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Sommario/riassunto

"The global population is growing at an alarming pace, as a result of this, comprehensive manufacturing is needed to satisfy human demand. One of the methods, nanotechnology, gives a solution to sustainable agriculture. The miniature aspect of nanotechnology controls major agricultural processes due to its diminutive dimensions. In agriculture, nano-materials aim to decrease the quantity of chemicals spread, minimize fertilization losses and increase production through management of pesticides and nutrients. With new Nano tools for managing fast diagnostic diseases, and improving the plant capabilities to absorb nutrients, nanotechnology has the ability to enhance agriculture and food. Specific applications, such as nano-fertilizer and nano-pesticides, for trailing products and nutrient concentrations, include the use of nanotechnology in agriculture to improve productivity without contaminating soil, water or the protection of various insect pests and microbial diseases. Nanotechnology can function as sensors to monitor agricultural field soil quality and thereby preserve agricultural plant health"--