Manure Management Network – Research Update 2023

Focused on reducing GHG emissions from livestock production and increasing the nutrient use efficiency of manures and soil organic matter by the improvement of excreta management.

Tony van der Weerden

(co-chair of Manure Management Network)

DATAMAN database completed

www.dataman.co.nz

Received: 13 July 2020 | Accepted: 9 December 2020 | Published online: 22 January 2021
DOI: 10.1002/jeq2.20186
Journal of Environmental Quality
DATASETS

DATAMAN: A global database of nitrous oxide and ammonia emission factors for excreta deposited by livestock and land-appli

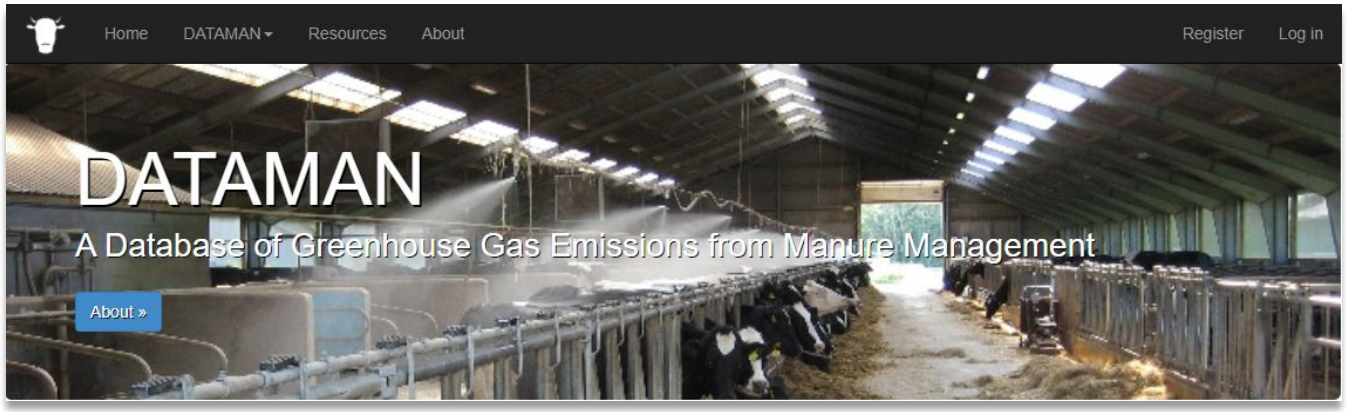
Received: 29 April 2022 | Accepted: 20 October 2022
DOI: 10.1002/jeq2.20430
Journal of Environmental Quality
DATASET ARTICLE

DATAMAN: A global database of methane, nitrous oxide, and ammonia emission factors for livestock housing and outdoor storage of manure

