

9<sup>th</sup> International Conference on

# Global Warming, Climate Change and Pollution Control & Recycling : Reduce, Reuse and Recycle

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## Feeding nine billion people sustainably

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We have a problem. Soon 10 billion people will be coming to dinner. Collectively we will have to produce 60-70% more food than we do today. The question is how. Will we put more land under cultivation or can we produce more food on the same or less land more sustainably. Genetic engineering (GE) of crops has been around for over 20 years. Research that tracks environmental aspects of agriculture demonstrates how these GE crops have helped reduce the environmental impact of agriculture. Herbicide-tolerant (HT) crops have helped farmers reduce or in some cases eliminate tillage. This reduction has profound benefits to soil ecology, moisture, and erosion issues. No-till agriculture also greatly reduces CO<sub>2</sub> emissions from tractors. Insect-resistant (IR) crops have allowed for massive reductions in broad-spectrum insecticide use while maintaining or increasing yields. With insect damage being one of the main causes of food rot, increases in IR crops will help to reduce food waste. Disease resistant crops are also helping farmers reduce insecticide applications. The new fungal resistant GE crops will allow for massive reductions in fungicide applications. If we are to succeed in feeding the future populations more sustainably we must incorporate the best of every agricultural system. Twenty years of research has demonstrated GE crops reduced the environmental impact of food production while increasing yields. Genetically engineered crops need to be part of the solution.

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