

# Herbal Analysis Reporter

HERBAL ANALYSIS SERVICES

## SPECIAL THANK YOU:

- EPSRC UK NATIONAL MASS SPECTROMETRY FACILITY
- OUR COLLABORATORS
- OUR WORLD-WIDE FOLLOWERS



## GREETINGS!

Let 2017 be the best year for uncovering the secrets of nature (...page 2)



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## OUR MORINGA STUDY WILL GROW IN 2017 TO A BOOK PROJECT

You might have heard about Moringa — The miracle tree that people use as food and also rightfully call it a cabbage tree ... a nutritional superfood that you may get from your local health shops ... with seeds for cooking oil or even to purify dirty water ... leaves for a range of ailments

including diabetes and associated disorders..... We have seen it used by many and grown from subsistence to industrial scale farming; experimented on it from greenhouse to chemical/biological laboratories. We are now pleased to provide comprehensive analysis for custom-

ers, scientists and everyone who needs accurate information about these plants — yes, plants, because there are 13 of them under the same name! A new book by Elsevier is being published & I am delighted to say that I am the sole author of it. More to come in 2017.

## FROM RESEARCH FRONT

## OUR MEDICINAL PLANTS RESEARCH

From  
crude  
drugs to  
purified  
active  
compounds

It was another successful year for us and our strong army of collaborators across the world. We published over 16 scientific papers in peer review journals and the emphasis, as always, has been on the search of novel pharmacologically active compounds from medicinal plants. We have characterised numerous bioactive compounds with potential therapeutic implications in wound healing, inflamma-

tion, pain, diabetes and Alzheimer's disease among others. Our medicinal plants of analysis were from Africa, India and Europe.



The above is one of the

popular Indian medicinal plants that we have provided evidence for its reputed use as antidiabetic agent.

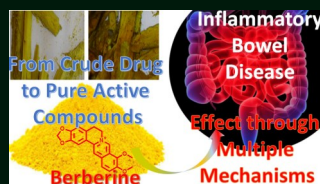


We have also done more extensive studies on *Cassia* and will publish our data very soon.

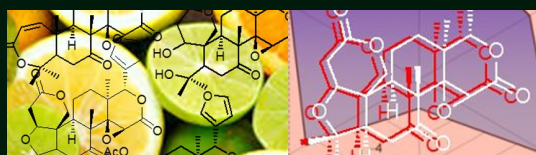
## FROM BIOSYNTHESIS TO SYNTHESIS

Beyond isolating bioactive compounds that nature has provided us in generous amounts, we have also been working on the semisynthesis/synthesis of our active compounds. We also made critical scrutiny of scientific literatures in the field and published several review articles that outline rational approaches to novel drug discoveries. One classical example is the alkaloid, berberine, that we have

isolated from several sources. This compound and its synthetic derivatives have shown a promise in the treatment of some neurodegenerative disorders including the Alzheimer's disease. We also outlined the potential of berberine for treating inflammatory bowel disease through diverse mecha-



nisms. There is still more to come in this area. By using medicinal chemistry tools, we also reviewed the therapeutic potential of citrus limonoids and many other compounds — See our publications.



Employing  
medicinal  
chemistry  
tools to  
enhance  
bioactivity

## EDITORIALS: JOURNALS — BOOKS

In addition to the Moringa Book project which is due to be completed in 2017, Herbal Analysis Services & Pharmacognosy Research Laboratories were addresses that appear in numerous journals both as authorship and editorial contributions.

In 2016, Dr Habtemariam served as an editor and/or member of the editorial board of the following:

Beverages;

Evidence-Based Complementary and Alternative Medicine (eCAM);

Current Pharmaceutical Biotechnology;

Mini Review in Medicinal Chemistry;

Plos One and

The Scientific Pages of Diabetology.

We are editing two special issues in 2017 and are now calling for colleagues to submit their top-rate articles for consideration. Details are available by clicking the links below:





