

# Development of National Leaching Scenarios in Austria

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- Purpose of National Scenarios
- General Approach
- Identification of Austrian Scenarios
- Open Points under Discussion
- Decision making

# Purpose of National GW Scenarios

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- More detailed/realistic risk assessment due to consideration of local conditions.
- Once established, more efficiency in national registration processes.
- Industry knows which models and assumptions will be accepted by authorities.

# General Approach for National GW Modelling

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- Take over - in general - FOCUS assumptions. Only scenarios will be modified to reflect climatic and soil conditions in Austria.
- Realistic soil - climate - crop combinations under Austrian conditions.
- Starting with FOCUS-PELMO, PEARL and MACRO are also under consideration.

# Identification of Austrian Scenarios

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- Crops: Representative crops in Austria are field crops/cereals/maize - orchards - grapes.
- Climate: From each of the representative crop-areas the one with high precipitation was chosen.
- Soil: Worst case but representative soil type of the chosen area.

# Open Points under Discussion

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- Irrigation: Need for crop specific data sets?
- Selection of  $DT_{50}/K_{OC}$ : Mean/median or driven by soil characteristics?
- 80<sup>th</sup> percentile evaluation criteria for conc. in 1 m depth?  
Austrian scenarios might be considered as less critical than the FOCUS scenarios.
- Another decision criterion than the overall 90<sup>th</sup> percentile at the end? Austrian scenarios are considered as „realistic case“.

# Decision making

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- National scenarios are meant as extension to existing FOCUS scenarios.
- If leaching insignificant in scenarios Kremsmünster, Piacenza and Hamburg → no further modelling needed.
- Two models have to be passed: PELMO and PEARL.
- No decision taken yet with regard to relevance of preferential flow and use of MACRO.