

AGRICULTURE™

TRADE MAGAZINE

YOUR GATEWAY TO THE MIDDLE EAST AGRIBUSINESS

Growtech

19. INTERNATIONAL GREENHOUSE, AGRICULTURAL TECHNOLOGY AND VERTICAL EQUIPMENT FAIR



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Education Week
**FIND US AT
IRRIGATION SHOW
2019 IN LAS VEGAS**

Introducing

GrowStream

**THE WORLD'S FIRST AND ONLY
PLANT-RESPONSIVE IRRIGATION SYSTEM.**

GrowStream™ is a smart microporous tubing that uses organic chemistry to interact with chemical signals released by crop roots to regulate water flow.

USED FOR FARMING, COMMERCIAL AGRICULTURE, LAWN & LANDSCAPE, GREENHOUSE, VINEYARDS, TREES

NO ELECTRONICS REQUIRED, JUST LOW PRESSURE WATER SUPPLY (1-4 PSI)

**MOST EFFICIENT IRRIGATION SYSTEM IN THE WORLD:
USES 30-90% LESS WATER**

WORKS WELL WITH POOR-QUALITY WATER: WELLS, PONDS, RIVERS, EVEN BRACKISH WATER

HIGH GRADE CROP PRODUCTION IN ALL SOIL TYPES, EVEN IN NON-ARABLE LAND AND SAND

Visit www.RESPONSIVEDRIP.com and learn more about our technology, other market applications, and our global efforts to create a more sustainable future.

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IRRIGATION

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Tomatoes in screen house



Fodder in Kenya

GROWSTREAM™ PROVIDES HIGHER YIELDS AND SIGNIFICANT WATER SAVINGS

By Ms Jan Gould

RDI'S SYSTEM HAS BEEN PRESENTED FOR USE IN NAIROBI'S AND SOMALIA'S CITY BEAUTIFICATION PROJECTS

Water covers approximately 72% of the Earth. With this massive resource comprising the majority of the Earth's surface, then some would question, "Why panic about water scarcity?" Over millions of years, the planet has efficiently recycled the water between the ground, lakes, rivers, oceans and the atmosphere to constantly provide freshwater. The real threat is not about the quantity of water on the planet, but the quality of clean, freshwater. Human waste water and chemicals applied through irrigation contaminate water sources. More than a billion people live without enough safe, clean water.

Due to the increasing demand by mankind's growing population, expanding industry

and urban development: water scarcity is a threatening reality. Responsive Drip Irrigation (RDI) is a solution for conserving and protecting the world's freshwater.

RDI commercially released Growstream™, the world's first plant-responsive irrigation system in December of 2018. This disruptive irrigation technology uses an understanding of plant physiology and organic chemistry, creating Growstream's "smart" subsurface tube. This patented, chemically-infused microporous tubing holds water and nutrients until plant root exudates are emitted that trigger the release of water from the tubing. Growstream™ doesn't attempt to control Nature, but rather interacts on an organic cellular level to

respond to nature's signals.

This nature-driven system is the most water-efficient irrigation ever invented. Growstream's plant-responsive system provides a slow-release delivery of water that matches the roots' absorption capacity. Growstream™ allows the plant to regulate its water delivery, resulting in unmatched plant performance, higher yields and significant water savings compared to conventional drip irrigation system. Lawn and landscape require far less water and achieve superior results. This plant-responsive method of irrigation demonstrates superior efficiency over all currently available subsurface drip systems, using 30-50% less water.

Growstream's tube has millions of microscopic openings along its surface to



Kakuma watermelon field

Lettuce in vertical trays

release water. The system has no emitters to clog or malfunction. RDI's system operates at extremely low pressure (2-4 psi), delivering water in row lengths exceeding 1200 feet. Due to the low operating pressure, irrigation can be delivered from a rain barrel. There is no need for electronic components-just a water source. There are no solenoids, valves, controllers, timers or other electronic devices required.

Growstream's tube supplies water-soluble fertilizers directly in the rhizosphere, reducing the amount of fertilizer that needs to be applied. Growstream™ eliminates fertilizer run-off and prevents contamination from fertilizers into groundwater, lakes, rivers, and oceans.

RDI offers irrigation solutions for landscapes, golf courses, vertical and rooftop gardens, trees & orchards, vineyards, greenhouses, and commercial farms. Growstream™ is available in the U.S. and has been installed

in California, Colorado, Kansas and Florida, with projects pending in New Mexico, Utah and Texas.

RDI was awarded the “Best Innovation by a Startup” at the March 2019 Global Forum for Innovations in Agriculture (GFIA) in Abu Dhabi. Following the GFIA show in Abu Dhabi, RDI began product distribution in Africa and Pakistan. Hydroponics Africa Limited, an RDI distributor in Africa, has installed Growstream™ in greenhouses, farms, and refugee camps. Due to Growstream's simplicity of installation and operation while delivering superior crop production, Growstream™ has been dubbed the “magic tube”. The system is producing higher yields using 40-50% less water than drip or hydroponic methods. RDI's system has been presented for use in Nairobi's and Somalia's city beautification projects. Eva-Anna Farms, RDI's distributor in Pakistan, has begun agricultural installations at the

National Agricultural Resource Center and also began turf and landscape installations for commercial projects and communities in Islamabad. Growstream™ is capable of growing plants in the harshest of environments, while using minimal amounts of water. This plant-responsive technology will forever change the way the world irrigates.

Tomorrow's children should not have to suffer the consequences of the past generations' mistakes. RDI's focus is to facilitate environmental changes today that will not only preserve, but regenerate, the planet for tomorrow.

*For more information about RDI: Visit their website at: www.responsivedrip.com or call them in the U.S. at: (+1) 941.792.9788
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Company email is: info@responsivedrip.com*

THE WATER SOURCE CAN BE A WELL, A RIVER, BRACKISH WATER, TAP WATER, RECLAIMED WATER, ETC. HIGH TEMPERATURES DO NOT AFFECT THE SYSTEM'S EFFICIENCY. GROWSTREAM™ WILL LEAD TO AN UNPRECEDENTED CONVERSION OF PREVIOUSLY NON-ARABLE LAND FOR CROP PRODUCTION TO INCREASE GLOBAL FOOD SUPPLY, WHILE DRASTICALLY REDUCING THE USE OF EARTH'S MOST VALUABLE RESOURCE: WATER.