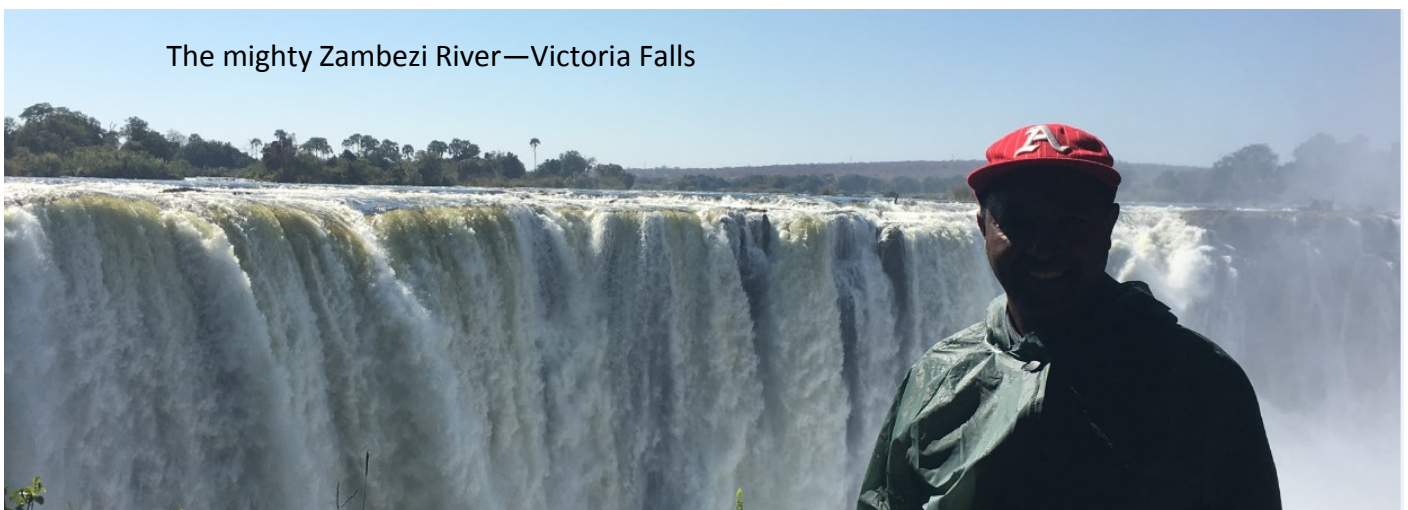
## MY JOURNEY TO SOUTHERN AFRICA



**M**y trip to Southern Africa in June 2016 was very memorable. It was a trip that put me very close to nature and admire all that Africa can offer from small to big; flora to fauna; predators to prey; ordinary to influential....



Recognition by the African Academy of Sciences during the general assembly in Botswana was another memorable moment.







**Dr Solomon Habtemariam**



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**Herbal Analysis Services** has been founded & exclusively owned by Dr. Solomon Habtemariam. Its mission is three-fold: to discover novel drugs from natural sources; employ phytochemical and pharmacological assays to standardise plant medicines; and provide expert **advice and services** on the subject area. The website also provides resources and news on our progress both on modernisation of herbal medicines and the discovery of novel pharmacologically active compounds. Dr. Habtemariam has **published** over 130 papers in peer review journals and regularly hosts experts from all over the world who come for research visits and trainings. We welcome all requests on natural medicine researches and businesses.

#### **Elected Fellow:**

*the Royal Society of Medicine (2007); the Royal Society of Chemistry (2009); the African Scientific Institute (2014); the African Academy of Sciences (2015).*

## **T I M E F O R R E F L E C T I O N**

I managed this year to totally pack up my academic life for a while and go for what I called a family holiday. We spent the whole of the summer period in Ethiopia. Visiting Addis Ababa after 3 years was exiting at first as we have to meet up with many old friends and colleagues. After a week, however, the boredom of a hectic city life became part of us until we rediscover the beauty of the East African rift valley. I strongly recommend it to anyone who visits Ethiopia even for a short period ... In just about four hours of drive from the capital, the stunning lakes, sceneries and countryside life will provide an unforgettable memories.

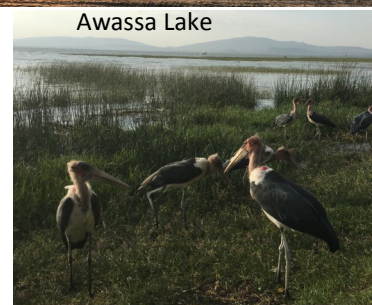
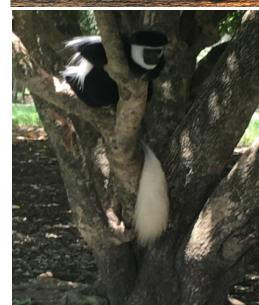
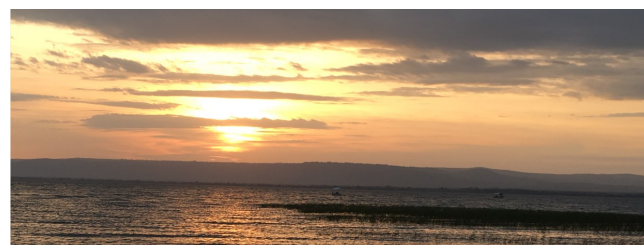
You would be amazed with the 5-star quality treatment you get in this small hut as your hotel at the little known natural hot spring camp of Wondo Genet.



Below @ the Abiyata—Shala National Park. Ostriches grazing in the Acacia forest.



Flamingos dancing at the Abiyata Lake (above) — Sadly the lake has shrunk almost by a quarter since I visited it last some 30 years ago.



## **A C K N O W L E D G E M E N T S**

**THE EPSRC UK NATIONAL MASS SPECTROMETRY FACILITY** — Excellent service as usual.

**OUR COLLABORATORS:** The numerous collaborators from Italy (particularly the team lead by Prof. Giovanni Lentini); Indian Collaborators but primarily Dr George Varghese; Ghanaian colleagues led by Prof. Abraham Mensah are just few to mention.

**OUR FOLLOWERS:** Great support, encouragement and feedback from the thousands of Herbal Analysis Services visitors — We have about half a million visitors each year — Thank You!

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