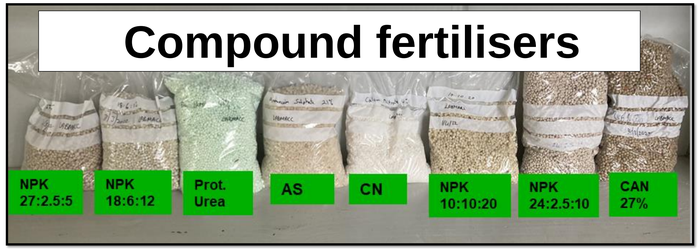
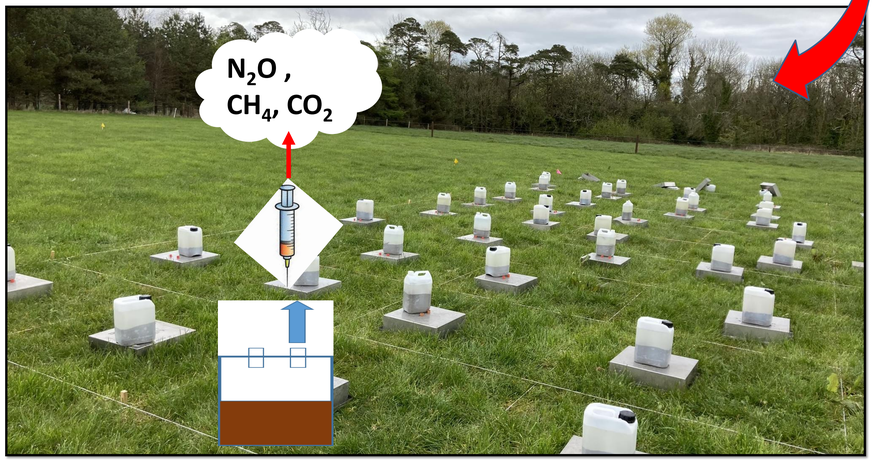
Developing N_2O emission factors

- **Task:** Quantifying N_2O emissions from a range of compound fertilisers with varying nitrate to ammonium/urea ratios
- **Goal:** to generate emission factors (EF) which can be included in the National Inventory Report and will allow for mitigation measures specific to Irish conditions

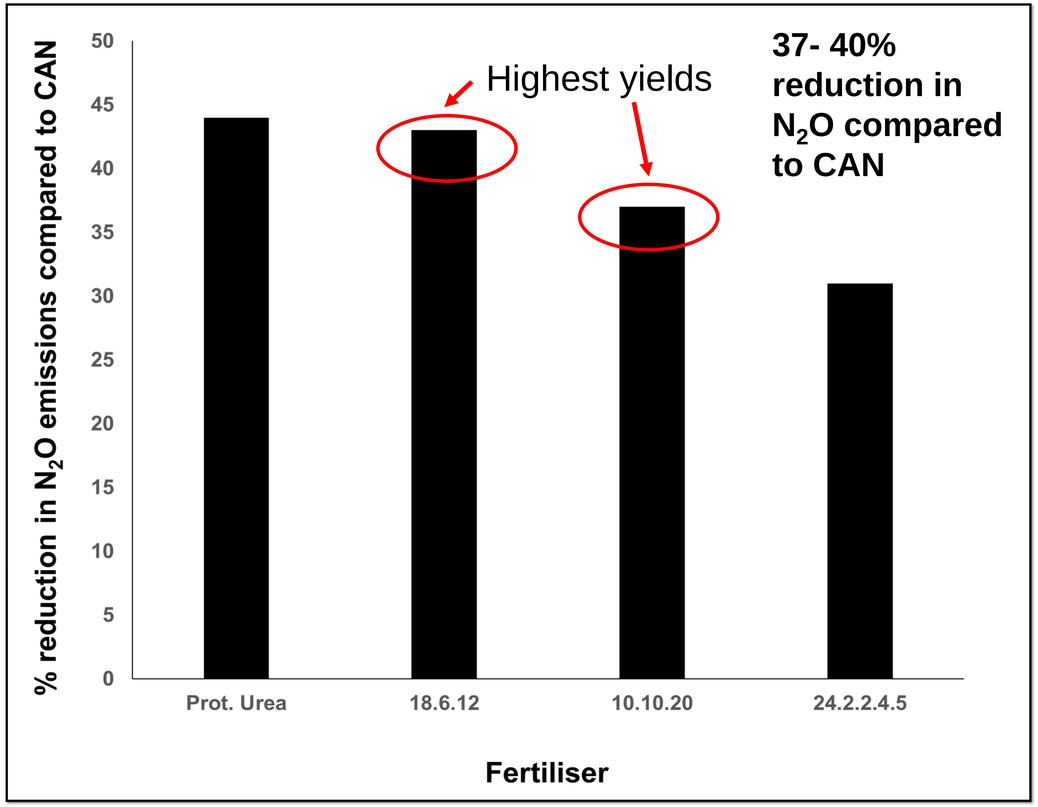


Rate = 40 kg N/ha



Compound	Nitrate:Ammonium
10.10.20	0.05
18.6.12	0.53
24.2.2.4.5	0.79

Compounds with the lowest nitrate to ammonium ratios gave the lowest emissions and highest yields!



Relative % N_2O reductions of urea+NBPT and a range of common compound fertiliser compared to CAN (Gebremichael et al., 2021).

Take home message

Moving from NO_3 to NH_4 based compound fertiliser has the potential to reduce emissions while maintaining yield. Offers a 'win-win' scenario