

# the **GrowingEDGE**

Celebrating our 10th Year!

News & Information for Indoor & Outdoor Growers

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**Hydroponics  
and Inmates**



**Bt-Engineered Crops**



**Hydroponics  
Against Hunger**



**Scented Geraniums**



**Living Walls**

USA \$4.95  
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*Wolfgang Amelung's tropical biomes  
provide the home and office with a breath of fresh air.*

*Text and photos by Michael Spillane*

Indoor air pollution has become a major problem in our energy-efficient and tightly insulated homes and offices. The source of the problem — collectively known as sick-building syndrome — is often difficult to detect, but its effects have plagued people with an array of symptoms and health problems ranging from fatigue, headaches, nausea, and congestion to serious illness (not to mention low productivity levels and absenteeism from work because of illness). Toxic gases released into the air in closed spaces — from synthetic building materials, carpeting, paints, solvents, adhesives, cleaning products, chlorine, etc., combined with mold spores — have resulted in a serious threat to the health and well-being of people at home and in the workplace.

Although the term sick-building syndrome has become an undesirable catchphrase of the 1990s, one solution to the problem could launch us into the next millennium with a new concept in how we perceive interior space. As opposed

to the negative consequences of slowly suffocating in heavily polluted, oxygen-depleted, closed environments, the answer to this modern-day dilemma is quite exhilarating and healthy to mind, body, and spirit.

Imagine all homes, offices, and other interior spaces equipped with custom-designed mini-rainforest ecosystems that act as environmental vacuum cleaners, sucking all the toxic materials out of the air and filtering them through plants and water. Umbilical water lines connect the main ecosystem (or biome) to smaller systems or hydroponic planters located in other parts of the room or building. Clean, living water is channeled throughout the home or office, and the system produces fresh air and a readily available supply of herbs, salad crops, and other useful plants grown in the hydroponic units. By bringing the natural world into the heart of our interior living spaces, the most stifled room can be transformed into a veritable sanctuary.

Founder of Genetron Systems, Wolfgang Amelung has made this futuristic dream a reality. His patented designs and environmental installations are changing the face of some of Toronto's corporate interiors into functional and breathtakingly beautiful living works of art. Amelung's vision, ingenuity, and determination has culminated in the creation of tropical biomes that sustain a high-order ecosystem with clean, pathogen- and algae-free water. Not only has this technology produced an immediate solution to the problems of sick-building syndrome, but it has also established a blueprint for using ecological engineering as a way to inject new life and a healthy balance into home and office spaces.

"The whole system is a filter," says Amelung. "The water going up and down the system wall and passing under the plants is constantly being filtered, and the plants then evolve to the conditions to become more efficient. Effectively, you have this biological unit that acts like a

*Genetron's Breathing Wall at Club Monaco in Toronto — A 40 x 40 ft installation that houses 2,000 species of plants, fish, and animals.*

barnacle, inventing new ways to suck and pull the garbage in the air towards itself. It's cleaning out the toxic chemicals that we create and then directing the poisons into areas that can become useful to the whole system."

Genetron's premise is "to create indoors what nature does best outdoors — purifying and regenerating the living environment." Amelung's quest to achieve this goal started at age three with an interest in keeping plants and fish. In high school, he was nicknamed "Philosopher" because he was always asking questions and searching for answers. After reading a book in grade 11 titled *The Phenomenon of Man* by Pierre Desjardins, his interest and ideas about biology and spirituality began to take shape.

Born in Germany, Amelung has lived most of his life in Canada. He obtained a Bachelor of Science degree in Biology at York University in Toronto but found science to be a little barren and exploitative. He gravitated more towards the philoso-

