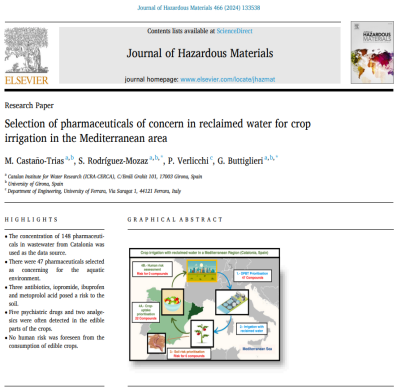

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Research Paper

Selection of pharmaceuticals of concern in reclaimed water for crop irrigation in the Mediterranean area

M. Castaño-Trias [a,b], S. Rodríguez-Mozaz [a,b,*], P. Verlicchi [c], G. Buttiglieri [a,b,*]

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[b] University of Girona, Spain
[c] Department of Engineering, University of Ferrara, Via Saragat 1, 44121 Ferrara, Italy

HIGHLIGHTS

- The concentration of 148 pharmaceuticals in wastewater from Catalonia was used as the data source.
- There were 47 pharmaceuticals selected as concerning for the aquatic environment.
- Three antibiotics, iopromide, ibuprofen and metoprolol acid posed a risk to the soil.
- Five psychiatric drugs and two analgesics were often detected in the edible parts of the crops.
- No human risk was foreseen from the consumption of edible crops.

GRAPHICAL ABSTRACT

PRIMA-SAFE: Advancing Research on Pharmaceuticals in Reclaimed Water

Description

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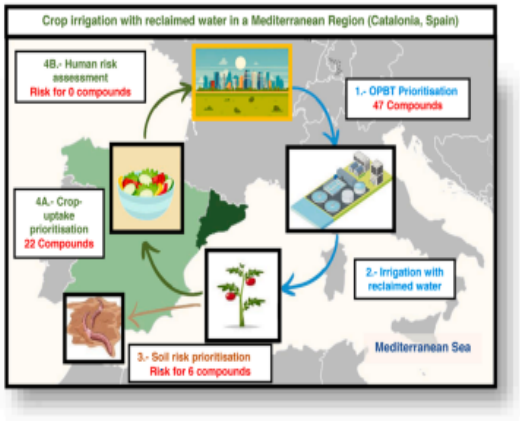

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The **34th Annual SETAC Europe Meeting** was held in **Seville, Spain**, from **May 5th to 9th, 2024**. The event brought together scientists from academia, industry, and government to exchange and advance knowledge in environmental science. The conference aimed to support adaptive and responsive environmental management by facilitating the dissemination and application of cutting-edge research findings.

As part of the program, **Sara Rodriguez-Mozaz**, a researcher from the **Catalan Institute for Water Research (ICRA)**, presented findings from the **PRIMA-SAFE project** through a poster presentation.

The study, titled:

- **“Pharmaceuticals in a Soil-Plant System Irrigated with Reclaimed Water in the Mediterranean Area: Environmental and Human Health Risk Assessment”**, authored by Rodriguez-Mozaz, S., Castaño-Trias, M., Verlicchi, P., and Buttiglieri, G,

focused on the presence of pharmaceutical contaminants in soil-plant systems irrigated with reclaimed water in the Mediterranean region. The research provided insights into the environmental and human health risks associated with these contaminants, emphasizing the importance of monitoring and risk mitigation strategies in water reuse practices.

The PRIMA-SAFE project’s participation at SETAC Europe 2024 underscores its dedication to advancing sustainable water reuse practices and contributing to global efforts in environmental protection and resource management.

Category

1. Senza categoria

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