Ministry of Environment and Gender Equality
Environmental Protection Agency

TFA and Pesticides

- a regulatory perspective

24. February 2026
Signe Rasmussen
Danish Environmental Protection Agency

Why did the Danish EPA regulate PFAS-pesticides?

- **New information:**
  - The Danish research project, TriFluPest
  - EU-assessments of pesticide active substances
- **Regulatory process at the Danish EPA**
  - Legal framework
  - Consultation
  - Decision
- **Agricultural challenges – Alternatives?**
- **Current status on PFAS-pesticides approved for use in Denmark**

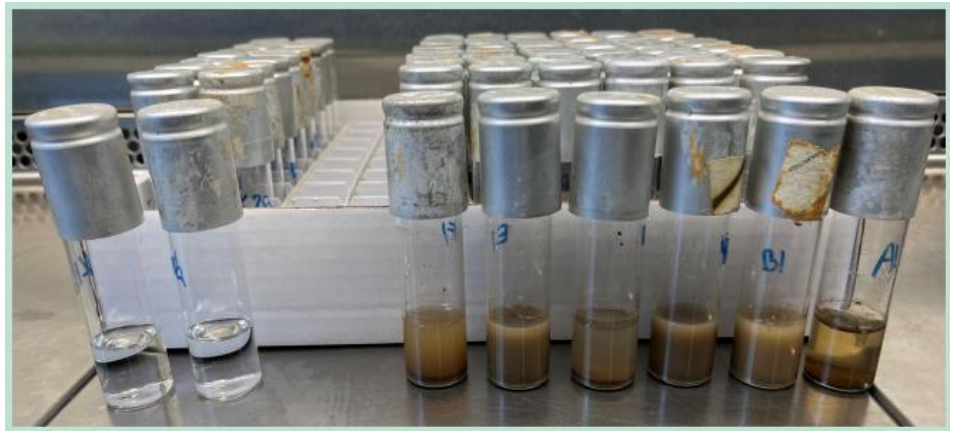
TriFluPest – A research project

- **Funded by the Danish EPA**
- **Conducted by GEUS (The Geological Survey of Denmark and Greenland)**
- **Startet in 2022, finished in December 2024**

Purpose:

Carry out simple degradation studies in the laboratory, to confirm or deny if TFA is formed from 7 active substances former or currently authorised for use in Denmark:

- Fluopyram
- Diflufenican
- Fluazinam
- Tau-fluvalinat
- Mefentrifluconazol
- Fluazifop-P-butyl*
- Trifluralin*

