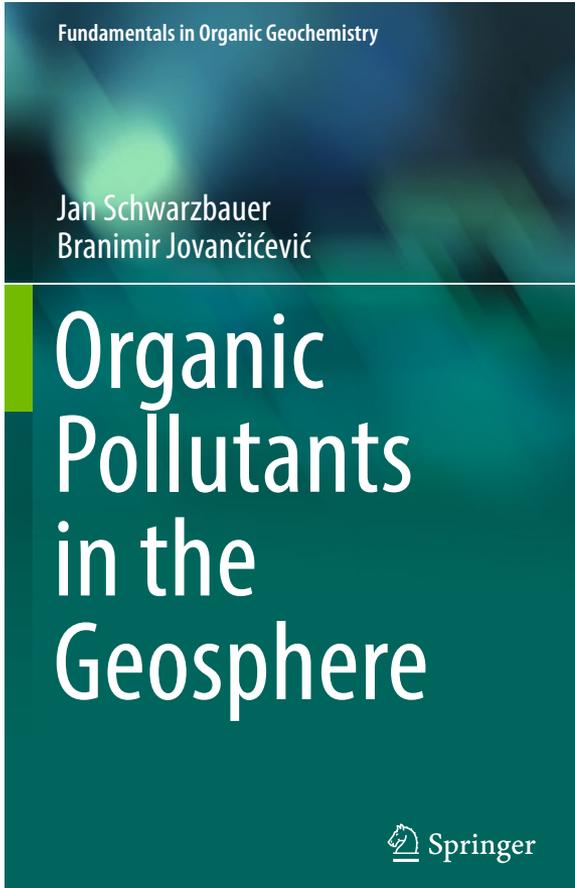


# Organic Pollutants



## Seminar topics A1

- 1) Fate and assessment of organic pollutants in the geosphere  
(distribution, toxicological assessment, degradation, bound residues)
- 2) Organic pollutants  
(pesticides, PAH, PAH detection methods)
- 3) Anthropogenic markers  
(steroids, plastic)

→ Start with a popular problem (in the news...), present state of the art (textbook, 1 article current research)

talk: 20 min + 10 min discussion, groups of 4 people



Gestrandeter Wal

## Mit fast sechs Kilo Plastik im Bauch



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

## Science of the Total Environment

journal homepage: [www.elsevier.com/locate/scitotenv](http://www.elsevier.com/locate/scitotenv)

Review

### Plastics in soil: Analytical methods and possible sources

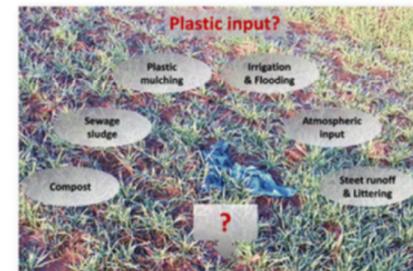
Melanie Bläsing\*, Wulf Amelung

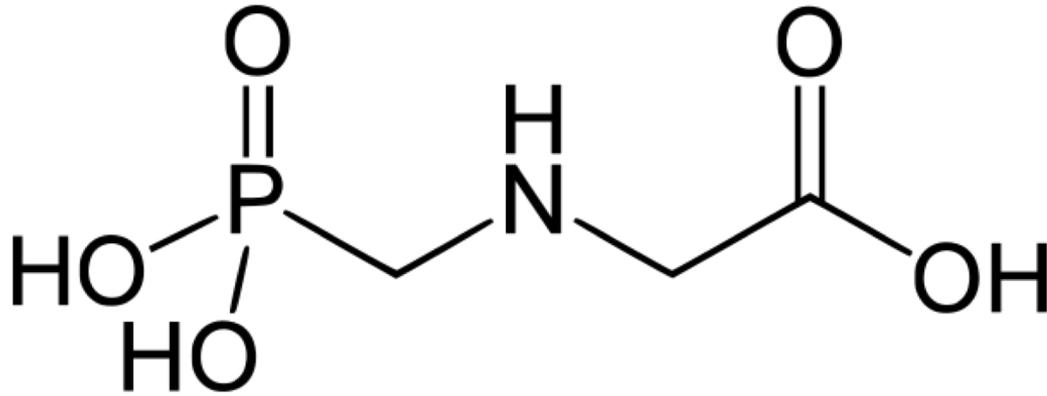
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#### HIGHLIGHTS

- Analytical methods and possible input pathways of plastic in soil were discussed.
- Organic matter challenges plastic quantification in soil.
- Soil amendments and irrigation are likely major plastic sources in agricultural soils.
- Flooding, atmospheric input and littering can potentially pollute even remote soil.
- Leaching of small plastics from soil into groundwater cannot be excluded.

#### GRAPHICAL ABSTRACT

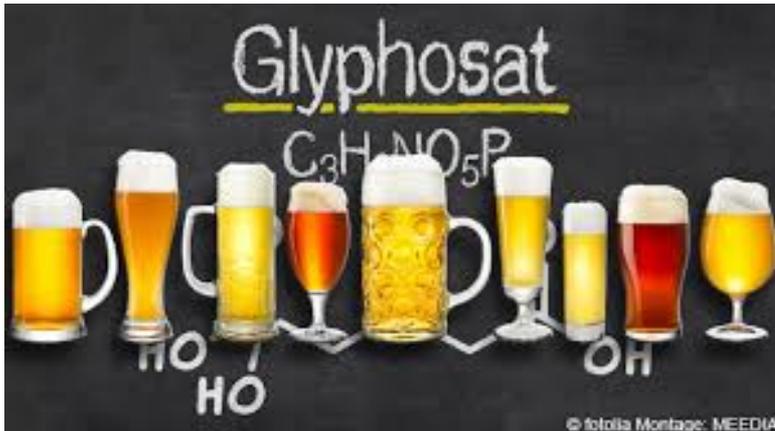




**Glyphosate:**

3 polar functional groups,  
strong sorption to soil

*e.g. Borggaard and Gimsing, 2008*



Seminar topics A3

- 1) Glyphosate and AMAP in soil  
(problem, method review)
- 2) Faecal markers in soil  
(problem, method review)

→ Start with a popular problem (in the news...), present state of the art (textbook), search for methods in scientific literature (method available is GC-MS, GC-MS/MS)

talk: 20 min + 10 min discussion, groups of 3 people