

International Symposium confirms plants improve health, air quality and quality of lives

Conclusive proof emerged from the Plants for People Symposium, 'Reducing Health Complaints at Work', held at the Floriade, Holland in June, that plants can dramatically affect the quality of our work and home lives, with significant health benefits resulting.

Internationally renowned scientists and speakers flew in from Australia, the USA and Europe to address the delegates on the latest findings on the effects of plants.



The key message of **Ronald Wood from the University of Technology in Sydney**, who had identified how plants and the potting compost interact to cleanse the air, was that *the more VOCs (volatile organic compounds) in the air the more effective the plants are at cleansing*. 'When we remember that indoor air is often more polluted than outdoor air, having plants in our homes and workplaces becomes very important,' commented Wood.

"Plants clean, plant-shaped ornaments pollute"

Challenged by the suggestion that artificial plants could be just as effective, Professor Wood not only refuted the description of artificial, preferring the far more accurate term "plant shaped ornaments", but conclusively demonstrated that they can actually further pollute the system by expelling VOCs into the air, not diminishing them.



From the USA, Professor Roger Ulrich of Texas A&M University focused on the effects of plants in hospital workplaces in improving patient recovery time, reducing dependence on serious post operative drugs and the relaxation and increased focus of staff, where green plants were present. His research in the San Diego Children's Hospital, which had been re-designed to ensure that every patient had a view or were in the presence of plants, resulted in the number of operations increasing by 13% per year and charitable donations going up by \$16 million. Very significant for the highly competitive private hospital sector.

Staff attitudes and commitment also improved as a result of the 'greening' of the hospital.

"Without plants you could be out of business"

... Was Professor Ulrich's conclusion – a view that is obviously being taken seriously as he has been asked to address the Netherlands Government Health Body.



A more relaxed and happier workplace is healthier and more productive, at least that was the experience of the Radium Hospital in Oslo, which for 5 years featured as guinea pigs for **Professor Tjove Fjeld.**



Radium



Hospital

Oslo



Before (left) and after (centre & right) plants and full spectrum lighting were installed

After putting plants and full spectrum lighting into the workplace, their absenteeism level due to minor health and sickness problems, reduced from 15% to 5.6% and stayed that way over the full 5 years. And in another 3 month experiment earlier this year, the Nordea Bank returned similar figures – overall an average 10% reduction in staff illnesses.



“Plants make pc workers more efficient”

John Bergs from Holland has studied the effects plants have on office workers at the engineering firm DHV AIB. Whilst spatial design and office technology - from air conditioning to computerisation - has changed considerably in the last 30 years, consideration has not been given to the effects of these changes on the workers.

Berg found that for workers who spent 4 hours or more a day in front of a computer screen, the introduction of plants made a significant improvement to their efficiency, concentration and general well-being.

This could have a hugely beneficial impact for the more than 7.6 million desk bound office workers in the UK most of whom will be pc users.



Creating buildings fit for plants is great for humans

From Germany, architect Dieter Schempp shared his 'put into practice' vision of solar architecture and the use of plants. Schempp practices what he preaches, his first office was in a meagre glasshouse which has grown into a smart modern solar panelled structure shaded by huge indoor plants in summer.

Schempp uses plants in his glass buildings - taking care to use glass with a K-value of 0.8 – to give shade, deflect noise, improve the ambient temperature and to cleanse and recycle air. With work at MOMA in New York, as well as international awards, his views are gaining great currency in the world of architecture.



“Planting encourages higher spending”

American Professor Kathleen Wolf presented her findings on the effect of planting outside of retail outlets.

The retailers found the presence of exterior planting less important than the consumers they were trying to attract. In some cases they saw it as a reduction of visibility both of signs and entrances and

felt it discouraged customers.

Green light of plants

In summary Symposium Chairman Ulrich confirmed that new research and substantial evidence on the positive effect of interior plants had confirmed to a far greater extent than ever before that plants can and do improve our health in an interior environment, reduce absenteeism and improve concentration and productivity.

Fresh international seminars in the next 2 or 3 years are expected to reveal further evidence and proof of the vital role that plants will play in our lives in the future.