and their adaptation to defavorable conditions (salinity, drougth,...)

Food species: Groundnut, cowpea, Vigna unguiculata,

Forest species: Acacia genus, Prosopis,...

ii- Effect of trees and soil management on soil microbial functioning
LCM: Equipment

Microscopy equipment

Genetic equipment

Microbial culture equipment

Two -80° C Freezers
2014: 08 publications (April 2014)

2013: 15 publications
**LCM: Collection database**

**Software:** ACCESS 2007  
**Number of referenced strains:** 2467 (nitrogen-fixing bacteria, Mycorrhiza and PPGR)

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**Fiche Signalétique d’une Souche Sauvage**

| LCM: | 1 |

**SOUCHE SAUVAGE**

- **Autres Noms:** Thu25, LMG11854
- **Plante Isolement:** Sebania rostrata
- **Lieu Isolement:** LCM
- **Date Isolement:** 01/07/1991
- **Isolé Par:** L. Nassir
- **Caractéristiques du Sol:**
- **Nod + sur:**
- **Genre et espèce:** Rhizobium sp.
- **Typo Isolement:**
  - Direct sur plante
  - Plageage tuba Gibson
  - Plageage sol
  - Autres
- **Pays:** Sénégal
- **Profondeur:**
- **Type Nodulaire:**
  - Rond
  - Tunnel
  - Autre
  - Artropode

**Mis en Collection le:** [ ] **Age actuel:** [ ] **Ans**

**Destination:**

**Date Sortie:**

**Remarques:**
Colones roses peu muqueuses sur YMA, croissance lente sur YL
Basic knowledge and practice on the collection and identification of microbial resources;

Introduction and operation of the microbial resource data management system;

Bioinformatics knowledge and tools;

Development and manipulation of microbiological informatics platform;
Thank you for your attention