WACAU-2014, Israel

International Workshop on Agricultural Coal Ash Uses
27 – 29 May 2014

Bet Dagan
May 27th 2014
Agricultural Uses of Coal Ash: Strategy, Agronomy, Environment and Health

Field Trip
Shafdan, Revadim
May 28th 2014

Environmental Assessment of Agricultural Coal Ash Uses
Using LEAF – Leaching Environmental Assessment Framework
May 29th 2014
• The ever increasing use of coal as an energy source results in the creation of growing stocks of coal ash, to the point that it is produced globally at a higher rate than any industrial waste or by product.

• The beneficial use of coal ash should thus become an environmental priority.
One avenue for the sustainable utilization of coal ash is its use in agriculture.

The agricultural use of coal ash, a low-cost raw material, can become an important tool in the fight of mankind against the looming global food crisis.
Agricultural applications include:

- Coarse particles of sieved bottom ash as a component of soilless growth media.

- Fly ash as a constituent in the process of turning sewage sludge into a Class A product, suitable for application to farm land.
• Coal ash improves the productivity of clay soils
• weakens the crust formed upon drying of loessial soils
• increases the water holding capacity of sandy soils
• application of coal ash to soils decreases erosion

and

• served as a plant protection agent.
The potential of coal ash for beneficial use in agriculture was demonstrated by experiment and practice the world over, yet concerns were raised regarding the addition of the ash to agricultural fields ranging from the potential enhanced uptake by plants of unwanted trace elements to the presumed risk of groundwater contamination or long term deleterious effects on soil productivity.
Competitive business interests and psychological barriers to accepting waste as a resource contribute to the objection to the wide use of coal ash and particularly in agriculture.
The aims of this workshop are:

- To share and exchange existing knowhow
- to analyze the benefits and risks associated with agricultural use of the ash
- To encourage cooperation and joint projects in the future
We are confident that this meeting will serve as an important step in the ongoing effort to optimize the use of coal ash in agriculture.

We also believe that future cooperation between the participants and joint international research projects will constitute one important outcome of this meeting.
THANKS
And
enjoy the proceedings