Field
184 papers
~ 5600 EF values

Storage
239 papers
~ 1300 EF values

Housing
263 papers
~ 2000 EF values



Beltran et al. 2021; Webb et al. 2021; Hassouna et al. 2023

DATAMAN database completed

DATAMAN

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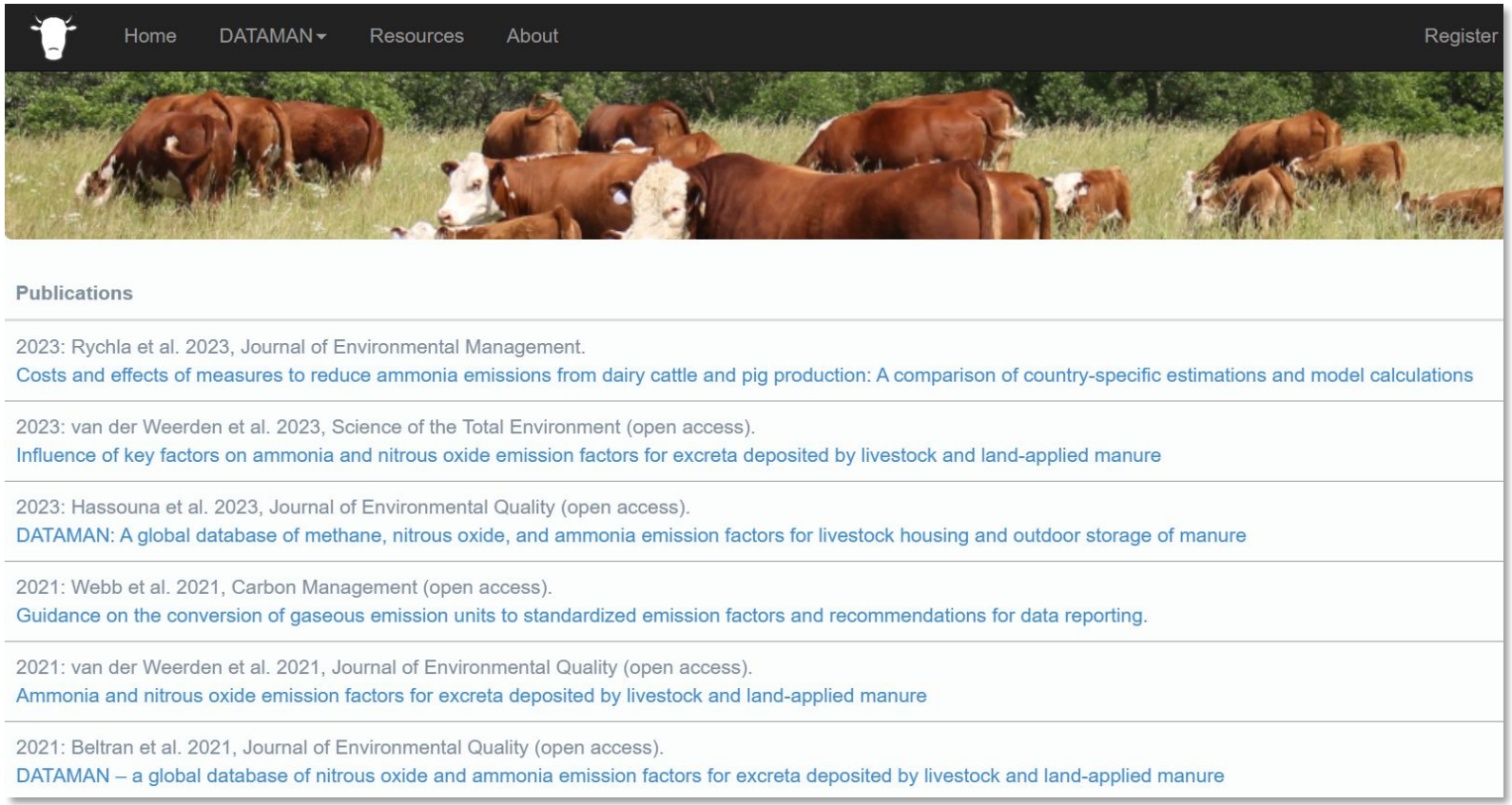


The end of the beginning: Version 1

Huge international effort!

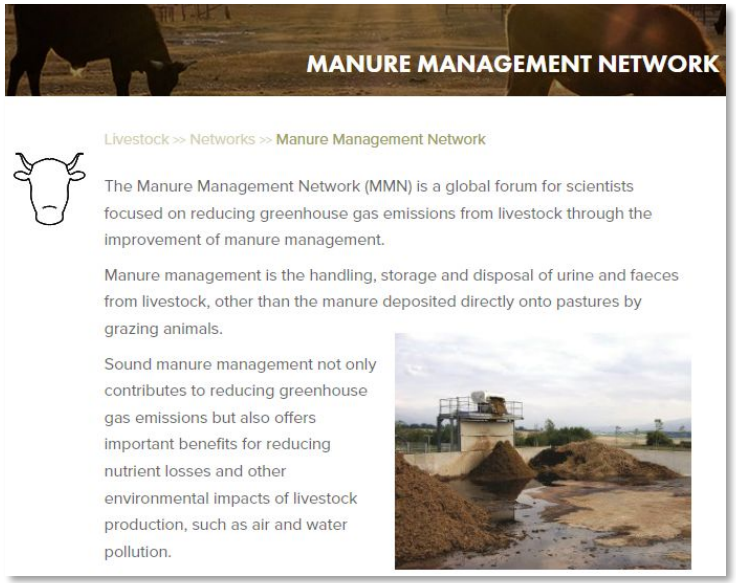
Still keen to expand further

Get in touch if you wish to contribute or analyse data

Stocktake of GHG Manure Management projects completed

Purpose of stocktake

1. Identify potential collaborators, knowledge experts in terms of methodologies or research topics
2. Awareness of current research efforts and focus: useful for strategic gap-filling



- Collation of key information on current CH_4, N_2O and NH_3 measurement, mitigation and modelling research projects.
- Access via GRA MMN webpage.

- Relies on contributions from Network members
- Aim to update annually
- Get in touch if you want to lead or assist

Activities:

The MMN has completed a stocktake of GHG manure-related research projects from across member countries.

Click HERE to download an excel file of the stocktake.

Want to get involved?

- Co-chair of MMN
- Expand DATAMAN database via contributing data
- Lead or assist with annual stocktake of projects
- Assist with updating experimental protocols for housing and storage measurements
  contact Melynda Hassouna (INRAE)
- Lead the development of rapid on-farm tests for manure nutrient supply

- Flagship ideas
  - Improving Methane Emissions Estimates from Manure (new)
  - Expand Manure GHG data from developing countries (new)
  - Bio-based fertilisers – development of low-cost approaches (last year)