

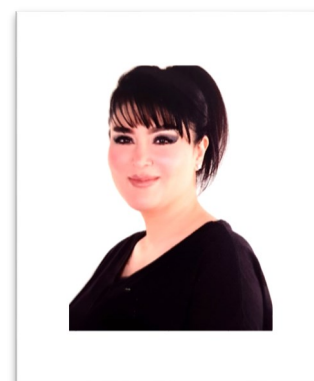
Kuwait Biochar Initiative (KBI)

Dr. Hana'a A. Burezq, Founder & Chairperson

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KBI is Official Sustaining Member of International Biochar Initiative



Dr. Hana'a A. Burezq

Message at World Soil Day 5 December 2021

**Dr. Hana'a A. Burezq National Focal Point United Nations Food and Agriculture Organization
Sponsored Global Soil Partnership**

Soil is a precious natural resource for multiple uses including crop production for food security. Over 90% of our food comes from soil. To feed rapidly growing population, managing our soils sustainably has never been as important in the past as now. In addition, soil also supports ecosystem that has significant role to mitigate climate change. Despite significant campaigning to save soils, soils are degraded to unprecedented level reaching to 33% globally. In order to raise the voice to protect soils for long-term ecosystems services and to pass healthy soils to future generations, on December 2013, the 68th United Nations General Assembly declared 5 December as the World Soil Day, and on **December 5, 2014**, the first-ever official **World Soil Day** celebration took place as a mean to focus attention on the importance of healthy soil and to advocate for the sustainable management of soil resources.

Considering the importance of **soil health** and threats of soil salinization for crop production and global food security, the United Nations Global Soil Partnership declared the theme of the **World Soil Day 2021** as **"Halt soil salinization, boost crop productivity"**. Today, the global community is celebrating the world soil day to aware the public the threats of soil salinization to irrigated agriculture lands which are diminishing rapidly at the rate of 2,000 hectares daily for the past many years, and threatening the capacity of agriculture lands to produce food for the rapidly growing global population. The global annual cost of salt-induced land degradation in irrigated areas is estimated to be USD 27.3 billion related to lost crop production.

As a national focal point from Kuwait to United Nations Food and Agriculture Organization's sponsored Global Soil Partnership, I request you all to put efforts to prevent soil salinization nationally and globally to save our precious agriculture farm lands and to improve soil health for high and nutritious food for all of us. This essentially requires proper maintenance and care of soil all over the world. The global community by making significant efforts could contribute to the efforts of food security, hunger eradication, climate change adaptation, poverty reduction, and sustainable development."

Round Table Meeting

A round table meeting was attended by staff from the Soil Chemistry Laboratory of the Kuwait Institute for Scientific Research. Dr. Hana'a Burezq briefed the attendees about the importance of the **WSD 2021** and its theme **"Halt salinization boost soil productivity"**. In addition to her specific message on the day, she also introduced the attendees soil taxa of Kuwait by sharing a small soil exhibition, their potential uses and ways of soil health improvement using organic and inorganic soil amendments for ecosystem services and to boost soil productivity.

Especially **Dr. Hana'a Burezq** introduced the use of biochar prepared from date palm fronds at a unique facility at KISR and its potential for mitigating climate change through soil carbon sequestration. In addition, the use of biochar as organic soil conditioner can save fertilizers and water in irrigated agriculture for



Soil education & awareness



Soil Exhibition



Sharing soil monoliths



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BIOCHAR in International News



KUWAIT BIOCHAR INITIATIVE



Vision

Educational outreach to Kuwait farming community to save inputs through biochar use to intensify agriculture for food security

Mission

Provide platform to potential biochar stakeholders to support safe and economical use of biochar

Promise

With the support of Kuwait Institute for Scientific Research (KISR), we will reach farmers in Kuwait to educate and transfer biochar production and use technologies in the next 5 years

KBI is Sustaining Member of Canandaigua, NY
14424 United States Based International
Biochar Initiative (IBI)

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Biochar in Climate Strategy

Cameroon has emerged as first country on the globe to integrate biochar into its climate strategy and hoping to eliminate at least 250,000 tons of Carbon Dioxide from the atmosphere. This is a good move and has set the precedence for other countries to follow this initiative to curb greenhouse gasses causing climate change.

<https://www.businessincameroon.com/environment/1111-12048-cop-26-cameroon-becomes-firstcountry-in-the-world-to-integrate-biochar-into-its-climate-strategy#comments>

Johannes Lehmann: COP26 leaders: support biochar scale-up to fight climate change. "Biochar systems can help reduce greenhouse gas emissions, pull carbon from the atmosphere and improve soil health." "What is the most pressing need for additional research on biochar?" "Much remains to be done on the science side, but the most important action right now is shaping policy and financial instruments: Developing carbon markets and the regulatory framework to allow industry adoption is key to safely scaling up the climate benefits of biochar."

<https://cals.cornell.edu/news/2021/11/johannes-lehmann-cop26-leaders-support-biochar-scale-fightclimate-change> (cf IBI Newsletter November 2021)

BBC Views on Biochar

BBC views 16% of greenhouse gas emissions could be saved by using biochar as fertilizers, and industrial scale production could be as powerful as renewable energy to fight against climate change. So, biochar can now be financed as a carbon offset by companies that are struggling to reduce their own fossil fuel use.

<https://www.bbc.co.uk/sounds/play/w3ct1plq>

Logan City Council takes biochar product to market as carbon-neutral program develops

A south-east Queensland council is set to sell biochar manufactured from the city's own waste, direct to commercial buyers, in a bid to reduce carbon emissions and put money back into the city.

<https://www.abc.net.au/news/2021-10-26/logan-council-goes-to-tender-for-biocharproduct/100557700> (cf IBI Newsletter November 2021)

New Research on Biochar

Nematian, M, C Keske, JN Ng'ombe - Waste Management, (2021) "A Techno-Economic Analysis of Biochar Production and the Bioeconomy for Orchard Biomass." Elsevier.

<https://www.sciencedirect.com/science/article/pii/S0956053X21005031>

Wang, H et al. (2021) "Stability of Biochar in Mineral Soils: Assessment Methods, Influencing Factors and Potential Problems." Elsevier.

<https://www.sciencedirect.com/science/article/pii/S0048969721058678>

**KISR Continued as Corporate
Member of International Biochar Initiative**



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