

Ayala Water & Ecology to Remediate Israel's Sh*t Mountain With Aquatic Plants

Karin Kloosterman (@greenprophet)

Category: Green Tech and Gadgets

May 13, 2008

Not long ago Eli Cohen, the founder of Ayala Water and Ecology, was invited to New York City to propose solutions for cleaning the city's sewage using plants in an environmentally friendly way. He's already got a number of sites working in Israel and hopes to raise money to build a pilot plant in the US.

Searching around the globe high and low, Cohen seeks out water plants that have the natural ability to digest sewage. The plants he finds also clean air and soil in a natural way.

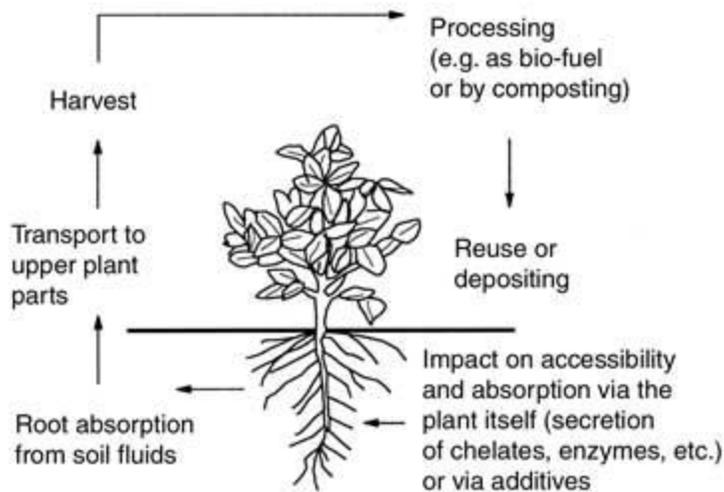
His system called the NBS for Natural Biological System is made up of three elements: aquatic plants that filter and decontaminate pollution, a special substrate for growing the plants, and Cohen's know-how for aerating the unit.

Clean, inexpensive and environmentally friendly, Cohen says: "We are using nature to help nature." Find him somewhere around the globe on his next expedition or on Israel's ecological [Kibbutz Lotan](#), where he is building a system to treat their dairy farm's manure and human waste.

He is also creating a plant-based solution "phytoremediation" as he calls it, to rehabilitate Tel Aviv's old landfill site Hiria (lovingly known by Israelis as Shit Mountain), which is to be turned into a park.



“The trick is to create winning combinations of plants,” said Cohen to ISRAEL21c where we interviewed him first. “Each plant has a different bacterial environment and breaks down a different pollutant. The system has to be constructed according to the waste in a given location.” In some cases, he says his system can be adjusted to produce secondary products, such as [bio-diesel](#); and the chemicals his super-plants can break down include heavy metals, hormones, and residue from gas stations.



(Illustration of how phyto-remediation works)

The plants can even digest explosives and pesticides. For those living off the grid, this is a perfect solution for dealing with residential waste.

Cohen doesn't know how many people are working in the business, but the gentle explorer says: "I hope there are many, because there is a lot of work to do. People understand now that commercial systems can't cope with contemporary problems."

:: [ISRAEL21c](#)

:: [Ayala Water & Ecology](#)

(Image credit: [Big Grey Mare](#))

- See more at: <http://www.greenprophet.com/2008/05/ayala-aquatic-plants-phyto-remediation/#sthash.acsUOfJQ.dpuf>