

# Pesticide Analytical Testing: Why does it matter? How we can help.

Developments in modern agriculture, governmental regulations and increased global trade necessitate the testing of an evolving range of pesticides and metabolites in food and environmental samples. At Dr. Ehrenstorfer we understand that these changes can affect your reference material needs, and we are continuously updating our product portfolio to ensure you have the products you need with the quality you can trust. Learn more about our range of pesticides and how we can help you find the most relevant products to meet your analytical requirements for food and environmental testing.

## Neonicotinoids



Neonicotinoids are a class of insecticide that are chemically similar to nicotine. They function by attacking the central nervous system of insects and account for around 25% of all insecticide use globally.



Neonicotinoids are water-soluble, which helps the plant absorb the pesticide through the soil rather than remaining on the surface of the plant.



While not initially fatal, their environmental persistence makes them particularly dangerous and they have been linked to declining bee populations. Reports show a 54% loss of the commercial honeybee in the UK alone, in addition to a 40% loss in the US and 25% in Europe<sup>3</sup>.

## The global agricultural pesticide market

In 2018 the value of the global agricultural pesticide market was roughly \$56.5 billion. This is expected to continue growing with a CAGR of about **4.7%**

**2.5 Million** tonnes of pesticides are utilised annually worldwide<sup>1</sup>



## Glyphosate



Glyphosate is used to control broadleaf weeds and grasses both commercially and residentially.



Insecticides control **900,000** insects and mites  
Fungicides control **50,000** plant pathogens  
Herbicides control **8,000** weeds

# 40 YEARS



**We are backed by over  
40 years of experience**



With decades of expertise assisting in pesticide analysis, Dr. Ehrenstorfer is a world leader in the production of pesticide reference materials.

We have consistently adapted and expanded our pesticides portfolio to meet changing regulations, technology and quality requirements, ensuring we can offer you the most up-to-date products to meet your need for your science for a safer world.

## Dr. Ehrenstorfer is here to help



# 88%+

of our production units are produced under our ISO 17034 scope of accreditation.



# 100%

Dr. Ehrenstorfer reference materials are produced to the highest quality, with all analytical measurements performed under our ISO/IEC 17025 scope of accreditation.

# 1700+

NEAT PESTICIDES & PESTICIDE METABOLITE products in our portfolio, each a unique analyte for pesticide analysis.

# 1600+

SOLUTIONS & MIXTURES for pesticide analysis, in a range of concentrations.

# 200+

NEW PRODUCTS added to our pesticides range in 2020.

# 750

In the United States alone, there are over 750 products that contain glyphosate<sup>2</sup>.



Countries are continuously increasing regulations and bans due to being linked to cancer in humans.



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<sup>1</sup> Alavanja, Michael C R. "Introduction: Pesticides Use and Exposure Extensive Worldwide." Reviews on Environmental Health, U.S. National Library of Medicine, 27 Sept. 2010. [www.ncbi.nlm.nih.gov/pmc/articles/PMC2946087/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2946087/).

<sup>2</sup> "Glyphosate." National Pesticide Information Center, [npic.orst.edu/factsheets/glyphogen.html](http://npic.orst.edu/factsheets/glyphogen.html).

<sup>3</sup> "Bees In Decline." Greenpeace USA, Greenpeace Research Laboratories Technical Report, [www.greenpeace.org/usa/bees-in-decline/](http://www.greenpeace.org/usa/bees-in-decline/).