

**Name:** Andre Bationo

**Position Title:** Senior Soil Scientist and Coordinator of  
the African Network of soil fertility and biology

**Appointment Date:** 2002

**Specialty Area:** Soil scientist

**Current time allocation:** 100%

| <b>Project</b> | <b>FTE</b> |
|----------------|------------|
| <b>PE-2</b>    | <b>100</b> |
|                |            |

**Education:**

Ph.D (Soil Chemistry), Laval University (Canada), 1981

M. Sc (Soil Science), Laval University (Canada), 1978

B. Sc (Agronomy), Laval University (Canada), 1977

**Positions held (since terminal degree):**

| <u>Title</u>  | <u>Affiliation</u>  | <u>Years</u>      |
|---|---|-------------------|
| - Senior Soil Scientist and Coordinator of the African Network of soil fertility and biology                                      | (a) Tropical Soil Biology and Fertility Institute of CIAT   | 2000<br>- present |
| - Principal Soil Scientist, an internationally recruited staff position and seconded to ICRISAT Sahelian Center (ISC) since 1982. | (b) International Fertilizer Development Centre (IFDC) and International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) | 1982 - 2000       |

**Research Responsibilities (2002 – present):**

- List here briefly your major research activities and areas of expertise  
Regular consultant for the International Atomic Energy Agency (IAEA)  
Coordinating research in several AfNet projects  
Backstopping IFS grantees within AfNet in their research projects

**Professional Service (2002 – present):**

- Memberships & services in scientific societies  
American Society of Agronomy  
Crop Science Society of America  
Soil Science Society of America  
International Society of Soil Science.
- Service on editorial boards
  - Reviewer of plant and soil
  - Reviewer of nutrient cycling and agro-ecosystems
  - Reviewer of **FIELD CROPS RESEARCH**
  - **Reviewer of soil and tillage research**
- Contributions to major global/regional initiatives and task forces
  - Member of Global land management board
  - DMP/UNEP/GEF Project representative
- Contributions to major international conferences (organizer)

- A workshop on the use of isotope techniques to monitor land degradation funded by International Atomic Energy Agency (IAEA)
- Monitoring Nutrient Flows and Economic Performance in Tropical Farming Systems (NUTMON). An African Soil Biology and Fertility Network (AfNet) Training Workshop. Nairobi, Kenya, 14th April – 25th April, 2003.
- Participatory Approaches to Research and Scaling Up (FPR-SU). An African Soil Biology and Fertility Network (AfNet) Training Workshop, Arusha, Tanzania, 28 September to 10 October 2003.
- Approaches to farmer participatory research and scaling up training workshop, An African Soil Biology and Fertility Network (AfNet) Training Workshop, Nairobi, 2005 (second training on the topic)
- DSSAT Version 4: Assessing Crop Production, Nutrient Management, Climatic Risk and Environmental Sustainability with Simulation Models held in Arusha Tanzania, 23rd – 28th August 2004
- DSSAT Version 4: Assessing Crop Production, Nutrient Management, Climatic Risk and Environmental Sustainability with Simulation Models held in Accra Ghana, October 2005 (a follow-up workshop)

**Honors and Awards (since terminal degree):**

- Only list major honors and awards
  - Canadian International Development Agency (CIDA)
  - International Development Research Center (IDRC) CANADA
  - International Minerals and Chemical Corporation (IMCC)
  - Semi-Arid Food Grain Research and Development (SAFGRAD)
  - United Nations Development Program (UNDP)
  - International Institute of Tropical Agriculture (IITA)
  - Ford Foundation.
  - Have received **the highest civilian award** from the government of Niger for contribution to the development of soil fertility restoration technologies in the Sahel.
  - Has been nominated and accepted to be part of “**Who is Who in the World**” 2003 edition
  - Has been nominated as **International Scientist of the year for 2004** by the International Biographical Centre of Cambridge, England

**Graduate Student Advisement (2002 – present):**

| <u>Degrees completed</u> |   | <u>Current</u> |   |
|--------------------------|---|----------------|---|
| M.S.                     | 5 | M.S.           | 5 |
| Ph.D.                    | 4 | Ph.D.          | 2 |

**Refereed journal publications (2002-2006)**

Only list papers that were published or have been accepted for publication in peer-reviewed international journals; do not include papers that have been submitted

- Fatondji D., Martius C., Biolders C.L., Vlek P.L.G., Bationo A. and Gerard B. 2005. Effect of planting technique and amendment type on pearl millet yield, nutrient uptake, and water use on degraded land in Niger. *Nutrient Cycling in Agroecosystems Journal (Accepted)*
- Kimetu J.M., Mugendi D.N., Palm C.A., Mutuo P.K., Gachengo C.N., Bationo A., Nandwa S. and Kungu J.B. 2004. Nitrogen fertilizer equivalencies of organics of differing quality and optimum combination with inorganic nitrogen source in Central Kenya. *Nutrient Cycling in Agroecosystems* 68: 127-135.

