

Pesticide Residues

Food Industry

“Specialist Laboratory Services”



Agriculture chemicals including pesticides are widely used all over the world to increase efficiency, productivity, quality and variety of produce all year round. The Food and Agriculture Organisation (FAO) defines a pesticide as ‘any substance or mixture of substances intended for preventing, destroying, attracting, repelling, or controlling any pest including unwanted species of plant or animals during the production, storage, transport, distribution, and processing of food, agricultural commodities, or animal feeds or which may be administered to animals for the control of ectoparasites’. The residue of the pesticide chemical including the derivatives is tested to ensure that food safety is maintained.

Food Standards Australia New Zealand (FSANZ) has been monitoring the safety of pesticides in and on food for over 30 years. FSANZ determines the maximum permissible residue levels (MRL) in local and imported food. The various pesticide residues are categorized into groups. The most common groups tested are:

Organochlorine pesticides (e.g. aldrin, chlordane, DDT, dieldrin, endosulfan, lindane)



Organophosphorus pesticides (e.g. chlorpyrifos, dimethoate, fenthion, parathion, phosmet)

Carbamate pesticides (e.g. aldicarb, carbaryl, phenoxy carb, pirimicarb)

Dithiocarbamates (e.g. mancozeb, ferbam, propineb, zineb)

Synthetic pyrethroid pesticides (e.g. bifenthrin, cyhalothrin, deltamethrin, permethrin)

Herbicides (e.g. glyphosate, metribuzin, oxyfluorfen, pendimethalin)

Acaricides (e.g. buprofezin, propargite, tebufenpyrad, tetradifon)

To ensure that food safety is maintained, Leeder Consulting can screen up to **500 pesticide residues in food**, water and soil. We understand the importance of detecting the lowest levels possible without compromising quality and service. To achieve these low levels, we analyse residues by Gas Chromatography-Mass Spectrometer (GS-MS), Liquid Chromatography-Mass Spectrometer (LC-MS) or by High Pressure Liquid Chromatography (HPLC). We cater for the local, export and import markets and are an approved laboratory under the Australian Quarantine and Inspection Service (AQIS) Imported Foods Program.

Quality Assurance and Quality Control are primary considerations when undertaking food analysis. Leeder Consulting is AS/NZS ISO 9001 Certified, the laboratory is NATA Accredited, a Registered Quarantine Laboratory and “Appointed Analyst” under the Commonwealth Imported Food Control Act.



Leeder Consulting offer a range of specialised high-tech, non-routine and on-site services. Access to leading edge technology and expertise in Australia and overseas guarantees results when and where you require. To discuss your requirements or for more information call us now.



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