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Global Research Alliance meet on Reducing Emissions from Fertilizer

Participants from 10 member countries of the Global Research Alliance (GRA) attended a meeting to plan the new GRA Flagship project “Development of context-specific emissions factors from the application of nitrogenous fertilisers.” which was hosted by the Agricultural Climate Research Centre in Teagasc.

Nitrous oxide (N₂O) emissions from agricultural applications of nitrogenous fertiliser can vary significantly depending on how, where and when a fertilizer is used. Modifying farm systems and making changes to management practices, such as fertilizer type, timing, amount, rate and location of fertilizer application, has been shown to dramatically influence the amount of N₂O being emitted.

Marta Alfaro from Chile explained that the goal of the Flagship project is to encourage global efforts to reduce greenhouse gas emissions from nitrogenous fertilizer by enabling its usage to be more accurately reflected in national level greenhouse gas accounting, and to optimize nitrogen use efficiency in croplands and grasslands.

Tony van der Weerden from AgResearch New Zealand highlighted that quantifying the emissions from applying nitrogenous fertilizers in different situations in national inventories is a significant challenge for many countries. The Flagship project will greatly help in improving national greenhouse gas inventories around the world and identify practices for farmers to reduce emissions.

In Ireland and New Zealand research funding from the Department of Agriculture, Food and the Marine in Ireland and the Ministry of Primary Industries in New Zealand has been secured to build an international database to support greenhouse gas modelling for grassland soils. Dominika Krol, Teagasc said; “This will help to support the GRA flagship project to compile existing data, and undertake new field measurements, to develop context specific emissions factors relating to the application of nitrogenous fertilizers for the purpose of inventory improvement including N₂O mitigation accounting.”

Karl Richards, Teagasc said that these exciting international projects are important ongoing research activities in the Teagasc Agricultural Climate Research Centre to help to reduce greenhouse gas emissions from farms in Ireland and internationally.

Ends.

Further Information

<https://www.teagasc.ie/environment/climate-action/climate-centre/>

<https://globalresearchalliance.org/flagship-projects/n-fertilisers/>