- Sangare M., Bationo A., Hiémaux P., Fernandez-Rivera S. and Pandey V.S. 2002. Effect of type and level of roughage offered to sheep and urine addition on compost quality and millet growth and production in the Sahel. *Nutrient Cycling in Agroecosystems* 62: 203-208.
- Sangare M., Fernandez-Rivera, Hiernaux P., Bationo A. and Pandey V.S. 2002. Influence of dry season supplementation for cattle on soil fertility and millet (*Pennisetum glaucum* L.) yield in a mixed crop/livestock production system of the Sahel. *Nutrient Cycling in Agroecosystems* 62: 209-217.
- Yamoah C.F., Bationo A., Shapiro B. and Koala S. 2002. Trend and stability analysis of millet yields treated with fertilizer and crop residues in the Sahel. *Field Crops Research* 75: 53-62.
- Yamoah C.F., Bationo A., Shapiro B. and Koala S. 2003. Soil management practices to improve nutrient-use efficiencies and reduce risk in millet-based cropping systems in the Sahel. *Tropicultura* 21(2): 66-72.
- Yamoah C.F., Bationo A., Wyatt T.J., Shapiro B. and Koala S. 2003. Simulated weather variables effects on millet fertilized with phosphate rock in the Sahel. *Nutrient Cycling in Agroecosystems* 67: 167-176.
- Bationo A., Kihara J., Vanlauwe B., Waswa B.S. and Kimetu J. 2005. Soil organic carbon dynamics, functions and management in West African agro-ecosystems. *Agricultural Systems Journal (In Press)*
- Biédiers C.L., Michels K. and Bationo A. 2002. On-farm evaluation of ridging and residue management options in a Sahelian millet-cowpea intercrop. 1. Soil quality changes. *Soil Use and Management* 18.
- Kimetu J.M., Mugendi D.N., Bationo A., Palm C.A., Mutuo P.K., Kihara J., Nandwa S. and Giller K. 2006. Tracing the fate of nitrogen in a humic nitisol under different management practices in Kenya. Accepted to *Nutrient Cycling in Agroecosystems*.
- Okalebo J.R., Othieno C.O., Karanja N.K., Semoka J.R.M., Bekunda M.A., Mugendi D.N., Woomer P.L. and Bationo A. 2006. Appropriate available technologies to replenish soil fertility in Eastern and Central Africa. Accepted to *Nutrient Cycling in Agroecosystems*.
- Ouattara B., Ouattara K., Serpantié G., Abdoulaye M., Sédogo M.P. and Bationo A. 2006. Intensity cultivation induced-effects on soil organic carbon dynamic in the western cotton area of Burkina Faso. Accepted to *Nutrient Cycling in Agroecosystems*.
- Schlecht E., Buerkert A., Tielkes E. and Bationo A. 2005. A critical analysis of challenges and opportunities for soil fertility restoration in Sudano-Sahelian West Africa. Accepted to *Nutrient Cycling in Agroecosystems*.

#### **Invited keynote presentation at major international conferences (2002-2006)**

Only list invited keynote or plenary presentations at major international conferences of global scope

- Bationo A., Kihara J., Vanlauwe B., Kimetu J., Waswa B.S. and Sahrawat K.L. 2006. Integrated Nutrient Management – concepts and experience from sub-Saharan Africa. In Aukland M.S. and Grant C.A. (eds) *Integrated Nutrient Management*. The Hartworth Press Inc. NY (In Press)
- Bationo A., Kihara J., Waswa B. and Vanlauwe B. 2005. Technologies for sustainable management of Sandy Sahelian soils (Keynote paper). Proceedings paper presented during workshop, 24 Nov.-3 December 2005 in Khon-Khaen, Thailand.
- Bationo A., Kihara J., Waswa B., Ouattara B. and Vanlauwe B. 2005. Integrated soil fertility management technologies for sustainable management of Sandy Sahelian Soils. Proceedings of the International Symposium on ‘The management of tropical sandy soils for sustainable agriculture- a holistic approach for sustainable development of problem soils in the tropics’, November 2005, Khon-Kaen, Thailand.

**Research Grants (2002 – present):**

- Only list grants on which you were the lead scientist or a principal investigator with major contributions

| <b>Funding source</b> | <b>Grant Title (Principal investigators)</b>   | <b>Amount US\$</b> | <b>Period</b> |
|-----------------------|--|--------------------|---------------|
| Rockefeller           | Core grant to TSBF   | 400,000            | 2002          |
| Rockefeller           | Core grant to TSBF   | 400,000            | 2003          |
| Rockefeller           | Core grant to TSBF   | 400,000            | 2004          |
| Rockefeller           | Core grant to TSBF   | 900,000            | 2005-2007     |
| CTA                   | Participatory Approaches to Research and Scaling Up: An African Soil Biology and Fertility Network (AfNet) Training Workshop   | 44,000             | 2005          |
| CTA                   | Participatory Approaches to Research and Scaling Up: An African Soil Biology and Fertility Network (AfNet) Training Workshop   | 43,500             | 2003          |
| IDRC                  | Promoting Innovative Research To Enhance Sustainable Agricultural Development In Africa: Applying Participatory Approaches And Innovative Capacity Building For Profitable Natural Resources Management: | 1,000,060          | 2006-2008     |
| OPEC                  | Increasing legume cover crops in selected benchmark sites in East Africa   | 60,000             | 2004-2005     |