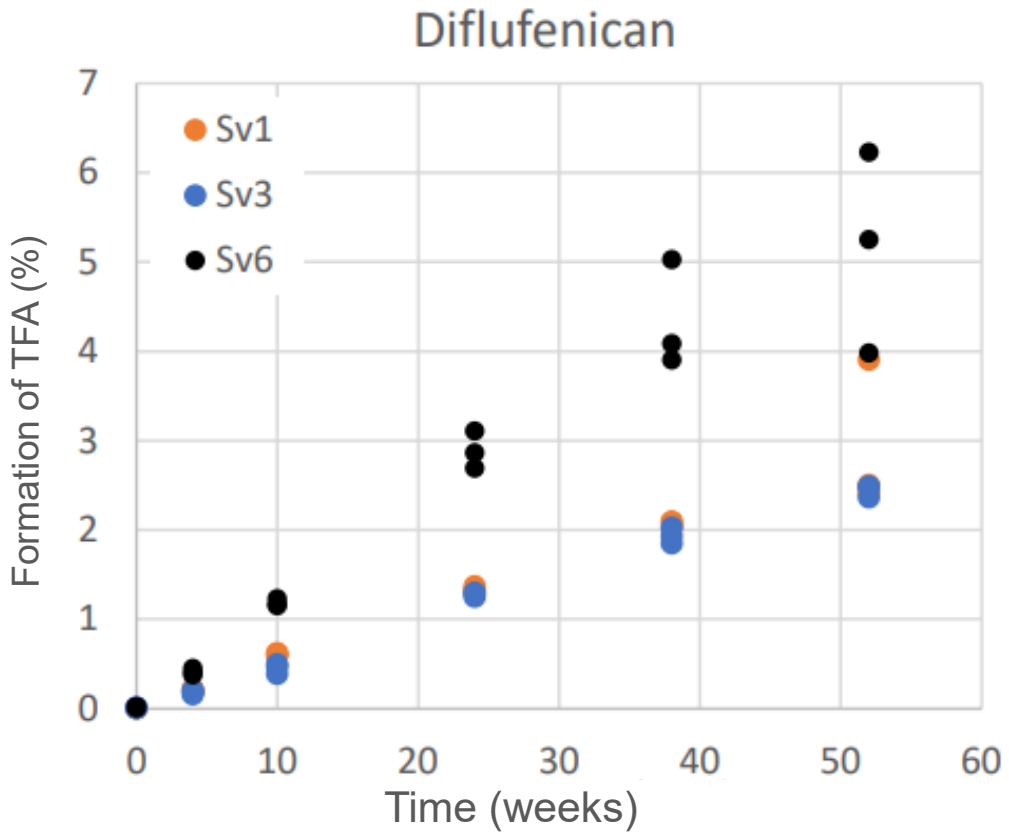


* former authorisations

https://mst.dk/publikationer/2024/december/triflupest

New information: Formation of TFA

- **All 7 tested active substances were found to form TFA in soil**
  - The formation of TFA is likely to continue over time



Information from EU assessments of active substances

- **Active substances**
  - Flufenacet and flurtamon (never authorised in Denmark)
  - Flonicamid and fluopyram (authorisations withdrawn in 2025 in Denmark).

- **TFA properties**
  - Non-degradable (persistent)
  - Extremely mobile (leaching to groundwater)

- **EU groundwater modelling**
  - All uses result in leaching of TFA above 0.1 µg/L
  - Concentrations from 0.7 til 96 µg/L

Aproval requirements

Approval requirements – Environment and groundwater

- **Limit value for pesticides in groundwater**
  - 0.1 µg/L
- **Danish persistency criteria for pesticides**
  - Half-life in soil on 180 days

TFA is predicted to leach above the limit value – Up to 96 µg/L

TFA is persistent – Degradation half-life is over 1000 days

Reassessment of products in Denmark

- **Based on new information**
- **6 active substances**
  - 33 products
- **Consultation period**
- **Withdrawal of all products**

Diflufenican
Fluopyram
Fluazinam
Mefentrifluconazol
Tau-fluvalinat
Flonicamid

Further work on alternatives - Taskforces

- **The withdrawn products had uses in a range of crops in Denmark, but specifically:** Potatoes, Grass seed, Cereals, Oil seed rape, Onions, and a number of minor uses in seed production, fruit and vegetables.

- **For some crops the withdrawals are expected to have significant consequenses**

- **The Danish Environmental Ministry has started 2 taskforces**
  - One taskforce for potatoes, and one for the remaining crops.
  - Purpose is to minimise the consequenses.
  - Fast identification of possible alternatives, that could potentially be authorised upon aplication and assessment by the Danish EPA.

- **The taskforces are ongoing, and expected to run until autumn 2026**
  - The Danish EPA participates in the taskforces
  - Other members are representatives from different agricultural organisations, companies and advisors.

Status on the remaining PFAS-pesticides approved for use in Denmark

- **5 active substances has the potential to form TFA, and are authorised for use in Denmark**
  - Lambda-cyhalothrin, Oxathiapiprolin, Picolinafen, Pyroxsulam and Tefluthrin.
- **DEPA is of the opinion that currently there is not sufficient documentation that TFA is formed to initiate a reassessment of the products at Member State level**
- **Pesticide Regulation Art. 21**
  - Member states can make a request to the EU Commission to initiate a reassessment of active substances.
  - Denmark made use of this option in September 2025, with a request to have all PFAS-pesticides reevaluated at EU level.
  - Currently the request is rejected.
- **Activities in other ”member states”**
  - Norway, Sweden and the Netherlands have stated that they will also initiate reassessments of products containing the concerned active substances.

Thank you for your attention