

The effect of ruminant urine and dung deposition and synthetic nitrogen fertiliser application to pasture on Irish agricultural N₂O profile.

D.J. Krol^a, R. Carolan^b, E. Minet^a, K.L. McGeough^b, C. J. Watson^b, M. Harty^{a,c}, C. Elliot^c, P.J. Forrester^a, G.J. Lanigan^a, K.G. Richards^a

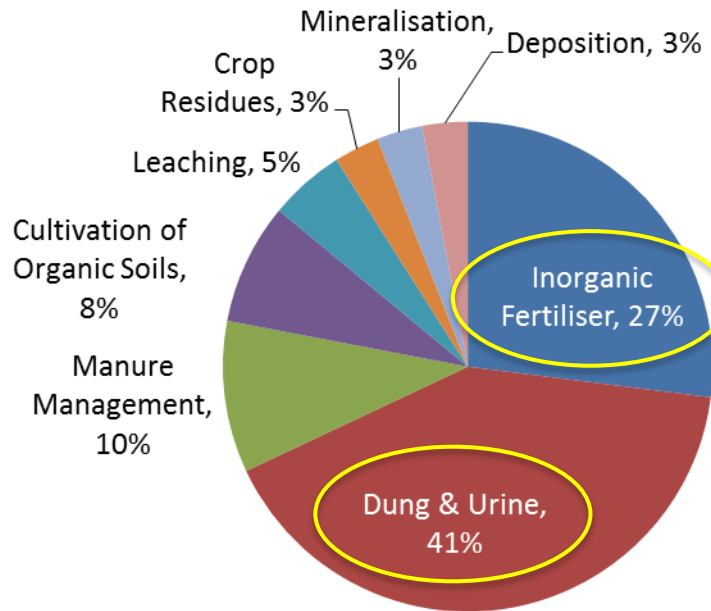
^aTeagasc, Crops, Environment and Land Use, Johnstown Castle, Co. Wexford, Ireland

^b Agri-Food and Biosciences Institute (AFBI), Belfast, BT9 5PX, Northern Ireland

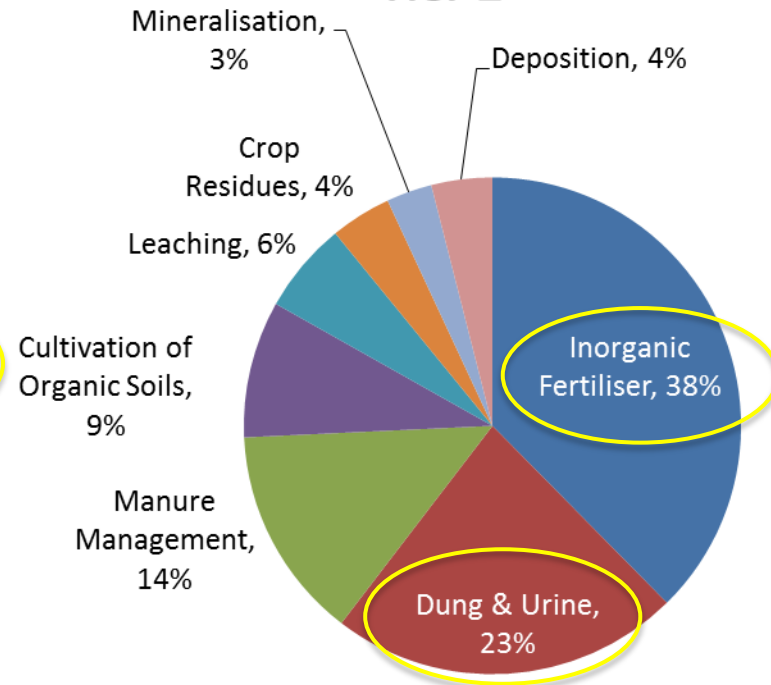
^cSchool of Biological Sciences, Queen's University, University Road Belfast, BT7 1NN, Northern Ireland

Results

Tier 1



Tier 2



Conclusions

- New EFs will re-shape Irish N₂O emission profile from agricultural activities with N fertilisation single most important source of N₂O
- There is a need and a potential to mitigate fertiliser-driven N₂O through the use of novel fertiliser formulations
- Soil type was an important factor in determining magnitude of N₂O emissions