A TECHNOLOGY THAT MAY CHANGE THE WORLD

A major new technology has been developed by The University of Nottingham, which enables crops to take nitrogen from the air rather than expensive and environmentally damaging fertilisers. Professor Edward Cocking, Director of The University of Nottingham has developed a unique method of putting nitrogen-fixing bacteria into the cells of plant roots.





Nitrogen fixation, the process by which nitrogen is converted to ammonia, is vital for plants to survive and grow. However, only a very small number of plants, most notably legumes (such as peas, beans and lentils) have the ability to take nitrogen from the atmosphere with the help of nitrogen fixing bacteria. The vast majority of plants have to obtain nitrogen from the soil, and for most crops currently being grown across the world, this also means a reliance on synthetic nitrogen fertiliser.

Nitrate pollution is a major problem as is also the pollution of the atmosphere by ammonia and oxides of nitrogen. In addition, nitrate pollution is a health hazard and also causes oxygen-depleted 'dead zones' in our waterways and oceans.

The implications for agriculture are enormous as this new technology can provide much of the plant's nitrogen needs. It is anticipated that the new technology will be commercially available within the next two to three years.

Long-Distance Relationships Doomed to Failure?

Long-distance relationships are seen as destined to fail, but are they actually creating stronger bonds than a geographically closer relationship? A recent paper published in

