

Technologia Luminex xMAP[®] – nowe narzędzie w diagnostyce chorób roślin

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Technology Luminex xMAP[®] – a new tool in the diagnostics of plant diseases

Summary

The presented paper reviews the aspects of Luminex xMAP[®] technology as a new tool in diagnostics of plant diseases. Luminex xMAP[®] technology, based on flow cytometry, employs tiny colored beads (microspheres) combined with specific analytes and ligands (antibodies, oligonucleotides ect.). Initially, this system was known as FlowMetrix. The Luminex xMAP[®] technology is mainly employed in medical diagnostics. This technology is suited to very wide range of medical applications: allergy testing, cancer markers, gene expression, genotyping, tissue typing and many others.

Luminex xMAP[®] technology was applied in the diagnostics of plant diseases. The first attempts were directed towards the fungal and bacterial plant pathogens. Nowadays, this technology has been applied to detection of bacteria such as: *Pectobacterium carotovorum* or *Dickeya dianthicola* and viral pathogens such as: Potato Virus X, Potato Virus Y and Potato Leafroll Virus. The Luminex xMAP[®] technology offers simultaneous detection of several factors (pathogens) in one test.

Key words:

detection, Luminex xMAP technology, plant pathogens

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