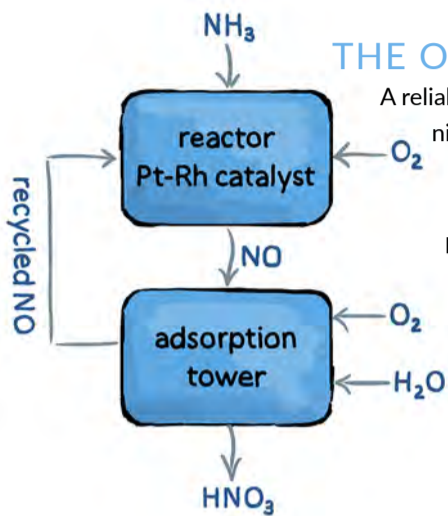


AGRICULTURAL SCIENCE



THE OSTWALD PROCESS

A reliable, simple process for producing nitric acid for nitrogen fertilisers is developed by German chemist, Wilhelm Ostwald. The Ostwald process is still widely used today.

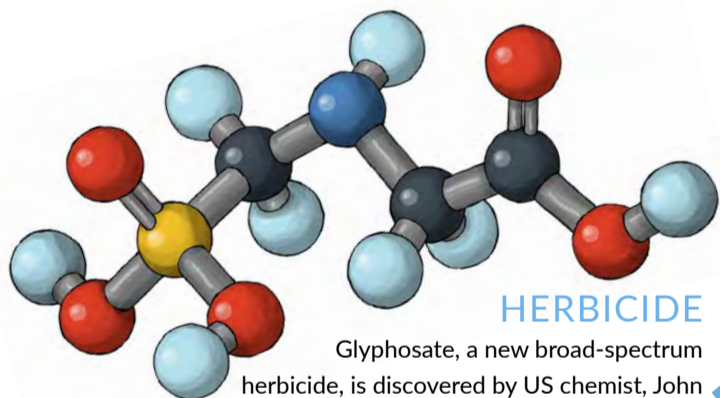
1902

BIODIESEL

Biodiesel production is first publicly described by Belgian chemist Charles Chavanne. Today, biodiesel plays a key role in reducing global reliance on fossil fuels.



1937



HERBICIDE

Glyphosate, a new broad-spectrum herbicide, is discovered by US chemist, John Franz, becoming the world's best-selling weed control for farmers and gardeners alike.

1971

GOLDEN RICE

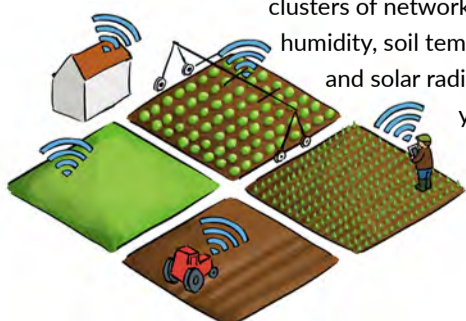
Beta-carotene -rich 'golden rice' is revealed by scientists Peter Beyer and Ingo Potrykus as a genetically-modified solution to widespread vitamin A deficiencies in regions where rice is the dominant crop.



1983

CROP MONITORING TECHNOLOGIES

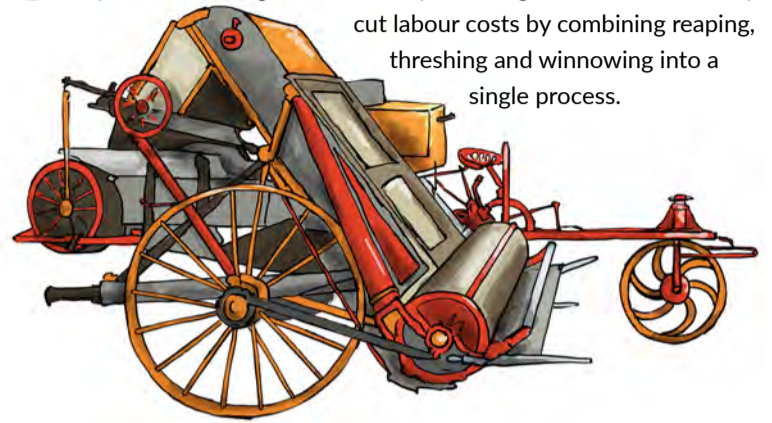
Improved crop monitoring technologies which deploy clusters of networked sensors to measure rainfall, humidity, soil temperature, soil moisture content and solar radiation allow farmers to increase yields and reduce crop damage.



2017

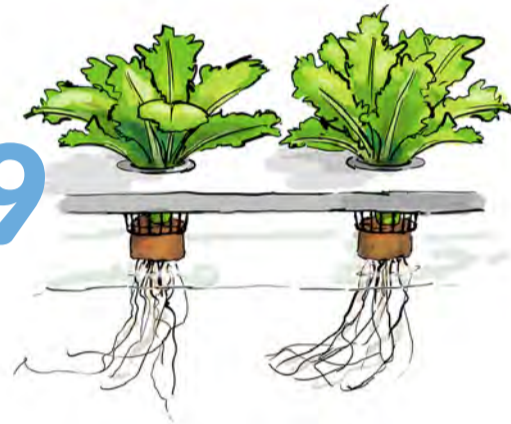
1885 COMBINE HARVESTER

The first commercially successful combine harvester is produced by Australian Hugh Victor McKay, enabling farmers to drastically cut labour costs by combining reaping, threshing and winnowing into a single process.



HYDROPONIC CROP GROWING

Soil-free, 'hydroponic' crop growing methods are publicly promoted by US researcher, William Gericke, raising the profile of methods in use today to help feed the world's growing population.



1929

1944 DISEASE-RESISTANT WHEAT

High-yielding and disease-resistant dwarf wheat varieties are first developed by Norman Borlaug in Mexico. Borlaug is credited with saving over a billion people worldwide from starvation.



GENETICALLY-MODIFIED PLANTS

The first genetically-modified plant is developed by Monsanto scientists, marking the start of engineering crops to alleviate world hunger and poverty through disease- and drought-resistance.



1983

2000 2006 DROUGHT TOLERANT MAIZE

The 'Drought Tolerant Maize for Africa' project is launched, providing more than 200 new high-yielding, drought-tolerant maize varieties to African farmers to improve food security and fight poverty and malnutrition.

